

FORM 11-K

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2006

OR

TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number 0-33207

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

Great Plains Energy Incorporated
Cash or Deferred Arrangement
("Employee Savings Plus")
(hereinafter referred to as "Plan")

B. Name of issuer of the securities held pursuant to the Plan and the address of its principal executive office:

Great Plains Energy Incorporated
1201 Walnut
Kansas City, Missouri 64106-2124

GREAT PLAINS ENERGY INCORPORATED CASH OR DEFERRED ARRANGEMENT (“EMPLOYEE SAVINGS PLUS”)

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SUPPLEMENTAL SCHEDULES:	
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Note:	All other schedules required by Section 2520.103-10 of the Department of Labor’s Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable.

EXHIBITS

Exhibit No.	Description
23	Consent of Independent Registered Public Accounting Firm

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Participants and Administrative Committee of the Great Plains Energy Incorporated Cash or Deferred Arrangement (“Employee Savings Plus”):

We have audited the accompanying statements of net assets available for benefits of Great Plains Energy Incorporated Cash or Deferred Arrangement (“Employee Savings Plus”) (the “Plan”) as of December 31, 2006 and 2005, and the related statement of changes in net assets available for benefits for the year ended December 31, 2006. These financial statements are the responsibility of the Plan’s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan’s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2006 and 2005, and the changes in net assets available for benefits for the year ended December 31, 2006, in conformity with accounting principles generally accepted in the United States of America.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedules listed in the table of contents are presented for the purpose of additional analysis and are not a required part of the basic financial statements, but are supplementary information required by the Department of Labor’s Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. These schedules are the responsibility of the Plan’s management. Such schedules have been subjected to the auditing procedures applied in our audit of the basic 2006 financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole.

As further discussed in Note 2, the Plan adopted FSP AAG Inv-1 and SOP 94-4-1 for the years ended December 31, 2006 and 2005.

/s/Deloitte & Touche LLP

June 13, 2007
Kansas City, Missouri

**GREAT PLAINS ENERGY INCORPORATED
CASH OR DEFERRED ARRANGEMENT
("EMPLOYEE SAVINGS PLUS")**

**STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
DECEMBER 31, 2006 AND 2005**

	2006	2005
ASSETS:		
Investments—at fair value (Note 3)	\$ <u>230,764,446</u>	\$ <u>231,202,135</u>
NET ASSETS AVAILABLE FOR BENEFITS AT FAIR VALUE	\$ <u><u>230,764,446</u></u>	\$ <u><u>231,202,135</u></u>
Adjustments from fair value to contract value for fully benefit-responsive investment contracts	142,148	198,671
NET ASSETS AVAILABLE FOR BENEFITS	\$ <u><u>230,906,594</u></u>	\$ <u><u>231,400,806</u></u>

See notes to financial statements.

**GREAT PLAINS ENERGY INCORPORATED
CASH OR DEFERRED ARRANGEMENT
("EMPLOYEE SAVINGS PLUS")**

**STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
YEAR ENDED DECEMBER 31, 2006**

ADDITIONS:

Investment income:

Net appreciation in fair value of investments	\$	10,860,678
Interest		1,046,558
Dividends		18,237,808

Contributions:

Employer contributions		3,225,821
Employee contributions		12,497,398
Rollovers		1,112,954

Total additions 46,981,217

DEDUCTIONS:

Benefits paid to participants		47,223,244
Dividend distributions		203,904
Expenses Paid		48,281

Total deductions 47,475,429

DECREASE IN NET ASSETS (494,212)

NET ASSETS AVAILABLE FOR BENEFITS

Beginning of year		<u>231,400,806</u>
End of year	\$	<u><u>230,906,594</u></u>

See notes to financial statements.

**GREAT PLAINS ENERGY INCORPORATED CASH OR DEFERRED
ARRANGEMENT (“EMPLOYEE SAVINGS PLUS”)**

**NOTES TO FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2006 AND 2005 AND FOR THE YEAR ENDED DECEMBER 31, 2006**

1. PLAN DESCRIPTION

The following description of the Great Plains Energy Incorporated Cash or Deferred Arrangement (“Employee Savings Plus”) (the “Plan”) is provided for general information purposes only. Participants should refer to the Plan Document for more complete information.

