

Prospectus

GREAT PLAINS ENERGY INCORPORATED

Dividend Reinvestment and Direct Stock Purchase Plan

1,000,000 Shares of Common Stock
(Without Par Value)

Great Plains Energy Incorporated ("Great Plains Energy") offers you the opportunity to participate in its Dividend Reinvestment and Direct Stock Purchase Plan ("Plan"). The Plan is a convenient way for you to:

- * Purchase shares of Great Plains Energy's common stock.
- * Reinvest all or some of your cash dividends in additional shares.
- * Deposit your stock certificates for safekeeping.

This is a restatement of Great Plains Energy's Dividend Reinvestment and Direct Stock Purchase Plan. If you are currently enrolled in the Great Plains Energy Plan, your enrollment will continue uninterrupted in the Plan.

The Administrator of the Plan may buy shares of common stock on the open market (New York Stock Exchange) or directly from Great Plains Energy. If it buys on the open market, the price of the shares will be the average cost of all shares purchased for the relevant investment date plus a nominal brokerage commission fee (currently \$.05 per share). If it buys from Great Plains Energy, the price will be the average of the high and low prices of the common stock for the relevant investment date as reported on the New York Stock Exchange "NYSE" - Consolidated Tape.

Great Plains Energy Incorporated common stock is traded on the New York Stock Exchange under the symbol "GXP".

Participating in the Plan and investing in our common stock involves risks. You should carefully consider the information described or referred to under the heading "Risk Factors" beginning on page 4.

Our principal executive office is located at 1201 Walnut Street, Kansas City, Missouri 64106-2124, and the telephone number is (816) 556-2200.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

May 19, 2006

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement filed with the Securities and Exchange Commission ("SEC"). Under this registration statement, we may offer up to a total of one million shares of our common stock described in this prospectus pursuant to the Plan. This prospectus provides you with a general description of the Plan. We may also add, update or change the information contained in this prospectus by means of a supplement to this prospectus. If there is any inconsistency between the information in this prospectus and any prospectus supplement, you should rely on the information in the prospectus supplement. The registration statement we filed with the SEC includes exhibits that provide more detail on descriptions of the matters discussed in this prospectus. Before you invest in our securities, you should carefully read the registration statement and exhibits thereto, this prospectus, any prospectus supplement and the information contained in the documents we refer to in this prospectus under "Where You Can Find More Information."

References in this prospectus to "Great Plains Energy" or "the Company" or to the terms "we", "us" or other similar terms mean Great Plains Energy Incorporated and its subsidiaries, unless the context clearly indicates otherwise.

You should rely only on the information contained or incorporated by reference in this prospectus and any prospectus supplement. We have not authorized anyone else to provide you with any different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell securities in any jurisdiction where the offer or sale is not permitted. The information contained in this prospectus is current only as of the date of this prospectus.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, and proxy statements and other information with the SEC through the SEC's Electronic Data Gathering, Analysis and Retrieval system and these filings are publicly available through the SEC's website (<http://www.sec.gov>). You may read and copy such material at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. You may also obtain copies of such material at prescribed rates from the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549.

The SEC allows us to "incorporate by reference" into this prospectus the information we file with them. This means that we can disclose important information to you by referring you to the documents containing the information. The information we incorporate by reference is considered to be included in and an important part of this prospectus and should be read with the same care. Information that we file later with the SEC that is incorporated by reference into this prospectus will automatically update and supersede this information. We are incorporating by reference into this prospectus the following documents that we have filed with the SEC and any subsequent filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 until the offering of the securities described in this prospectus is completed:

1

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- * Our Annual Report on Form 10-K for the fiscal year ended December 31, 2005
 - * Our Report on Form 8-K dated February 1, 2006
 - * Our Report on Form 8-K dated February 10, 2006
 - * Our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2006
 - * Our Report on Form 8-K dated May 11, 2006

Our website is www.greatplainsenergy.com. Information contained on our website is not incorporated herein except to the extent specifically so indicated. We make available, free of charge, on or through our website, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. In addition, we make available on or through our website all other reports, notifications and certifications filed electronically with the SEC. You may obtain a free copy of our filings with the SEC by writing or telephoning us at the following address: Great Plains Energy Incorporated, 1201 Walnut Street, Kansas City, Missouri 64106-2124 (Telephone No.: 816-556-2200) Attention: Senior Vice President - Corporate Services and Corporate Secretary, or by contacting us on our website.

