SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 2 TO FORM S-3

REGISTRATION STATEMENT Under THE SECURITIES ACT OF 1933

GREAT PLAINS ENERGY INCORPORATED

(Exact name of registrant as specified in its charter)

Missouri43-1916803(State or other jurisdiction of
incorporation or organization)(I.R.S. Employer
Identification No.)

1201 Walnut Kansas City, Missouri 64106 (816) 556-2200 (Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

> DIVIDEND REINVESTMENT AND DIRECT STOCK PURCHASE PLAN

Jeanie Sell Latz, Corporate Secretary 1201 Walnut Kansas City, Missouri 64106 (816) 556-2936 (Name, address, including zip code, and telephone number, including area code, of agent for service)

Approximate date of commencement of proposed sale to the public: October 1, 2001

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. [X]

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. []

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. []

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. []

AMENDMENT NO. 2 TO FORM S-3 GREAT PLAINS ENERGY INCORPORATED DIVIDEND REINVESTMENT AND DIRECT STOCK PURCHASE PLAN

This Post-Effective Amendment No. 2 to Registration Statement on Form S-3 (No. 33-51799) is being filed pursuant to Rule 414 under the Securities Act of 1933 as amended to reflect the completion by Kansas City Power & Light Company, a Missouri Corporation ("KCPL"), of a corporate restructuring to create a holding company structure. The holding company organizational structure was effected pursuant to an agreement and plan of merger among Kansas City Power and Light Company, Great Plains Energy Incorporated, a Missouri Corporation ("GPE"), and KCPL Merger Sub Incorporated, a Missouri Corporation ("Merger Sub") and wholly owned subsidiary of GPE. The merger agreement provides for, among other things, the merger of Merger Sub with and into KCPL, with KCPL continuing as the surviving corporation. Pursuant to Section 351.448 of the General Corporation Law of the State of Missouri, stockholder approval of the merger was not required.

As a result of the merger, which was consummated on October 1, 2001, KCPL became a direct wholly owned subsidiary of GPE. Immediately following the merger, GPE became the successor issuer on the New York Stock Exchange, replacing KCPL. Effectively, the new GPE trading symbol GXP replaced the old trading symbol KLT.

As a result of the merger, all outstanding shares of KCPL will be honored on a share for share basis as shares of GPE with the same voting powers, designations, preferences, and rights, and the same qualifications, restrictions, and limitations, as the shares of KCPL previously held by the stockholders prior to the holding company merger. The shares of the holding company will continue to be represented by the same stock certificates that previously represented shares of KCPL capital stock prior to the holding company merger. No actual (or physical) exchange of stock certificates will occur.

In accordance with paragraph (d) of Rule 414 under the Securities Act, GPE hereby expressly adopts this registration statement as its own registration statement for all purposes of the Securities Act and the Securities Exchange Act of 1934, as amended.

The applicable registration fees were paid at the time of the original filing of this registration statement.

Of the 2,000,000 shares originally registered under this registration statement, approximately 242,170 remain available for use under the Dividend Reinvestment and Direct Stock Purchase Plan.

PROSPECTUS

GREAT PLAINS ENERGY INCORPORATED

DIVIDEND REINVESTMENT AND DIRECT STOCK PURCHASE PLAN

2,000,000 SHARES OF COMMON STOCK (WITHOUT PAR VALUE)

Great Plains Energy Incorporated (GPE), the holding company of Kansas City Power & Light Company (KCPL), 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 GPE's common stock.
- Reinvest all or some of your cash dividends in additional shares.
- Deposit your stock certificates for safekeeping.

This Plan is an amendment and restatement of Kansas City Power & Light Company's Dividend Reinvestment and Direct Stock Purchase Plan reflecting a name change for the Plan from Kansas City Power & Light Company to Great Plains Energy Incorporated. You will automatically be enrolled in GPE's Plan if you are currently enrolled in the KCPL Dividend Reinvestment and Direct Stock Purchase Plan.

The Administrator of the Plan may buy shares of common stock on the open market (New York Stock Exchange) or directly from GPE. 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 GPE, 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-Consolidated Tape.

GPE common stock is traded on the New York Stock Exchange under the symbol "GXP". The Company's stock was formerly traded under the name "Kansas City Power & Light Company", symbol "KLT". The closing price of the Company's common stock on September 21, 2001 on the NYSE consolidated tape was \$25.32 per share. Of the initial 2,000,000 shares set forth above, approximately 242,170 remain available for use under the Plan.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES REGULATOR HAS APPROVED OR DISAPPROVED THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

October 1, 2001

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 GPE shareholder to participate in the Plan. You may purchase your first GPE 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 GPE shareholder, you can enroll by completing an enrollment form and sending it to the plan administrator. You can also deposit your GPE shares for safekeeping or reinvest all or some of your GPE dividends in GPE common stock.

GPE pays 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.

You will be automatically enrolled in GPE's Plan if you are currently enrolled in the KCPL Dividend Reinvestment and Direct Stock Purchase Plan.

MONTHLY INVESTMENTS

After you enroll, you can make monthly additional investments in any amount from a minimum of \$100 to a maximum of \$5,000 per month. Your maximum annual investment cannot exceed \$60,000. 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 GPE shares.

REINVEST DIVIDENDS AUTOMATICALLY

You can automatically reinvest all or part of your GPE 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 GPE 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.

IMPORTANT CONSIDERATIONS

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

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

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.