General - The Plan is a defined contribution plan covering all full time and part time management and bargaining unit employees of Kansas City Power & Light Company, sponsored by Great Plains Energy Incorporated (the “Company”). Effective June 1, 2002, eligible employees of Home Services Solutions, Inc. and Worry Free Services, Inc. began participating in the Plan. Effective January 2, 2004, eligible employees of KLT, Inc. and KLT Gas began participating in the Plan. The Plan provides that employees are immediately eligible to make elective contributions to the Plan. The Company serves as the administrator of the Plan. Fidelity Management Trust Company (“Fidelity”) serves as the trustee of the Plan. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (“ERISA”).

An Employee Stock Ownership Plan (“ESOP”) component was added to the Plan on January 1, 2002. The ESOP component consists of the portion of the Plan that is invested in Great Plains Energy Incorporated common stock. Adding this component gives participants the option of receiving a direct cash distribution of any dividends paid on such stock held in participant elective contribution accounts and, if they are 100% vested as of the dividend record date, their Company match accounts. Dividends paid on Company stock will be automatically reinvested, unless the cash distribution was elected.

Contributions - Each year participants may contribute between 2% and 40% of their annual compensation as defined in the Plan. In addition, participants who have attained age 50 and who elect to make the maximum level of elective contributions, as defined by the Plan, may elect to make a catch-up contribution. Participants direct the investment of their contributions into various investment options offered by the Plan. The Plan currently offers twenty-one mutual funds, Company stock, a common/ collective trust fund, and a brokerage account as investment options for participants. Participants have purchased shares of mutual funds through the brokerage account. Participants are eligible for a matching contribution after completing one year of service. The Company contributes 50% of the employee's elective contribution, not to exceed 3% of annual compensation, as defined in the Plan. The matching contribution is invested directly in Great Plains Energy Incorporated Stock although participants who have attained the age of 52 may transfer funds in their company-match account to another investment fund offered by the Plan. Effective April 1, 2006, the Plan was amended to remove the requirement that participants must attain age 52 before they may diversify their employer match accounts. Contributions are subject to certain Internal Revenue Code (“IRC”) limitations.

Participant Accounts - Each participant's account is credited with the participant's contribution and allocations of (a) the Company's contribution, (b) Plan earnings, and charged with an allocation of administrative expenses as applicable. Allocations are based on participant earnings or account balances, as defined. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Vesting - Participants are immediately vested in their voluntary contributions plus actual earnings thereon. Vesting in the Company matching contributions portion of their accounts plus earnings thereon is based on years of continuous service. A participant is partially vested after two years and 100% vested after six years of credited service. Participants who retire after age 55, die or become totally or permanently disabled while an employee of the Company are considered 100% vested in the Company matching contributions, regardless of their length of service.

Participant Loans - Participants may borrow from their fund accounts a minimum of \$1,000 up to a maximum equal to the lesser of \$50,000 or 50% of their vested account balance. The loans are secured by the balance in the participant's account and bear interest at rates equal to prime plus 2%. Principal and interest is paid ratably through semi-monthly payroll deductions. Additionally, all loans are made for a period of less than five years unless proceeds of such loan are exclusively used for the purchase of a participant's primary residence, which has a maximum of fifteen years.

Payment of Benefits - Participants who leave the Company as a result of termination, retirement, or permanent disability may receive the vested interest in their account in one lump-sum payment or in a series of monthly or annual installments over a period of not longer than five years, rollover their account to another trustee or elect to defer distribution until age 62 or retirement, whichever is later. Upon death, distributions will be made to beneficiaries in a lump sum or in monthly or annual installments over a period of no more than three years. If the value of the participant's retirement, termination, or disability benefit is \$5,000 or less, payment shall be made to the participant as soon as practicable in a single lump sum distribution. In all other cases, at the election of the participant in a manner prescribed by the Administrative Committee or its designee, retirement, disability, and termination benefits shall be paid in a single lump sum distribution or in a series of substantially equal monthly or annual installments over a period of not longer than five years. In the absence of a written directive from the participant as to the manner of payment, if the value of the participant's retirement, termination, or disability benefit is greater than \$5,000, payment shall be made in annual installments over a period of five years. In the event of a mandatory distribution greater than \$1,000, if the distributee does not elect to have such distribution paid directly to an eligible retirement plan specified by the distributee in a direct rollover or to receive the distribution directly, the Plan will pay the distribution in a direct rollover to an individual retirement plan designated by the Administrative Committee.