CAUTIONARY STATEMENTS REGARDING CERTAIN FORWARD-LOOKING INFORMATION

This prospectus and the documents incorporated or deemed incorporated by reference as described under the heading "Where You Can Find More Information" contain forward-looking statements that are not based on historical facts. Forward looking statements include, but are not limited to, statements regarding projected delivery volumes and margins, the outcome of regulatory proceedings, cost estimates for our comprehensive energy plan and other matters affecting future operations. These forward-looking statements are based on assumptions, expectations, and assessments made by our management in light of their experience and their perception of historical trends, current conditions, expected future developments and other factors they believe to be appropriate. Any forward-looking statements are not guarantees of our future performance and are subject to risks and uncertainties, including those described or referred to under the heading "Risk Factors" in this prospectus, and in our other SEC filings. These risks and uncertainties could cause actual results, developments and business decisions to differ materially from those contemplated or implied by forward-looking statements. Consequently, you should recognize these statements for what they are and we caution you not to rely upon them as facts. We disclaim any duty to update any forward-looking statements.

2

GREAT PLAINS ENERGY INCORPORATED

Great Plains Energy Incorporated

Great Plains Energy Incorporated, a Missouri corporation incorporated in 2001 and headquartered in Kansas City, Missouri, is a public utility holding company and does not own or operate any significant assets other than the stock of its subsidiaries.

We have four direct subsidiaries with operations or active subsidiaries:

- * Kansas City Power & Light Company ("KCP&L") is described below.
- * KLT Inc. is an intermediate holding company that primarily holds, directly or indirectly, interests in Strategic Energy, L.L.C. ("Strategic Energy"), which provides competitive retail electricity supply services in several electricity markets offering retail choice, and affordable housing limited partnerships. KLT Inc. also wholly owns KLT Gas Inc. ("KLT Gas"). During 2004, KLT Gas sold its gas properties and discontinued its gas business.
- * Innovative Energy Consultants Inc. ("IEC") is an intermediate holding company that holds an indirect interest in Strategic Energy. IEC does not own or operate any assets other than its indirect interest in Strategic Energy. When combined with KLT Inc.'s indirect interest in Strategic Energy, Great Plains Energy indirectly owns 100% of Strategic Energy.
- * Great Plains Energy Services Incorporated ("Services") provides services at cost to us and our subsidiaries, including KCP&L.

KCP&L

KCP&L is an integrated, regulated electric utility, headquartered in Kansas City, Missouri, that engages in the generation, transmission, distribution and sale of electricity. KCP&L serves slightly over 500,000 customers located in all or portions of 24 counties in western Missouri and eastern Kansas. Customers include approximately 440,000 residences, over 55,000 commercial firms, and over 2,200 industrials, municipalities and other electric utilities. KCP&L's retail revenues averaged approximately 82% of its total operating revenues over the last three years. Wholesale firm power, bulk power sales and miscellaneous electric revenues accounted for the remainder of utility revenues. KCP&L is significantly impacted by seasonality with approximately one-third of its retail revenues recorded in the third quarter. KCP&L's total electric revenues averaged approximately 45% of our consolidated revenues over the last three years. KCP&L's income from continuing operations accounted for approximately 88%, 86% and 67% of our consolidated income from continuing operations in 2005, 2004 and 2003, respectively.

Strategic Energy

Strategic Energy provides competitive retail electricity supply services by entering into power supply contracts to supply electricity to its end-use customers. Of the states that offer retail choice, Strategic Energy operates in California, Maryland, Massachusetts, Michigan, New Jersey, New York, Ohio, Pennsylvania and Texas. In addition to competitive retail electricity supply services, Strategic Energy records insignificant wholesale revenues and purchased power expense incidental to the retail services provided. Strategic Energy also provides strategic planning, consulting and billing and scheduling services in the natural gas and electricity markets.