You will be automatically enrolled in GPE's Plan if you are currently enrolled in the KCPL Dividend Reinvestment and Direct Stock Purchase Plan.

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 \$5,000) (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 GPE shareholder, you may enroll in the Plan by making an initial investment of at least \$500 (and no more than \$5,000), plus a one-time only enrollment fee of \$5.00. After you enroll, you may make optional investments in any amount from \$100 to \$5,000 per month. 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.

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 GPE 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 \$5,000) 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 GPE 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 GPE. 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 410064 KANSAS CITY, MO 64141-0064 PHONE: (816) 860-7891 FAX: (816) 860-3963

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 bookentry 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.

GPE or the administrator, on behalf of GPE 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. Presently, the administrator purchases and sells shares in the open market on the New York Stock Exchange.

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 purchase shares from or sell shares to GPE if GPE chooses. The price of any shares purchased from or sold to GPE will be the average of the high and low sale prices as reported on the New York Stock Exchange consolidated tape on the transaction date.

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 GPE 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

GPE, its 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

GPE can change, suspend or terminate the Plan at any time, in whole or in part, or may terminate the participation of any participant. GPE RESERVES 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.

TAX CONSEQUENCES

GPE believes the following is an accurate summary of the 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 GPE 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 GPE is considered taxable income whether received in cash or reinvested under the Plan. 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. GPE 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.

USE OF PROCEEDS

If GPE issues new shares of common stock under the Plan, the net proceeds will be added to the GPE general funds and used for legal and lawful purposes.

LEGAL OPINIONS

Jeanie Sell Latz, Senior Vice President-Corporate Services and Corporate Secretary , has passed upon certain legal matters in connection with the common stock offered by this Prospectus. Ms. Latz owns shares of common stock directly and is a participant in various employee benefit plans.

EXPERTS

The financial statements and schedules included in KCPL's latest Annual Report on Form 10-K, incorporated by reference in this prospectus, have been audited by PricewaterhouseCoopers

LLP, independent public accountants, and have been so incorporated on the authority of such firm as experts in auditing and accounting.

ADDITIONAL INFORMATION

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

We filed a registration statement with the SEC under the Securities Act of 1933, relating to the GPE common stock offered under the Plan. This Prospectus does not contain all of the information included in the registration statement. You will find additional information about us and our common stock in the registration statement. You may read and copy the registration statement the SEC's public reference facilities described below.

We incorporate by reference in this prospectus the following important business and financial information about KCPL and GPE that is not included in or delivered with this Prospectus:

- KCPL's annual report on Form 10-K for the year ended December 31, 2000
- KCPL's reports on Form 10-Q for the quarters ending March 31, 2001 and June 30, 2001
- KCPL's and GPE's current report on Form 8-K dated October 1, 2001

As long as GPE continues to offer the Plan, GPE also incorporates by reference additional reports, proxy statements, and other documents that GPE may file with the SEC after the date of this prospectus under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934.

GPE will provide you with a free copy of any or all of the documents incorporated by reference, except for exhibits to such documents (unless the exhibit is specifically incorporated by reference). You can request copies by calling or writing the Corporate Secretary, Great Plains Energy Incorporated, P.O. Box 418679, Kansas City, Missouri 64106, telephone 1-800-245-5275 or 816-556-2053 or by contacting us at our internet web site www.kcpl.com.

SEC FILING INFORMATION

GPE is subject to the requirements of the Securities Exchange Act of 1934 and will file annual, quarterly, and current reports, proxy statements, and other information with the SEC. You can read and copy these materials at the SEC's public reference rooms at 450 Fifth Street, NW, Washington, D.C.; and 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. You can get copies of these materials (for payment of copying fees) from the Public Reference Section by writing to the SEC at 450 Fifth Street, N.W., 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. The SEC also maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers, such as GPE, that file electronically with the SEC. The address of that site is http://www.sec.gov. In addition, GPE's filings can also be viewed at the offices of the New York Stock Exchange, 20 Broad Street, New York, New York 10005.

GPE will provide you with a free copy of any or all of the documents incorporated by reference, except exhibits (unless the exhibit is specifically incorporated by reference). You can request copies by calling or writing the Corporate Secretary, Great Plains Energy Incorporated, P.O. Box 418679, Kansas City, Missouri 64141, telephone 1-800-245-5275 or by contacting us at our internet web site www.kcpl.com.

TOLL-FREE INFORMATION

If you have questions about the Plan or need assistance or information about other shareholder matters, contact GPE Investor Relations toll-free at: 1-800-245-5275.

DESCRIPTION OF COMMON STOCK

The following statements summarize certain information about GPE's common stock. They do not claim to be complete or to reflect or give effect to statutory law, but are intended to present information in general terms only. All statements are subject to the provisions of our Articles of Incorporation.

DIVIDEND RIGHTS AND RESTRICTIONS

Subject to the preferential dividends of GPE's preferred and preference stock and certain provisions for the protection of such holders and other restrictive provisions, dividends may be paid on shares of common stock from available funds, when and as declared by the Board of Directors.

Except as otherwise authorized by consent of the holders of at least two-thirds of the total outstanding shares of the preferred stock voting as a single class, GPE may not pay or declare any dividends on shares of its junior stock, other than the dividends payable solely in shares of junior stock, or make any distribution on, or purchase or acquire, any shares of junior stock if the aggregate amount expended during the last 12 months (a) exceeds 50% of GPE's net income available for dividends on junior stock for the last 12 months, in case the total junior 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% to 25% of total capitalization, or (c) except to the extent permitted in (a) or (b) would reduce such equity below 25% of total capitalization.