Forfeited Accounts - At December 31, 2006 and 2005 there were \$68,372 and \$27,091 in forfeited non-vested accounts, respectively. These accounts are used to reduce employer contributions. During 2006, employer contributions were reduced by \$506 from forfeited non-vested accounts.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting - The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America.

Use of Estimates - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of net assets available for benefits and changes therein. Actual results could differ from those estimates.

Risks and Uncertainties - The Plan utilizes various investment instruments. Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the financial statements.

Investment Valuation and Income Recognition - The Plan's investments are stated at fair value. Shares of mutual funds are valued at quoted market prices, which represent the net asset value of shares held by the Plan at year-end. The investment in the common/collective trust fund is stated at fair value, as determined by the issuer of the common/collective trust fund based on the fair market value of the underlying investments. Common/collective trust funds with underlying investments in investment contracts are valued at the fair market value of the underlying investments and then adjusted by the issuer to contract value. Common stock is valued at quoted market prices. Participant loans are valued at the outstanding loan balances.

The Fidelity Managed Income Portfolio (the "Portfolio") is a stable value fund that is an open-end commingled pool dedicated exclusively to the management of assets of defined contribution plans. The Portfolio's investment objective is to seek preservation of capital and a competitive level of income over time. To achieve its investment objective, the Portfolio invests in underlying assets (typically fixed income securities or bond funds and may include derivative instruments such as futures contracts and swap agreements) and enters into a "wrapper" contract issued by a third party. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value. Contract value represents contributions made to the fund, plus earning, less participant withdrawals.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Adoption of New Accounting Guidance - The financial statements reflect the retroactive adoption of Financial Accounting Standards Board Staff Position, FSP AAG INV-1 and SOP 94-4-1, *Reporting of Fully Benefit-Responsive Contracts Held by Certain Investment Companies Subject to the AICPA Investment Company Guide and Defined-Contribution Health and Welfare and Pension Plans* (the "FSP"). As required by the

FSP, the statements of net assets available for benefits presents the common/collective trust fund with underlying investments in investment contracts at fair value as well as an additional line item showing an adjustment of fully benefit-responsive investment contracts from fair value to contract value. The statement of changes in net assets available for benefits is presented on a contract value basis and was not affected by the adoption of the FSP. The adoption of the FSP did not impact the amount of net assets available for benefits at December 31, 2005.

Unit Values - Individual participant accounts for the common/collective trust fund are maintained on a unit value basis. Participants do not have beneficial ownership in the specific underlying securities or other assets in the fund, but do have an interest therein represented by units valued daily. The fund earns dividends and interest which are automatically reinvested in additional units. Generally, contributions to and withdrawal payments from each fund are converted to units by dividing the amounts of such transactions by the unit values as last determined, and the participants' accounts are charged or credited with the number of units properly attributable to each participant.

Expenses - Administrative expenses of the Plan are paid by either the Plan or the Company, as provided in the Plan document.

Payment of Benefits - Benefits payments to participants are recorded upon distribution.

3. INVESTMENTS

The Plan's investments that represented five percent or more of the Plan's net assets available for benefits as of December 31, 2006 and 2005 are as follows:

	December 31,	
	2006	2005
Great Plains Energy Incorporated Common Stock, 2,655,728 and 3,093,989 shares, respectively (includes both nonparticipant-directed and participant-directed funds)	\$ 84,451,987	\$ 86,507,922
Fidelity Magellan Fund, 339,271 and 336,275 shares, respectively	30,371,553	35,793,094
Fidelity Puritan Fund, 1,033,603 and 1,135,084 shares, respectively	20,641,066	21,260,139
Fidelity Managed Income Portfolio, 14,303,972 and 17,698,678 units, respectively	14,161,824	17,500,007
Fidelity Diversified International Fund, 322,657 units	11,922,165	

During 2006, the Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) increased in value by \$10,586,579 as follows:

Mutual funds	\$ (76,548)
Common stock	<u>10,937,226</u>
	<u><u>\$ 10,860,678</u></u>

4. NONPARTICIPANT-DIRECTED INVESTMENTS

Information about the net assets and the significant components of the changes in net assets relating to the nonparticipant-directed investments is as follows as of December 31, 2006 and 2005, and for the year ended December 31, 2006. The Great Plains Energy Incorporated stock fund is considered to be nonparticipant-directed for purposes of this disclosure as the participant-directed and nonparticipant-directed amounts cannot be separately determined.