Strategic Energy provides services to approximately 49,200 commercial, institutional and small manufacturing accounts for approximately 12,700 customers including numerous Fortune 500

companies, smaller companies and governmental entities. Strategic Energy's revenues averaged approximately 55% of our consolidated revenues over the last three years. Strategic Energy's net income accounted for approximately 17%, 24% and 21% of our consolidated income from continuing operations in 2005, 2004 and 2003, respectively.

Additional Information

Our principal executive office is located at 1201 Walnut Street, Kansas City, Missouri 64106. Our telephone number is (816) 556-2200.

RISK FACTORS

Our actual results in future periods could differ materially from historical results and the forward-looking statements contained in this prospectus. Factors that might cause or contribute to such differences include, but are not limited to, those referenced below. Our business is influenced by many factors that are difficult to predict, involve uncertainties that may materially affect actual results, and are often beyond our control. Additional risks and uncertainties not presently known or that we currently believe to be immaterial may also adversely affect us. The risk factors referenced below should be carefully considered before making an investment in our common stock. In addition, there are risks related to participating in the Plan, which are discussed below.

Investing in our securities involves risks. You should carefully consider the information under the heading "Risk Factors" in:

- * our Annual Report on Form 10-K for the fiscal year ended December 31, 2005, which is incorporated by reference into this prospectus;
- * our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2006, which is incorporated by reference into this prospectus; and
- * documents we file with the SEC after the date of this prospectus and which are deemed incorporated by reference into this prospectus.

There are Market Risks Associated with Investing in the Plan

Participants in the Plan have no control over or authority to direct the timing or price at which shares of common stock are purchased or sold for their Plan accounts. The investment period of the Plan is limited because purchases and sales of shares of our common stock under the Plan are transacted only on the monthly investment date (the 20th day of the month or, if not a business day, the next business day). Therefore, participant in the Plan bear market risk associated with fluctuations in the price of our common stock. In addition, no interest is paid on funds held by the administrator pending investment.

There are Tax Consequences to Reinvesting Cash Dividends Under the Plan

In general, the full amount of cash dividends paid on a participant's shares of our common stock under the Plan is considered to be received by the participant for federal income tax purposes whether actually received in cash or reinvested in additional shares under the Plan. Therefore, by electing to reinvest cash dividends in additional shares of our common stock, a participant in the Plan may incur tax liability without having received the cash dividends to satisfy that liability.

IMPORTANT CONSIDERATIONS

The purpose of the Plan is to provide a convenient and useful service for our current or potential shareholders. Nothing in this prospectus or other Plan information represents a recommendation by us or anyone else that any person buy or sell our common stock. We urge you to read this prospectus and the documents incorporated or deemed incorporated by reference in this prospectus thoroughly before you make your independent investment decision regarding participation in the Plan.

The value of our shares may increase or decrease from time to time. There is no assurance whether, or at what rate, we will continue to pay dividends. The Securities Investor Protection Corporation, the Federal Deposit Insurance Corporation, or any other entity does not insure Plan accounts.

USE OF PROCEEDS

If we issue new shares of common stock under the Plan, the net proceeds will be added to our general funds and used for general corporate purposes.

SUMMARY OF PLAN HIGHLIGHTS

Because this section is a summary, it does not contain all the information that may be important to you. You should read the entire prospectus carefully.

How to Enroll

You need not be a shareholder to participate in the Plan. You may purchase your first shares through the Plan by completing an enrollment form and making an initial minimum cash investment of at least \$500. An enrollment fee of \$5 will be deducted from this amount prior to investment.

If you are already a shareholder but not a participant in the Plan, you can enroll by completing an enrollment form and sending it to the Plan administrator. You can deposit your shares for safekeeping or reinvest all or some of your dividends in our common stock.

We pay all administrative fees associated with purchases through the Plan; the only charge to you is a one-time enrollment fee of \$5 plus a nominal commission fee (currently \$.05) per purchased share.

Monthly Investments

After you enroll, you can make investments in any amount from a minimum of \$100 to a maximum of \$60,000 annually. Investments can be automatically deducted directly from your bank account each month provided the amount meets the minimum/maximum requirements. You can change the amount at any time provided you give the administrator proper instructions about any changes in time to process your request.