No dividends may be declared or paid on the common stock and no common stock may be purchased, redeemed or retired unless all past and current dividends on shares of outstanding preferred stock have been paid or set apart for payment or to the extent of retained earnings.

LIQUIDATION RIGHTS

If GPE is liquidated, common shareholders are entitled to receive all of its assets which remain after its debts are paid and the holders of any outstanding preferred shares or other senior securities are paid.

PREEMPTIVE RIGHTS

Holders of common stock have no preemptive rights to buy any shares of stock or other securities issued by GPE.

LIABILITY TO ASSESSMENT

The shares of GPE common stock issued in accordance with the terms of the Plan will be fully paid and nonassessable.

GREAT PLAINS ENERGY INCORPORATED

Great Plains Energy Incorporated (NYSE: GXP) was incorporated in the state of Missouri in 2001. GPE's principal executive office is located at 1201 Walnut Street, Kansas City, Missouri 64106-2124, telephone 816-556-2200. GPE is the holding company for these three wholly owned subsidiaries:

-KANSAS CITY POWER & LIGHT COMPANY, a leading regulated provider of electricity in the Midwest;
-GREAT PLAINS POWER INCORPORATED, a competitive generator that will sell to the wholesale market; and
-KLT INC., a national investment company focusing on energy related ventures that are unregulated with high growth potential.

Headquartered in Kansas City, Missouri, the Company's web site is www.kcpl.com.

INDEMNIFICATION OF DIRECTORS, OFFICERS AND OTHERS FOR SECURITIES ACT LIABILITIES

Missouri law provides that a Missouri corporation, such as GPE, may indemnify, under circumstances provided by law, its directors, officers, employees and agents against liabilities and expenses they may incur. These circumstances could include indemnification for liabilities and expenses incurred in connection with claims arising under the Securities Act of 1933. GPE's Articles of Consolidation provide for indemnification of our directors, officers, employees, and agents, to the full extent permitted by Missouri law.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling GPE under the foregoing provisions, GPE has been informed that, in the opinion of the Securities and Exchange Commission, this indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

We have not authorized anyone to provide you with any information other than the information included in this Prospectus and the documents to which we refer you. If someone gives you other information, please do not rely on it as being authorized by us.

This Prospectus has been prepared as of October 1, 2001. There may be changes in the affairs of GPE after that date which are not reflected in this document.

We are not offering, or soliciting an offer to buy, these shares in any jurisdiction where an offer or solicitation is not authorized or is illegal.

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 GPE. 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.

[GREAT PLAINS ENERGY LOGO]

THE HOLDING COMPANY OF [KANSAS CITY POWER & LIGHT COMPANY LOGO]

DIVIDEND REINVESTMENT AND DIRECT STOCK PURCHASE PLAN

COMMON STOCK

PROSPECTUS

OCTOBER 1, 2001

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PART II. INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

SEC Registration Fees	\$ -0-
Blue Sky Fees	- 0 -
Legal Fees	3,000*
Accounting Fees and Expenses	1,000*
Printing Costs	9,300*
Postage and Handling Costs	3,000*
Miscellaneous	700*
Total	\$17,000

*Estimated

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ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Mo. Rev. Stat. 351.355 provides as follows:

1. A corporation created under the laws of this state may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit, or proceeding, whether civil, criminal, administrative or investigative, other than an action by or in the right of the corporation, by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit, or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit, or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in an manner which he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his conduct was unlawful.

2. The corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses, including attorneys' fees, and amounts paid in settlement actually and reasonably incurred by him in connection with the defense or settlement of the action or suit if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation; except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable for negligence or misconduct in the performance of his duty to the corporation unless and only to the extent that the court in which the action or suit was brought determines upon application that, despite the adjudication of liability and in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses which the court shall deem proper.

3. Except as otherwise provided in the Articles of Incorporation, to the extent that a director, officer, employee or agent of the corporation has been successful on the merits or otherwise in defense of any action, suit, or proceeding referred to in subsections 1 and 2 of this section, or in defense of any claim, issue or matter therein, he shall be indemnified against expenses, including attorneys' fees, actually and reasonably incurred by him in connection with the action, suit or proceeding.

4. Any indemnification under subsections 1 and 2 of this section, unless ordered by a court, shall be made by the corporation only as authorized in the specific case upon a determination that indemnification of the director, officer, employee or agent is proper in the circumstances because he has met the applicable standard of conduct set forth in this section. The determination shall be made by the board of directors by a majority vote of a quorum consisting of directors who were not parties to the action, suit, or proceeding, or if such a quorum is not obtainable, or even if obtainable a quorum of disinterested directors so directs, by independent legal counsel in a written opinion, or by the shareholders.

5. Expenses incurred in defending a civil or criminal action, suit or proceeding may be paid by the corporation in advance of the final disposition of the action, suit, or proceeding as authorized by the board of directors in the specific case upon receipt of an undertaking by or on behalf of the director, officer, employee or agent to repay such amount unless it shall ultimately be determined that he is entitled to be indemnified by the corporation as authorized in this section.