	<u>2006</u>	<u>2005</u>
Net Assets - Great Plains Energy Incorporated Common Stock	\$ 84,451,987	\$ 86,507,922

	Year Ended December 31, 2006
Changes in Net Assets:	
Contributions	\$ 4,653,301
Interest and dividends	4,786,978
Dividend distributions	(203,904)
Net appreciation in fair value of investments	10,937,226
Benefits paid to participants	(11,772,458)
Transfers to participant-directed investments	(12,733,595)
Transfers from participant-directed investments	<u>2,276,517</u>
	<u>\$ (2,055,935)</u>

5. RELATED-PARTY TRANSACTIONS

Certain Plan investments are shares of mutual funds, units in a common/collective trust fund, a brokerage account and shares of Company stock managed by Fidelity Investments. Fidelity serves as the trustee of the Plan and, therefore, these transactions qualify as party-in-interest transactions.

6. PLAN TERMINATION

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of Plan termination, the participants would become 100% vested in their Company matching contributions.

7. FEDERAL INCOME TAX STATUS

The Internal Revenue Service has determined and informed the Company by a letter dated June 4, 2004, that the Plan and related trust are designed in accordance with

applicable sections of the IRC. Although the Plan has been amended since receiving the determination letter, the Plan administrator believes that the Plan is designed and is currently being operated in compliance with the applicable requirements of the IRC. Therefore, no provision for income taxes has been included in the Plan's financial statements.

8. RECONCILIATION OF FINANCIAL STATEMENTS TO FORM 5500

The following is a reconciliation of net assets available for benefits as of December 31, 2006, per the financial statements to the Form 5500:

	2006
Net assets available for benefits per the financial statements	\$ 230,906,594
Adjustment from contract value to fair value for fully benefit-responsive investment contracts	<u>(142,148)</u>
Net assets available for benefits per Form 5500	<u>\$ 230,764,446</u>
Net decrease in net assets per the financial statements	\$ (494,212)
Adjustment from contract value to fair value for fully benefit-responsive investment contracts	<u>(142,148)</u>
Net decrease in net assets per Form 5500	<u>\$ (636,360)</u>

9. SUBSEQUENT EVENT

Effective April 2, 2007, the following funds will be added as investment options to the Plan: Davis New York Fund – Class A, Fidelity Freedom 2005 Fund, Fidelity Freedom 2015 Fund, Fidelity Freedom 2025 Fund, Fidelity Freedom 2035 Fund, Fidelity Freedom 2045 Fund, and Fidelity Freedom 2050 Fund. Also, effective April 2, 2007, the Plan's default fund will change to the Fidelity Freedom Fund that has a target retirement date closest to the year the participant may retire, based on the participant's current age and assuming normal retirement age of 65.

GREAT PLAINS ENERGY INCORPORATED
CASH OR DEFERRED ARRANGEMENT
("EMPLOYEE SAVINGS PLUS")