How to Pay for Shares

You can make purchases in various ways - by check, automatic deduction or dividend reinvestment. Your investment dollars (minus the enrollment and per share purchase fee) are fully used to purchase our shares.

5

Reinvest Dividends Automatically

You can automatically reinvest all or part of your dividends in additional shares. If you reinvest partially in additional shares, you will receive your remaining dividends in cash.

Sell Plan Shares

You can sell some or all of your shares through the Plan administrator for a nominal service charge of \$10 plus a nominal commission fee (currently \$.10) per share. Sales will be made once a month.

Direct Deposit of Dividends

If you do not reinvest your dividends, you can have your dividend deposited directly into your checking or savings account by electronic transfer on the dividend payable date.

Certificate Safekeeping

Protect your stock certificates from loss, theft or damage by depositing your shares in your account for safekeeping. When you want certificates sent to you, you only need to send a written request.

TERMS OF THE PLAN

Eligibility

Any U.S. person or entity can participate in the Plan if they follow the steps described below under "Enrollment." A citizen or resident of a country outside the United States is also eligible if participation does not violate any governmental regulations or laws.

Enrollment

Read the prospectus carefully. If you are eligible and want to enroll in the Plan, complete and sign an enrollment form and return it to the Plan administrator. To participate in the Plan, you must do one or more of the following:

- * Deposit certificate(s) representing one or more shares with the administrator for safekeeping.
- * Elect to reinvest cash dividends paid on at least one whole share.
- * Make an initial cash investment of at least \$500 (and not more than \$60,000 annually) (an enrollment fee of \$5 will be deducted from this amount prior to investment).

After the administrator approves your enrollment and receives your funds or securities, your participation in the Plan begins.

Initial and Optional Investments

Whether or not you are a shareholder, you may enroll in the Plan by making an initial investment of at least \$500 (and no more than \$60,000 annually), plus a one-time only enrollment fee of \$5. After you enroll, you can make investments in any amount from a minimum of \$100 to a maximum of \$60,000 annually. You may not invest more than \$60,000 during any calendar year, not counting qualified Plan distributions, if any. **You have no obligation to make optional investments.**

6

You can make your investments by personal check or money order payable to "UMB Bank-GPE." Return your payment to the administrator with a completed enrollment form or the tear-off remittance portion included with your statement of account. **Do Not Send Cash.**

You can reinvest cash dividends paid on all or some of your shares by making the appropriate selection on the enrollment form. You can also change your reinvestment selection by sending written notice to the Administrator. To be effective for a particular dividend period, the administrator must receive your

instructions prior to the record date for the dividend.

Automatic Monthly Investment

You can automatically invest a specified monthly amount (not less than \$100 and not more than \$60,000 annually) deducted directly from your U.S. bank account by completing the Automatic Monthly Deduction section on the enrollment form and returning it to the administrator. Funds will be transferred from your account three business days prior to the investment date each month. You can change or stop automatic monthly investments by completing and returning a new Automatic Monthly Deduction section on the enrollment form or by sending written notification to the administrator. The administrator must receive your instructions and authorization ten business days prior to the monthly investment date.

Dividend Reinvestment Options

- * **Full Reinvestment** -- If you choose this option, all of your dividends will be reinvested to purchase additional shares of our common stock.
- * **Partial Reinvestment** -- You may reinvest dividends on a specific percent of shares for an account. Dividends on remaining shares will be paid to you by cash or direct deposit.
- * **Optional Cash Investment Only** -- All dividends will be paid to you in cash unless you direct otherwise.

Administration

UMB Bank administers the Plan. The administrator serves as transfer agent, registrar and dividend paying agent for us. In addition, the administrator receives and invests all cash investments by participants, maintains participants' Plan account records, issues periodic account statements and performs other duties relating to the Plan. If you have questions about the Plan, you may contact the Plan administrator:

UMB Bank, n.a.
Securities Transfer Division
P.O. Box 419064
Kansas City, MO 64141-6064
Phone: (816) 860-7891
Fax: (816) 860-3963

UMB Bank is one of the lenders under revolving credit agreements with Great Plains Energy and with KCP&L. UMB Bank is also the trustee under KCP&L's General Mortgage Indenture and Deed of Trust, and provides various other banking and trust services for us.