6. The indemnification provided by this section shall be deemed exclusive of any other rights to which those seeking indemnification may be entitled under the articles of incorporation or bylaws or any agreement, vote of shareholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office, and shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

7. A corporation created under the laws of this state shall have the power to give any further indemnity, in addition to the indemnity authorized or contemplated under other subsections of this section, including subsection 6, to any person who is or was a director, officer, employee or agent, or to any person who is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, provided such further indemnity is either (i) authorized, directed, or provided for in the articles of incorporation of the corporation or any duly adopted amendment thereof or (ii) is authorized, directed, or provided for in any bylaw or agreement of the corporation which has been adopted by a vote of the shareholders of the corporation, and provided further that no such indemnity shall indemnify any person from or on account of such person's conduct which was finally adjudged to have been knowingly fraudulent, deliberately dishonest or willful misconduct. Nothing in this subsection shall be deemed to limit the power of the corporation under subsection 6 of this section to enact bylaws or to enter into agreements without shareholder adoption of the same.

8. The corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him and incurred by him in any such capacity, or arising out of his status as such, whether or not the corporation would have the power to indemnify him against such liability under the provisions of this section.

9. Any provision of this chapter to the contrary notwithstanding, the provisions of this section shall apply to all existing and new domestic corporations, including but not limited to banks, trust companies, insurance companies, building and loan associations, savings bank and safe deposit companies, mortgage loan companies, corporations formed for benevolent, religious, scientific or educational purposes and nonprofit corporations.

10. For the purpose of this section, references to "the corporation" include all constituent corporations absorbed in a consolidation or merger as well as the resulting or surviving corporation so that any person who is or was a director, officer, employee or agent of such a constituent corporation or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise shall stand in the same position under the provisions of this section with respect to the resulting or surviving corporation in the same capacity.

11. For purposes of this section, the term "other enterprise" shall include employee benefit plans; the term "fines" shall include any excise taxes assessed on a person with respect to an employee benefit plan; and the term "serving at the request of the corporation" shall include any service as a director, officer, employee, or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee, or agent with respect to an employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner he reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the corporation" as referred to in this section.

The officers and directors of the Company have entered into indemnification agreements with the Company indemnifying such officers and directors to the extent allowed under the above Section Mo. Rev. Stat. 351.355 (1994).

Article XIII of the Articles of Incorporation of the Company provides as follows:

ARTICLE THIRTEENTH. (a) Right to Indemnification. Each person who was or is made a party or is threatened to be made a party to any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was a Director or officer of the Company or is or was an employee of the Company acting within the scope and course of his or her employment or is or was serving at the request of the Company as a Director, officer, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, shall be indemnified and held harmless by the Company to the fullest extent authorized by The Missouri General and Business Corporation Law, as the same exists or may hereafter be amended, against all expense, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts paid to or to be paid in settlement) actually and reasonably incurred by such person in connection therewith. The Company may in its discretion by action of its Board of Directors provide indemnification to agents of the Company as provided for in this ARTICLE THIRTEEN. Such indemnification shall continue as to a person who has ceased to be a Director, officer, employee or agent and shall inure to the benefit of his or her heirs, executors and administrators.

(b) Rights Not Exclusive. The indemnification and other rights provided by this ARTICLE THIRTEEN shall not be deemed exclusive of any other rights to which a person may be entitled under any applicable law, By-laws of the Company, agreement, vote of shareholders or disinterested Directors or otherwise, both as to action in such person's official capacity and as to action in any other capacity while holding the office of Director or officer, and the Company is hereby expressly authorized by the shareholders of the Company to enter into agreements with its Directors and officers which provide greater indemnification rights than that generally provided by The Missouri General and Business Corporation Law; provided, however, that no such further indemnity shall indemnify any person from or on account of such Director's or officer's conduct which was finally adjudged to have been knowingly fraudulent, deliberately dishonest or willful misconduct. Any such agreement providing for further indemnity entered into pursuant to this ARTICLE THIRTEEN after the date of approval of this ARTICLE THIRTEEN by the Company's shareholders need not be further approved by the shareholders of the Company in order to be fully effective and enforceable.

Insurance. The Company may purchase and maintain insurance on behalf of any person who was or is a Director, officer, employee or agent of the Company, or was or is serving at the request of the Company as a Director, officer, employee or agent of another Company, partnership, joint venture, trust or other enterprise against any liability asserted against or incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the Company would have the power to indemnify such person against such liability under the provisions of this ARTICLE THIRTEEN.

Amendment. This ARTICLE THIRTEEN may be hereafter amended or repealed; however, no amendment or repeal shall reduce, terminate or otherwise adversely affect the right of a person entitled to obtain indemnification or an advance of expenses with respect to an action, suit or proceeding that pertains to or arises out of actions or omissions that occur prior to the later of (a) the effective date of such amendment or repeal; (b) the expiration date of such person's then current term of office with, or service for, the Company (provided such person has a stated term of office or service and completes such term); or (c) the effective date such person resigns his or her office or terminates his or her service (provided such person has a stated term of office or service but resigns prior to the expiration of such term).

ITEM 16. EXHIBITS.