FORM 5500, SCHEDULE H, PART IV, LINE 4i - SCHEDULE OF ASSETS (HELD AT END OF YEAR)
DECEMBER 31, 2006

(a)	(b)	(c)	(d)	(e)
	Identity of Issue, Borrower, Lessor or Similar Party	Description of Investment Including Maturity Date, Rate of Interest, Collateral, Par or Maturity Value	Cost	Current Value
	* Great Plains Energy Incorporated	Common stock	\$ 69,719,779	\$ 84,451,987
	* Fidelity Magellan Fund	Registered Investment Company	**	30,371,553
	* Fidelity Puritan Fund	Registered Investment Company	**	20,641,066
	* Fidelity Managed Income Portfolio	Common/Collective Trust Fund	**	14,161,824
	* Fidelity Diversified International Fund	Registered Investment Company	**	11,922,165
	American Funds Growth Fund America	Registered Investment Company	**	10,248,678
	* Fidelity Capital Appreciation Fund	Registered Investment Company	**	10,110,282
	PIMCO Total Return Fund - Inst Class	Registered Investment Company	**	4,584,113
	T. Rowe Price Equity Income Fund	Registered Investment Company	**	4,028,305
	* Fidelity Low-Priced Stock Fund	Registered Investment Company	**	3,928,066
	Artisan Mid Cap Fund - Investor Class	Registered Investment Company	**	3,838,299
	Hotchkis & Wiley Mid-Cap Value Fund	Registered Investment Company	**	3,658,702
	* Fidelity Small Cap Stock Fund	Registered Investment Company	**	3,587,531
	* Fidelity Freedom 2020 Fund	Registered Investment Company	**	3,375,017
	* Fidelity Asset Manager Fund	Registered Investment Company	**	3,071,539
	* Fidelity Freedom 2030 Fund	Registered Investment Company	**	2,816,876
	* Fidelity Freedom 2010 Fund	Registered Investment Company	**	2,544,043
	Spartan US Equity Index Fund	Registered Investment Company	**	2,390,598
	American Beacon Small Cap Value Fund	Registered Investment Company	**	1,338,675
	Calamos Growth Fund	Registered Investment Company	**	1,159,843
	* Fidelity Freedom 2040 Fund	Registered Investment Company	**	802,042
	* Fidelity Freedom Income Fund	Registered Investment Company	**	605,916
	* Fidelity Freedom 2000 Fund	Registered Investment Company	**	262,266
	* Fidelity Brokerage Account	Brokerage Account	**	1,358,515
	* Participant Loans	Various participants, interest rates ranging from 6% to 11.5% maturing through 2021	**	5,506,545
				<u>\$ 230,764,446</u>

* Represents party-in-interest to the Plan.

** Cost information is not required for participant-directed investments and, therefore, is not included.

**GREAT PLAINS ENERGY INCORPORATED
CASH OR DEFERRED ARRANGEMENT
("EMPLOYEE SAVINGS PLUS")**

**FORM 5500, SCHEDULE H, PART IV, LINE 4j --
SCHEDULE OF REPORTABLE TRANSACTIONS YEAR ENDED DECEMBER 31, 2006**

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Identity of party involved	Description of asset (include interest rate and maturity in case of a loan)	Purchase price	Selling price	Lease rental	Expense incurred with transaction	Cost of asset	Current value of asset on transaction date	Net gain or loss
SINGLE TRANSACTIONS								
No single transactions greater than 5%.								
SERIES IN SAME SECURITY								
* Great Plains Energy Incorporated	Common Stock							
	(226 Purchases)	\$ 11,909,700				\$ 11,909,700	\$ 11,909,700	
	(440 Sales)		\$ 24,913,699			21,960,652	24,913,699	\$ 2,953,047

* Represents a party-in-interest to the Plan

EXHIBIT INDEX

Exhibit filed with Form 11-K for the year ended December 31, 2006:

<u>Exhibit No.</u>	<u>Description</u>
23	Consent of Independent Registered Public Accounting Firm

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Administrative Committee of the Great Plains Energy Incorporated Cash or Deferred Arrangement ("Employee Savings Plus") has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

GREAT PLAINS ENERGY INCORPORATED CASH OR DEFERRED
ARRANGEMENT ("EMPLOYEE SAVINGS PLUS")

By: /s/ Terry Bassham
Terry Bassham

By: /s/ Barbara B. Curry
Barbara B. Curry

By: /s/ Mark G. English
Mark G. English

By: /s/ Todd A. Kobayashi
Todd A. Kobayashi

By: /s/ Richard A. Spring
Richard A. Spring

June 21, 2007

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-120172 and No. 333-132828 of Great Plains Energy Incorporated on Form S-8 of our report dated June 13, 2007, appearing in this Annual Report on Form 11-K of the Great Plains Energy Incorporated Cash or Deferred Arrangement (“Employee Savings Plus”) for the year ended December 31, 2006.

/s/ Deloitte and Touche L.L.P.

Kansas City, Missouri

June 19, 2007