Investment Dates

The investment dates are the 20th day of each month. If the 20th day is not a business day, or if financial markets in New York City are not open for business, the investment date will be the next following business day.

OTHER INVESTMENT INFORMATION

The administrator must receive your funds no later than the close of the business day prior to the investment date. Funds received later are held until the next investment period. **No interest is paid on funds held by the administrator pending investment.** Therefore, you should send funds to the administrator shortly prior to the deadline investment date. If delivery is by mail, we recommend the mailing be made sufficiently in advance of the investment date to allow time for postal delivery. All investments must be in U.S. dollars and are subject to collection by the administrator of full face value.

At your request, the administrator will return your investment (without interest), if your written request is received two or more business days prior to the investment date. However, refunds of a check or money order will be made only after the administrator actually collects such funds.

There is a \$20 charge for each check, electronic funds transfer, or other investment that is rejected due to insufficient funds. When you enroll in the Plan, you authorize the administrator to deduct this charge from your Plan account, if necessary.

Direct Deposit

You can have any cash dividend that is not being reinvested deposited directly into your bank account by completing the direct deposit section on the enrollment form and returning it to the administrator. You can change direct deposit account information or terminate direct deposit by sending written notice prior to the record date to the administrator. To be effective for a particular dividend period, the administrator must receive your instructions fifteen calendar days prior to the record date for the dividend.

Share Safekeeping

You can deposit your common stock certificates with the administrator for safekeeping. To take advantage of this feature, send your share certificates to the administrator by registered, insured mail along with a completed Certificate Deposit Form, or written instructions. Do not endorse your certificates.

The administrator will transfer your safekeeping shares into its name or the name of its nominee and deposit the shares in your Plan account in book-entry form. Safekeeping of your certificates will not affect your dividend reinvestment election.

Transferring Shares from a Brokerage Account

You may transfer shares held in "street name" through a broker or other agent to your Plan account. You should instruct your broker or other agent to initiate the transfer or you can contact the administrator to request assistance.

Share Certificates

The administrator holds shares purchased through the Plan in safekeeping in book-entry form. You can request a certificate for all or some of your Plan shares by sending a written request to the administrator. Certificates for fractional shares will not be issued. Instead, you will receive

cash payment for any fractional share. The issuance of a certificate does not affect dividend reinvestment. You may not pledge shares of stock held in book-entry form by the administrator in your Plan account as collateral for a loan or otherwise assign those shares.

Selling Plan Shares

You can sell any number of whole shares held in your Plan account by completing the Change Request Form or by sending written instructions to the administrator. Sale requests must be received no later than two business days prior to the investment date to be effective. Sale proceeds, less a sale fee of \$10 and the applicable brokerage commission deductions (currently \$.10 per share) and any withholding required by law, are paid by check. A request to sell all shares in your account will terminate your Plan account. Sale requests in a dividend-paying month will be processed after any dividend reinvestment distribution to your account.

Closing a Plan Account

You can close your Plan account at any time by sending written notification to the administrator or by electing to sell or withdraw all shares on the Change Request Form. Electing to sell or withdraw all shares from your Plan account automatically terminates your Plan participation. If you close your Plan account by withdrawing all shares, the administrator will issue you a certificate for all whole shares and the cash value of any fractional share will be paid to you by check.

Instructions to close a Plan account prior to a quarterly dividend payment will be processed as soon as practicable after any dividend disbursement is allocated to your Plan account. After you close an account, you cannot make future investments through the Plan without re-enrolling.

We, or the administrator, on our behalf, has the right to deny, suspend or terminate your participation in the Plan on grounds of excessive enrollment and termination. This is intended to minimize administrative expense and encourage long-term investment.