EXHIBIT	
NUMBER	DESCRIPTION OF DOCUMENT

- 2 *Agreement and Plan of Merger Among Kansas City Power & Light Company, Great Plains Energy Incorporated and KCPL Merger Sub Incorporated dated as of October 1, 2001 (Exhibit 2 to Report on Form 8-K filed October 1, 2001).
- 3-i *Articles of Incorporation of Great Plains Energy Incorporated (Exhibit 3-i to Report on Form 8-K filed October 1, 2001).
- 3-ii *By-laws of Great Plains Energy Incorporated (Exhibit 3-ii to Report on Form 8-K filed October 1, 2001).
- 4-a *Resolution of Board of Directors Establishing 3.80% Cumulative Preferred Stock (Exhibit 2-R to Registration Statement, Registration No. 2-40239).

- 4-b *Resolution of Board of Directors Establishing 4.50% Cumulative Preferred Stock (Exhibit 2-T to Registration Statement, Registration No. 2-40239).
- 4-c *Resolution of Board of Directors Establishing 4.20% Cumulative Preferred Stock (Exhibit 2-U to Registration Statement, Registration No. 2-40239).
- 4-d *Resolution of Board of Directors Establishing 4.35% Cumulative Preferred Stock (Exhibit 2-V to Registration Statement, Registration No. 2-40239).
- 23 Consent of Independent Accountants-PricewaterhouseCoopers LLP.
- 24 Powers of Attorney.
- 99-a Direct Stock Purchase and Dividend Reinvestment Plan Enrollment Form.
- 99-b Direct Stock Purchase and Dividend Reinvestment Plan Change Request Form.
- 99-c Direct Stock Purchase and Dividend Reinvestment Plan Certificate Deposit Form.

* Filed with the Securities and Exchange Commission as exhibits to prior registration statements (except as otherwise noted) and incorporated herein by reference and made a part hereof. The exhibit number and file number of the documents so filed, and incorporated herein by reference, are stated in parenthesis in the description of such exhibit.

ITEM 17. UNDERTAKINGS.

The undersigned registrant hereby undertakes:

(a) (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the formation set forth in the registration statement;

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of posteffective amendment any of the securities being registered which remain unsold at the termination of the offering. (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities and Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(a) of the Securities Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this post-effective amendment to Registration Statement No. 33-51799 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Kansas City, State of Missouri, on the 1st day of October, 2001.

GREAT PLAINS ENERGY INCORPORATED

By:	/s/Bernard J. Beaudoin
	(Bernard J. Beaudoin)
	Chairman of the Board,
	President and Chief
	Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this post-effective amendment has been signed below by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE		
/s/Bernard J. Beaudoin (Bernard J. Beaudoin)	Chairman of the Board, President and Chief Executive Officer)))		
/s/Andrea F. Bielsker (Andrea F. Bielsker)	Vice President-Finance, Treasurer and Chief Financial Officer (Chief Financial Officer)))))		
/s/Neil A. Roadman (Neil A. Roadman)	Controller (Principal Accounting Officer))))		
David L. Bodde* (David L. Bodde)	Director)		
Mark A. Ernst* (Mark A. Ernst)	Director)) October 1, 2001		
William K. Hall* (William K. Hall)	Director)		
Luis A. Jimenez* (Luis A. Jimenez)	Director)		
William C. Nelson* (William C. Nelson)	Director)		
Linda Hood Talbott* (Linda Hood Talbott)	Director)		
Robert H. West* (Robert H. West)	Director)		
*By /s/Bernard J. Beaudoin				

: (Bernard J. Beaudoin) Attorney-in-fact We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated February 20, 2001 relating to the financial statements as of December 31, 2000 and 1999 and for each of the three years in the period ended December 31, 2000, which appears in Kansas City Power & Light Company's Annual Report on Form 10-K for the year ended December 31, 2000. Those financial statements have been incorporated into such registration statement in reliance on our report given on our authority as experts in auditing and accounting.

/s/PricewaterhouseCoopers LLP
 PricewaterhouseCoopers LLP

Kansas City, Missouri September 28, 2001

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, a Director of Great Plains Energy Incorporated, a Missouri corporation, does hereby constitute and appoint Bernard J. Beaudoin and/or Jeanie Sell Latz, their true and lawful attorney and agent, with full power and authority to execute in the name and on behalf of the undersigned as such director all amendments to Registration Statement on Form S-3 (Registration Statement No. 33-51799) for the Dividend Reinvestment and Direct Stock Purchase Plan; hereby granting unto such attorney and agent full power of substitution and revocation in the premises; and hereby ratifying and confirming all that such attorney and agent may do or cause to be done by virtue of these presents.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 1st day of October, 2001.

/s/David L. Bodde David L. Bodde

STATE OF MISSOURI)) COUNTY OF JACKSON)

On this 1st day of October, 2001, before me the undersigned, a Notary Public, personally appeared David L. Bodde, to be known to be the person described in and who executed the foregoing instrument, and who, being by me first duly sworn, acknowledged that they executed the same as their free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

SS

/s/Jacquetta L. Hartman Jacquetta L. Hartman Notary Public Ray County, Missouri

My Commission Expires

April 8, 2004

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, a Director of Great Plains Energy Incorporated, a Missouri corporation, does hereby constitute and appoint Bernard J. Beaudoin and/or Jeanie Sell Latz, their true and lawful attorney and agent, with full power and authority to execute in the name and on behalf of the undersigned as such director all amendments to Registration Statement on Form S-3 (Registration Statement No. 33-51799) for the Dividend Reinvestment and Direct Stock Purchase Plan; hereby granting unto such attorney and agent full power of substitution and revocation in the premises; and hereby ratifying and confirming all that such attorney and agent may do or cause to be done by virtue of these presents.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 1st day of October, 2001.

