

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 11-K

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

For the fiscal year ended December 31, 2005

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 Plan)
(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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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

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, 2005 and 2004, and the related statement of changes in net assets available for benefits for the year ended December 31, 2005. 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, 2005 and 2004 and the changes in net assets available for benefits for the year ended December 31, 2005, 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 2005 financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/Deloitte & Touche LLP

June 23, 2006
Kansas City, Missouri

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

**STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
DECEMBER 31, 2005 AND 2004**

	2005	2004
ASSETS:		
Investments (Note 3)	\$ 231,400,806	\$ 223,237,066
Receivables:		
Employer contributions		138,412
Employee contributions		508,421
		<u>646,833</u>
Total receivables		646,833
Cash		
Accrued Income		<u>62,208</u>
NET ASSETS AVAILABLE FOR BENEFITS	<u>\$ 231,400,806</u>	<u>\$ 223,946,107</u>

See notes to financial statements.

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

**STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
YEAR ENDED DECEMBER 31, 2005**

ADDITIONS:

Investment income (loss):		
Net depreciation in fair value of investments	\$	(5,090,490)
Interest		432,417
Dividends		10,962,022
Contributions:		
Employer contributions		3,077,228
Employee contributions		11,939,862
Other income		57,556
		<hr/>
Total additions		21,378,595
		<hr/>

DEDUCTIONS:

Benefits paid to participants		13,689,735
Dividend distributions		186,456
Expenses Paid		47,705
		<hr/>
Total deductions		13,923,896
		<hr/>

INCREASE IN NET ASSETS 7,454,699

NET ASSETS AVAILABLE FOR BENEFITS

Beginning of year		<hr/> 223,946,107
End of year	\$	<hr/> <hr/> 231,400,806

See notes to financial statements.

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

**NOTES TO FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2005 AND 2004 AND FOR THE YEAR ENDED DECEMBER 31, 2005**

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. United Missouri Bank, n.a. (“UMB”) served as the trustee of the Plan through January 20, 2004. Marshall & Ilsley Trust Company, N.A. (“M&I”) served as the trustee of the Plan effective January 20, 2004. Fidelity Management Trust Company (“Fidelity”) serves as the trustee of the Plan effective April 1, 2005. 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

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have attained the age of 52 may transfer funds in their company-match account to another investment fund offered by the Plan. 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.

Forfeited Accounts - At December 31, 2005 there were \$27,091 in forfeited non-vested accounts. There were no forfeited non-vested accounts at December 31, 2004. These accounts are used to reduce employer contributions. Also, during 2005, employer contributions were not reduced by 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

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those estimates. 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 in mutual funds, the brokerage account, and Company stock are stated at fair value. Quoted market prices are used to value these investments. Shares of mutual funds are valued at the net asset value of shares held by the Plan at year-end. The investment in the common/collective trust fund is stated at estimated fair value, which has been determined by the trustee of the fund based on unit values of the fund. Participant loans are valued at the outstanding loan balance, which approximates fair value.

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.

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, 2005 and 2004 are as follows:

	December 31,	
	2005	2004
Great Plains Energy Incorporated Common Stock, 3,093,989 and 3,046,365 shares, respectively (includes both nonparticipant-directed and participant-directed funds)	\$ 86,507,922	\$ 92,279,171
Fidelity Magellan Fund, 336,275 and 372,330 shares, respectively	35,793,094	38,644,118
Fidelity Puritan Fund, 1,135,084 and 1,081,714 shares, respectively	21,260,139	20,498,471
Fidelity Managed Income Portfolio, 17,698,678 and 15,745,536 units, respectively	17,698,678	15,745,536

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During 2005, the Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) depreciated in value by \$5,090,490 as follows:

Mutual funds	\$ 1,964,612
Common stock	(7,055,102)
	<hr/>
	\$ (5,090,490)
	<hr/> <hr/>

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, 2005 and 2004, and for the year ended December 31, 2005. 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>2005</u>	<u>2004</u>
Net Assets -		
Great Plains Energy Incorporated Common Stock	\$ 86,507,922	\$ 92,279,171

**Year Ended
December 31, 2005**

Changes in Net Assets:

Contributions	\$	5,276,896
Dividends		5,070,322
Dividend distributions		(186,457)
Net depreciation in fair value of investments		(7,055,102)
Benefits paid to participants		(4,578,770)
Transfers to participant-directed investments		(9,772,774)
Transfers from participant-directed investments		5,474,636
	\$	<u>(5,771,249)</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 UMB, M&I and Fidelity Investments. UMB served as the trustee through January 20, 2004, M&I served as the trustee from January 20, 2004 through March 31, 2005, and Fidelity currently serves as the trustee effective April 1, 2005 and, therefore, these transactions qualify as party-in-interest transactions.

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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. SUBSEQUENT EVENT

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.

* * * * *

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**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, 2005**

(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 Stock	Common stock	\$ 79,759,730	\$ 86,507,922
*	Fidelity Magellan Fund	Mutual Fund	**	35,793,094
*	Fidelity Puritan Fund	Mutual Fund	**	21,260,139
*	Fidelity Managed Income Portfolio	Common/Collective Trust Fund	**	17,698,678
*	Fidelity Capital Appreciation Fund	Mutual Fund	**	9,915,174
	American Funds Growth Fund America	Mutual Fund	**	9,529,577

* Fidelity Diversified International Fund	Mutual Fund	**	7,939,620
PIMCO Total Return Fund - Inst Class	Mutual Fund	**	4,023,950
* Fidelity Low-Priced Stock Fund	Mutual Fund	**	3,990,608
Artisan Mid Cap Fund - Investor Class	Mutual Fund	**	3,756,353
* Fidelity Asset Manager Fund	Mutual Fund	**	3,476,638
Hotchkis & Wiley Mid-Cap Value Fund	Mutual Fund	**	2,679,012
* Fidelity Freedom 2010 Fund	Mutual Fund	**	2,648,572
* Fidelity Small Cap Stock Fund	Mutual Fund	**	2,491,067
* Fidelity Freedom 2020 Fund	Mutual Fund	**	2,424,411
Spartan US Equity Index Fund	Mutual Fund	**	2,299,519
* Fidelity Freedom 2030 Fund	Mutual Fund	**	2,088,313
T. Rowe Price Equity Income Fund	Mutual Fund	**	2,463,000
American Beacon Small Cap Value Fund	Mutual Fund	**	1,091,360
Calamos Growth Fund	Mutual Fund	**	771,736
* Fidelity Freedom Income Fund	Mutual Fund	**	713,831
* Fidelity Freedom 2040 Fund	Mutual Fund	**	531,524
* Fidelity Freedom 2000 Fund	Mutual Fund	**	454,340
* Fidelity Brokerage Account	Brokerage Account	**	605,341
* Participant Loans	Various participants, interest rates ranging from 6% to 12% maturing through 2020	**	6,247,027
			\$ 231,400,806

* Represents party-in-interest to the Plan.

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

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Administrative Committee of the Employee Savings Plus Plan has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

EMPLOYEE SAVINGS PLUS PLAN

By: /s/Terry D. Bassham
Terry D. 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

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-120172 and 333-132828 of Great Plains Energy Incorporated on Form S-8 of our report dated June 23, 2006, 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, 2005.

/s/Deloitte & Touche LLP

Kansas City, Missouri
June 27, 2006