Price of Shares

Shares may be purchased or sold in the open market or in privately negotiated transactions on terms and conditions acceptable to the administrator. We can direct whether the administrator purchases and sells shares (i) in the open market on the New York Stock Exchange or in privately negotiated transactions or (ii) from or to us. Any purchase of shares from us by the administrator will be made pursuant to a registration statement filed with the SEC of which this prospectus is a part.

The price of any shares purchased from or sold to us will be the average of the high and low sale prices as reported on the NYSE Consolidated Tape on the transaction date. Otherwise, shares purchased or sold for a particular investment period are credited to your Plan account at the weighted average price per share of all shares purchased or sold for that investment period, less the enrollment/sale fee plus any applicable brokerage charge (currently \$.05 per purchased share and \$.10 per share sold).

The administrator may combine all participants' funds for the purpose of making purchases and may offset purchases of shares against sales of shares for the same investment period under the Plan, resulting in a net purchase or sale of shares.

The administrator will try to purchase or sell shares on the investment date or as soon as practicable for the relevant investment period, but not later than 30 days after the investment date.

You do not have control or authority to direct the price or time at which common stock is purchased or sold for Plan accounts. Therefore, you bear market risk associated with fluctuations in the price of common stock.

Account Statements

You will receive a statement of your account reflecting the amount invested, the purchase price, the number of shares purchased, deposited, sold, transferred, or withdrawn, the total number of shares accumulated and other information quarterly or whenever your account has a transaction activity. The quarterly statement consolidates all shares, certificated as well as book-entry shares. **You should keep your statements for income tax and other purposes.** If you need a replacement statement you should contact the administrator.

Reports

All notices, statements and reports will be mailed to the latest address on record with the administrator. Address changes may be made in writing or by telephone to the administrator.

MISCELLANEOUS

Rights Offering, Stock Dividends and Stock Splits

Stock dividends or split shares on your Plan book-entry shares will be credited to your book-entry Plan account. If you have elected partial dividend reinvestment, the administrator will adjust your election so that you continue to reinvest cash dividends on approximately the same percentage of your shares prior to the split. In the event of a rights offering, rights will be based on the number of shares credited to your account.

Voting Rights

You can vote all whole and fractional shares of common stock held in your Plan account in person or by the proxy card sent to you. If you do not vote in person or by proxy, your shares will not be voted.

Limitation of Liability

We, our directors, officers, employees, and the administrator and its representatives are not liable for anything done in good faith or good faith omissions in administering the Plan. This includes any claim of liability based on the prices or times at which shares are purchased or sold or any change in market price of shares or for the payment or amount of any future dividends on common stock. This is not a waiver of rights you may have under applicable securities laws.

Termination of the Plan

We can change, suspend or terminate the Plan at any time, in whole or in part, or may terminate the participation of any participant. **We reserve the right to close your account if you do not own at least one whole book-entry or certificate share of record. In that case, notices will be mailed to your last known address, along with a check for the cash value of any fractional share.**

10

Tax Consequences

We believe the following is an accurate summary of the federal income tax consequences to participation in the Plan as of the date of this prospectus. This summary may not reflect every possible situation resulting from participation in the Plan; therefore, you should consult your tax advisor.

Shares of common stock purchased on the open market will have a cost basis equal to the purchase price per share, including brokerage commissions. Common stock purchased from us will have a cost basis equal to the price paid for the shares. This will be the price at which the administrator credits shares to your account.

In general, the full amount of cash dividends paid to you by us is considered received by you for federal income tax purposes whether received in cash or reinvested under the Plan. Generally, any such dividends will be taxable to you as ordinary dividend income to the extent of our current or accumulated earnings and profits for federal income tax purposes. Dividends paid in taxable years beginning on or before December 31, 2008 will be eligible for a reduced rate of federal income taxation for individuals (not exceeding 15%), provided that the dividend is paid with respect to shares held for more than 60 days during the 120-day period beginning 60 days before the ex-dividend date, the individual is not obligated to make related payments with respect to substantially similar or related property (e.g., pursuant to a short sale of such shares), and certain other conditions are met. The amount of any dividends in excess of earnings and profits will reduce your tax basis in the common stock with respect to which the dividend was received, and, to the extent in excess of basis, result in capital gain. A statement of account showing the total amount of dividends will be sent to you and reported to the Internal Revenue Service shortly after the end of the year in which they are payable.