/s/Mark A. Ernst Mark A. Ernst STATE OF MISSOURI)) SS COUNTY OF JACKSON)

On this 1st day of October, 2001, before me the undersigned, a Notary Public, personally appeared Mark A. Ernst, to be known to be the person described in and who executed the foregoing instrument, and who, being by me first duly sworn, acknowledged that they executed the same as their free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

/s/Jacquetta L. Hartman Jacquetta L. Hartman Notary Public Ray County, Missouri

My Commission Expires

That the undersigned, a Director of Great Plains Energy Incorporated, a Missouri corporation, does hereby constitute and appoint Bernard J. Beaudoin and/or Jeanie Sell Latz, their true and lawful attorney and agent, with full power and authority to execute in the name and on behalf of the undersigned as such director all amendments to Registration Statement on Form S-3 (Registration Statement No. 33-51799) for the Dividend Reinvestment and Direct Stock Purchase Plan; hereby granting unto such attorney and agent full power of substitution and revocation in the premises; and hereby ratifying and confirming all that such attorney and agent may do or cause to be done by virtue of these presents.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 1st day of October, 2001.

/s/William K. Hall William K. Hall

STATE OF MISSOURI)) SS COUNTY OF JACKSON)

On this 1st day of October, 2001, before me the undersigned, a Notary Public, personally appeared William K. Hall, to be known to be the person described in and who executed the foregoing instrument, and who, being by me first duly sworn, acknowledged that they executed the same as their free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

/s/Jacquetta L. Hartman Jacquetta L. Hartman Notary Public Ray County, Missouri

My Commission Expires

That the undersigned, a Director of Great Plains Energy Incorporated, a Missouri corporation, does hereby constitute and appoint Bernard J. Beaudoin and/or Jeanie Sell Latz, their true and lawful attorney and agent, with full power and authority to execute in the name and on behalf of the undersigned as such director all amendments to Registration Statement on Form S-3 (Registration Statement No. 33-51799) for the Dividend Reinvestment and Direct Stock Purchase Plan; hereby granting unto such attorney and agent full power of substitution and revocation in the premises; and hereby ratifying and confirming all that such attorney and agent may do or cause to be done by virtue of these presents.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 1st day of October, 2001.

/s/Luis A. Jimenez Luis A. Jimenez

STATE OF MISSOURI)) ss COUNTY OF JACKSON)

On this 1st day of October, 2001, before me the undersigned, a Notary Public, personally appeared Luis A. Jimenez, to be known to be the person described in and who executed the foregoing instrument, and who, being by me first duly sworn, acknowledged that they executed the same as their free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

/s/Jacquetta L. Hartman Jacquetta L. Hartman Notary Public Ray County, Missouri

My Commission Expires

That the undersigned, a Director of Great Plains Energy Incorporated, a Missouri corporation, does hereby constitute and appoint Bernard J. Beaudoin and/or Jeanie Sell Latz, their true and lawful attorney and agent, with full power and authority to execute in the name and on behalf of the undersigned as such director all amendments to Registration Statement on Form S-3 (Registration Statement No. 33-51799) for the Dividend Reinvestment and Direct Stock Purchase Plan; hereby granting unto such attorney and agent full power of substitution and revocation in the premises; and hereby ratifying and confirming all that such attorney and agent may do or cause to be done by virtue of these presents.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 1st day of October, 2001.

/s/William C. Nelson William C. Nelson

STATE OF MISSOURI)) SS COUNTY OF JACKSON)

On this 1st day of October, 2001, before me the undersigned, a Notary Public, personally appeared William C. Nelson, to be known to be the person described in and who executed the foregoing instrument, and who, being by me first duly sworn, acknowledged that they executed the same as their free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

/s/Jacquetta L. Hartman Jacquetta L. Hartman Notary Public Ray County, Missouri

My Commission Expires

That the undersigned, a Director of Great Plains Energy Incorporated, a Missouri corporation, does hereby constitute and appoint Bernard J. Beaudoin and/or Jeanie Sell Latz, their true and lawful attorney and agent, with full power and authority to execute in the name and on behalf of the undersigned as such director all amendments to Registration Statement on Form S-3 (Registration Statement No. 33-51799) for the Dividend Reinvestment and Direct Stock Purchase Plan; hereby granting unto such attorney and agent full power of substitution and revocation in the premises; and hereby ratifying and confirming all that such attorney and agent may do or cause to be done by virtue of these presents.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 1st day of October, 2001.

/s/Linda H. Talbott Linda H. Talbott

STATE OF MISSOURI)) SS COUNTY OF JACKSON)

On this 1st day of October, 2001, before me the undersigned, a Notary Public, personally appeared Linda H. Talbott, to be known to be the person described in and who executed the foregoing instrument, and who, being by me first duly sworn, acknowledged that they executed the same as their free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

/s/Jacquetta L. Hartman Jacquetta L. Hartman Notary Public Ray County, Missouri

My Commission Expires

That the undersigned, a Director of Great Plains Energy Incorporated, a Missouri corporation, does hereby constitute and appoint Bernard J. Beaudoin and/or Jeanie Sell Latz, their true and lawful attorney and agent, with full power and authority to execute in the name and on behalf of the undersigned as such director all amendments to Registration Statement on Form S-3 (Registration Statement No. 33-51799) for the Dividend Reinvestment and Direct Stock Purchase Plan; hereby granting unto such attorney and agent full power of substitution and revocation in the premises; and hereby ratifying and confirming all that such attorney and agent may do or cause to be done by virtue of these presents.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 1st day of October, 2001.

/s/Robert H. West Robert H. West

STATE OF MISSOURI)) SS COUNTY OF JACKSON)

On this 1st day of October, 2001, before me the undersigned, a Notary Public, personally appeared Robert H. West, to be known to be the person described in and who executed the foregoing instrument, and who, being by me first duly sworn, acknowledged that they executed the same as their free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

/s/Jacquetta L. Hartman Jacquetta L. Hartman Notary Public Ray County, Missouri

My Commission Expires

GREAT PLAINS ENERGY(SM)

DIVIDEND REINVESTMENT AND DIRECT STOCK PURCHASE PLAN

ENROLLMENT FORM

ENROLLMENT IN THE PLAN I wish to enroll in Great Plains Energy (GPE) (holding company of Kansas City Power & Light Company) Dividend Reinvestment and Direct Stock Purchase Plan and authorize UMB Bank, n.a. as Administrator described in the Plan prospectus, to take the following action:

ACCOUNT NAME AND ADDRESS (Please () Check here if

Print)			initial purchase
Name of	Account Owner		I wish to enroll by depositing an initial cash investment. Enclosed is a check or money order for \$ payable to UMB
Name of	Account Owner		Bank-GPE (\$500 minimum; \$5,000 maximum). A one- time only enrollment fee
Mailing	Address Apt	. No.	of \$5.00 will be deducted from the above amount.
City	State	Zip	

() Check here if current shareholder

REGISTRATION GUIDELINES (Please check one box)

) INDIVIDUAL OR JOINT -- Joint accounts will be presumed to be Joint Tenants with Right of Survivorship unless restricted by applicable law or otherwise indicated. Only one Social Security Number is required for tax reporting purposes.) UNIFORM TRANSFER/GIFT TO MINOR -- A minor is the beneficial (owner of the account, with an adult custodian managing the account until the minor becomes of age, as specified in the Uniform Gift/Transfers to Minors Act in the minor's state of residence (The custodian's name, in addition to the minor's name, state, and social security number must be provided.) () TRUST -- Account is established in accordance with the provisions of a trust agreement. (Please provide name of Trust, date of Trust and Trustee with this registration.) () CORPORATION, PARTNERSHIP OR OTHER ENTITY -- (Provide business name and Tax I.D. Number.)

DIVIDEND PAYMENT AND REINVESTMENT PARTICIPATION (Please check one box)

Check the participation option in which you wish to enroll. Under any option, a Plan participant may make cash investments in any amount ranging from \$100 - \$5,000 per investment date as defined in the prospectus.

() FULL	() PARTIAL	<pre>() OPTIONAL CASH</pre>
REINVESTMENT	REINVESTMENT	INVESTMENT ONLY
All dividends	Invest%	All dividends paid in
reinvested.	of my dividend in	cash.
	shares & pay	
	balance in cash.	

IF NO PARTICIPATION OPTION IS INDICATED, ALL DIVIDENDS WILL BE PAID TO YOU IN CASH.

(Continue on back)

(PAGE)

DIRECT DEPOSIT AND/OR AUTOMATIC MONTHLY DEDUCTION

Complete this section ONLY to have dividends deposited electronically to your bank account OR to authorize automatic monthly deductions to purchase stock. Authorizations will remain in effect until you provide the Administrator with written notification to change or discontinue. Check the appropriate box below.

() DIRECT DEPOSIT OF DIVIDENDS I authorize GPE or the Administrator, UMB Bank, to deposit dividends electronically according to the information shown below. I authorize the Administrator to make corrections, if necessary, to any amounts credited to my account in error.

() AUTOMATIC MONTHLY DEDUCTIONS

I authorize GPE or the Administrator, UMB Bank, to make monthly automatic transfer of funds according to the information shown below to purchase shares of common stock for deposit into my Plan account. Transfer of authorized funds will be made three business days prior to investment date.

Name of Financial Institution

) Checking) Savings

(

Mailing address of Financial Institution () _____ Phone Number of Financial Institution

Bank Account Number

\$_____ Amount of authorized monthly deduction (\$100 minimum; \$5,000 maximum)

ABA Number (9 digit number on bottom of check)

_ _ _ _ _ _ _ _ _ _

PLEASE ATTACH A VOIDED CHECK OR SAVINGS DEPOSIT SLIP TO VERIFY BANKING INFORMATION.

By signing this form, I acknowledge receipt of the prospectus describing the details of the Dividend Reinvestment and Direct Stock Purchase Plan (the "Plan") and request that the above account be enrolled in the Plan. I understand and agree that participation is subject to the terms and conditions of the Plan as described in the Prospectus, and that participation may be terminated at any time by written notice to UMB Bank, or Great Plains Energy.

Under penalties of perjury, I certify that the Social Security/Taxpayer I.D. Number shown on this form is true and correct and that I am not subject to back-up withholding per the Internal Revenue Code. If a Social Security/Taxpayer I.D. Number is not provided, back-up withholding tax will be withheld from dividend payments. ALL OWNERS MUST SIGN.

Signature	Date	Social Security/ Tax I.D. Number
Signature	Date	() Daytime Phone
orginature	Dutt	() Evening Phone
Complete, sign, and in the enclosed end or mail to:		UMB Bank, n.a. Securities Transfer Division P.O. Box 410064 Kansas City, MO 64141-0064

Questions should be directed to UMB Bank (816) 860-7891 or Great Plains Energy toll-free 800-245-5275 or (816) 556-2053.