You will generally not realize gain or loss for the U.S. federal income tax purposes upon the withdrawal of shares in certificate form from the Plan, but will generally realize gain or loss on the sale of any whole or fractional shares.

If your dividends are subject to U.S. backup withholding, the administrator will cause dividends, less the appropriate amount of tax required to be withheld, to be reinvested in common stock, or sent by check or direct deposit. The filing of any documentation to obtain a reduction in U.S. withholding tax is your responsibility. If you are subject to such withholding, you should contact your tax advisors or the Internal Revenue Service for information. **We cannot refund federal income tax withholding amounts.**

The above may not apply to certain participants in the Plan, such as tax-exempt entities (e.g., pension funds and IRA's) and foreign shareholders. These participants should consult their tax advisors concerning tax consequences.

DESCRIPTION OF COMMON STOCK

General.

The following descriptions of our common stock and the relevant provisions of our Articles of Incorporation and by-laws are summaries and are qualified by references to our Articles of Incorporation and by-laws which have been previously filed with the SEC and are exhibits to this registration statement, of which this prospectus is a part, as well as the applicable Missouri General and Business Corporation Law.

11

Under our Articles of Incorporation, we are authorized to issue 162,962,000 shares of stock, divided into classes as follows:

- * 390,000 shares of Cumulative Preferred Stock with a par value of \$100;
- * 1,572,000 shares of Cumulative No Par Preferred Stock with no par value;
- * 11,000,000 shares of Preference Stock with no par value; and
- * 150,000,000 shares of Common Stock with no par value.

At May 1, 2006, 390,000 shares of Cumulative Preferred Stock and 74,904,567 shares of common stock were outstanding. No shares of Cumulative No Par Preferred Stock or Preference Stock are currently outstanding but such shares may be issued from time to time in accordance with the Articles of Incorporation. The voting powers, designations, preferences, rights and qualifications, limitations, or restrictions of any series of Preference Stock are set by our board of directors when it is issued.

Dividend Rights and Limitations.

The holders of our common stock are entitled to receive such dividends as our board of directors may from time to time declare, subject to any rights of the holders of our preferred and preference stock. Our ability to pay dividends depends primarily upon the ability of our subsidiaries to pay dividends or otherwise transfer funds to us.

Except as otherwise authorized by consent of the holders of at least two-thirds of the total number of shares of the total outstanding shares of Cumulative Preferred Stock and Cumulative No Par Preferred Stock, we may not pay or declare any dividends on common stock, other than dividends payable in common stock, or make any distributions on, or purchase or otherwise acquire for value, any shares of common stock if, after giving effect thereto, the aggregate amount expended for such purposes during the 12 months then ended (a) exceeds 50% of net income available for dividends on Preference Stock and common stock for the preceding 12 months, in case the total of Preference Stock and common stock equity would be reduced to less than 20% of total capitalization, or (b) exceeds 75% of such net income in case such equity would be reduced to between 20% and 25% of total capitalization, or (c) except to the extent permitted in subparagraphs (a) and (b), would reduce such equity below 25% of total capitalization.

Subject to certain limited exceptions, no dividends may be declared or paid on common stock and no common stock may be purchased or redeemed or otherwise retired for consideration (a) unless all past and current dividends on Cumulative Preferred Stock and Cumulative No Par Preferred Stock have been paid or set apart for payment and (b) except to the extent of retained earnings (earned surplus).

Voting Rights.

Except as otherwise provided by law and subject to the voting rights of the outstanding Cumulative Preferred Stock, Cumulative No Par Preferred Stock, and Preference Stock, the holders of our common stock have the exclusive right to vote for all general purposes and for the election of directors through cumulative voting. This means each shareholder has a total vote equal to the number of shares they own multiplied by the number of directors to be elected. These votes may be divided among all nominees equally or may be voted for one or more of the nominees either in equal or unequal amounts. The nominees with the highest number of votes are elected.