GREAT PLAINS ENERGY(SM)

DIVIDEND REINVESTMENT AND DIRECT STOCK PURCHASE PLAN

I authorize UMB Bank, n.a. as Administrator described in Great Plains Energy's (holding company for Kansas City Power & Light Company) Dividend Reinvestment and Direct Stock Purchase Plan prospectus, to take the following action:

ACCOUNT NAME AND ADDRESS (Please print)

Name(s) of Account Owners

Mailing Address City State Zip

Account Number Social Security/Tax I.D. Number

Signature Date

Signature

A. SALE REQUEST

() Sell ALL shares, including fractional shares, of Common Stock credited to my Plan account and forward the sale proceeds to me. I UNDERSTAND THIS WILL TERMINATE MY PLAN ACCOUNT.

Date

() Sell whole shares of Common Stock credited to my Plan account and forward the sale proceeds to me. I UNDERSTAND THIS WILL NOT TERMINATE MY PLAN ACCOUNT.

B. WITHDRAWAL REQUEST

() Withdraw ALL whole shares of Common Stock credited to my Plan account and forward certificate to me. Sell any fractional share and forward sale proceeds to me. I UNDERSTAND THIS WILL TERMINATE MY PLAN ACCOUNT.

() Withdraw ______ whole shares of Common Stock credited to my Plan account and forward certificate to me. I UNDERSTAND THIS WILL NOT TERMINATE MY PLAN ACCOUNT.

C. TRANSFER REQUEST

() Transfer ALL shares of Common Stock credited to my Plan account to the transferee named below.

() Transfer ______ whole shares of Common Stock credited to my Plan account to the named below.

TRANSFEREE INFORMATION (REQUIRED FOR TRANSFER REQUEST)

Name of Transferee

Mailing address of Transferee City State Zip

Social Security/Tax I.D. # of Transferee

(Continue on back)

(PAGE)

REGISTRATION GUIDELINES (PLEASE CHECK ONE BOX)

() INDIVIDUAL OR JOINT - Joint accounts will be presumed to be Joint Tenants with Right of Survivorship unless restricted by applicable law or otherwise indicated. Only one Social Security Number is required for tax reporting purposes.
() UNIFORM TRANSFER/GIFT TO MINOR - A minor is the beneficial owner of the account, with an adult custodian managing the account until the minor becomes of age, as specified in the

Uniform Gift/Transfer to Minors Act in the minor's state of residence. (The custodian's name, in addition to the minor's name, state, and social security number must be provided.) () TRUST - Account is established in accordance with the provisions of a trust agreement. (Please provide name of Trust, date of Trust and Trustee with this registration.) () CORPORATION, PARTNERSHIP OR OTHER ENTITY (Provide business name and Tax I.D. Number.)

TO ENABLE THE TRANSFER OF SHARE(S) OF COMMON STOCK CREDITED TO YOUR PLAN ACCOUNT, YOUR SIGNATURE(S) MUST BE FURNISHED BELOW WITH MEDALLION STAMP GUARANTEE (SEE NOTE BELOW).

The undersigned irrevocably appoints UMB Bank, n.a. as attorney to sell/transfer the shares of Common Stock credited to my (our) Plan account noted on the books of the Company.

Signature

Date

Signature

Date

MEDALLION STAMP GUARANTEE (REQUIRED ONLY FOR TRANSFER REQUESTS)

Note: Plan participants executing this stock power must sign above. Signature(s) must correspond with the name(s) exactly as shown on your Plan account and must be Medallion Stamp Guaranteed by an authorized commercial bank, broker or trust company.

To assist us in processing your request, please provide your day and evening telephone numbers.

Daytime Phone () _____ Evening Phone () _____

If you have questions or need assistance completing your request, please write or call:

UMB BANK, N.A. SECURITIES TRANSFER DIVISION P.O. BOX 410064 KANSAS CITY, MO 64141-0064 (816) 860-7891

OR CALL GREAT PLAINS ENERGY TOLL-FREE 1-800-245-5275 - UNITED STATES (816) 556-2053 - KANSAS CITY, MO GREAT PLAINS ENERGY(SM)

Dividend Reinvestment and CERTIFICATE DEPOSIT FORM Direct Stock Purchase Plan

Please deposit the attached Great Plains Energy (holding company of Kansas City Power & Light Company) Common Stock certificates into my Dividend Reinvestment and Direct Stock Purchase Plan account for safekeeping. Certificates need NOT be endorsed. IF YOU ARE NOT ENROLLED IN THE PLAN, AN ENROLLMENT FORM MUST ACCOMPANY THIS REQUEST.

Complete	information	below,	sign,	UMB BANK, N	.A.
date and	return to			SECURITIES	TRANSFER
				DIVISION	
				P.O. BOX 41	0064
				KANSAS CITY	, МО
				64141-0064	

ACCOUNT NAME AND ADDRESS (Please print)

Signature of Account Owner(s)

Date

NOTE: SIGNATURE(S) MUST AGREE IN ALL RESPECTS WITH THE NAME(S) ON STOCK CERTIFICATE(S).

To ensure against loss resulting from mailing certificates, it is recommended certificates be mailed registered mail, properly insured, with return receipt requested.