12

The consent of specified percentages of holders of outstanding shares of Cumulative Preferred Stock and Cumulative No Par Preferred Stock is required to authorize certain actions which may affect their interests; and if, at any time, dividends on any of the outstanding shares of Cumulative Preferred Stock and Cumulative No Par Preferred Stock shall be in default in an amount equivalent to four or more full quarterly dividends, the holders of outstanding shares of all preferred stock, voting as a single class, shall be entitled (voting cumulatively) to elect the smallest number of directors necessary to constitute a majority of the full Board of Directors, which right shall continue in effect until all dividend arrearages shall have been paid.

Liquidation Rights.

In the event of any dissolution or liquidation of Great Plains Energy Incorporated, after there shall have been paid to or set aside for the holders of shares of outstanding Cumulative Preferred Stock, Cumulative No Par Preferred Stock, and Preference Stock the full preferential amounts to which they are respectively entitled, the holders of outstanding shares of common stock shall be entitled to receive pro rata, according to the number of shares held by each, the remaining assets available for distribution.

Miscellaneous.

The outstanding shares of common stock are, and the shares of common stock sold hereunder will be, upon payment for them, fully paid and nonassessable. The holders of our common stock are not entitled to any preemptive or preferential rights to subscribe for or purchase any part of any new or additional issue of stock or securities convertible into stock. Our common stock does not contain any redemption provisions or conversion rights.

Transfer Agent and Registrar.

UMB Bank, N.A. acts as transfer agent and registrar for our common stock.

Business Combinations.

The affirmative vote of the holders of at least 80% of the outstanding shares of common stock is required for the approval or authorization of certain business combinations with interested shareholders; provided, however, that such 80% voting requirement shall not be applicable if:

- * the business combination shall have been approved by a majority of the continuing directors; or
- * the cash or the fair market value of the property, securities, or other consideration to be received per share by holders of the common stock in such business combination is not less than the highest per-share price paid by or on behalf of the acquiror for any shares of common stock during the five-year period preceding the announcement of the business combination.

Listing.

The common stock of Great Plains Energy Incorporated is listed on the New York Stock Exchange under the symbol "GXP."

LEGAL MATTERS

Legal matters with respect to the common stock offered under this prospectus will be passed upon by Mark English, General Counsel and Assistant Secretary. At May 1, 2006, Mr. English owned beneficially 1,312 shares of our common stock, including restricted stock and 4,355 performance shares, which may be paid in shares of common stock at a later date based on our performance.

13

EXPERTS

The consolidated financial statements, the related financial statement schedules and management's report on the effectiveness of internal control over financial reporting incorporated in this prospectus by reference from the Annual Report on Form 10-K of Great Plains Energy Incorporated have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports (which reports (1) express an unqualified opinion on the consolidated financial statements and financial statement schedules and include an explanatory paragraph regarding the adoption of a new accounting

standard and revisions made to the consolidated statements of cash flows for the years ended December 31, 2004 and 2003, (2) express an unqualified opinion on management's assessment regarding the effectiveness of internal control over financial reporting, and (3) express an unqualified opinion on the effectiveness of internal control over financial reporting), which are incorporated herein by reference, and have been so incorporated in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

No person has been authorized to give information or make any representation other than contained in this prospectus or information incorporated by reference. In the event such information is given or made, it should not be relied upon as being authorized by Great Plains Energy. This prospectus is not an offer to buy or sell any of these securities to any person in any state where it is unlawful to make such offer or solicitation. The delivery of this prospectus or any sale made shall, under any circumstances, imply that information is accurate subsequent to the date of this prospectus.

[Company Logo Here]

Table of Contents

About this Prospectus	1	Dividend Reinvestment and Direct Stock Purchase Plan
Where You Can Find More Information	1	
Cautionary Statements Regarding Certain Forwarding-Looking Information	2	Common Stock
Great Plains Energy Incorporated	3	
Risk Factors	4	<hr/>
Important Considerations	5	PROSPECTUS <hr/>
Use of Proceeds	5	
Summary of Plan Highlights	5	
Terms of the Plan	6	May 19, 2006
Other Investment Information	8	
Miscellaneous	10	
Description of Common Stock	11	
Legal Matters	13	
Experts	14	