The information in this prospectus supplement and the accompanying prospectus is not complete and may be changed. This prospectus supplement and the accompanying base prospectus are not an offer to sell these securities and are not soliciting an offer to buy these securities in any state where the offer and sale is not permitted.

SUBJECT TO COMPLETION, DATED DECEMBER 6, 2000

PROSPECTUS SUPPLEMENT
DECEMBER , 2000
(TO PROSPECTUS DATED DECEMBER 4, 2000)

\$250,000,000

KANSAS CITY POWER & LIGHT COMPANY

% SENIOR NOTES DUE DECEMBER , 20

We will pay interest on the Senior Notes on June 1, 2001 and thereafter semi-annually on December 1 and June 1 of each year. The Senior Notes will mature on December $\,$, 20 $\,$. We may not redeem the Senior Notes prior to maturity.

The Senior Notes will be unsecured obligations and rank equally with our other unsecured debt securities that are not subordinated obligations. The Senior Notes will be issued only in registered form in denominations of \$1,000 or multiples of \$1,000.

	PER SENIOR NOTE	TOTAI
Public offering price(1) Underwriting discount	% %	\$ \$
Proceeds, before expenses, to Kansas City Power & Light Company	%	\$

⁽¹⁾ Plus accrued interest from December $\,$, 2000, if settlement occurs after that date

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

The Senior Notes will be ready for delivery in book-entry form only through the facilities of The Depository Trust Company on or about December , 2000.

JOINT BOOK-RUNNING MANAGERS

JUINI BOOK-RUNNING MANAGE

BANC OF AMERICA SECURITIES LLC

MERRILL LYNCH & CO.

BANC ONE CAPITAL MARKETS, INC.

ABN AMRO INCORPORATED

BNY CAPITAL MARKETS, INC.

TABLE OF CONTENTS

PAGE ----

UnderwritingPROSPECTUS	S-4
About This Prospectus	2
Where You Can Find More Information	2
The Company	3
Use of Proceeds	4
Ratio of Earnings to Fixed Charges	
Description of Debt Securities	4
Plan of Distribution	13
Legal Matters	14
Experts	14

You should rely on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not, and the underwriters have not, authorized any other person 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, and the underwriters are not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference is accurate only as of the dates appearing on the covers of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

DESCRIPTION OF SENIOR NOTES

GENERAL

The Senior Notes will be initially issued in the principal amount of \$250,000,000 and will mature on December , 20 , and may not be redeemed prior to maturity. We may issue additional Senior Notes in the future at our discretion. Additional information describing the Senior Notes and the Indenture under which they are to be issued is included in "Description of Debt Securities" in the accompanying prospectus.

INTEREST

We will pay interest on the Senior Notes at the annual rate stated on the cover of this prospectus supplement. Interest will accrue from December , 2000 or from the most recent interest payment date to which interest has been paid. Interest is payable on June 1, 2001 and thereafter semi-annually on December 1 and June 1 of each year to holders of record at the close of business on the fifteenth day, whether or not a business day, of the calendar month immediately preceding that interest payment date.

BOOK-ENTRY SYSTEM

This discussion regarding The Depository Trust Company ("DTC") and its book-entry system supplements the discussion of depository arrangements in "Description of Debt Securities-Global Securities" in the prospectus.

DTC will act as securities depository for the Senior Notes. The Senior Notes will be issued in fully registered form in the name of Cede & Co. (DTC's partnership nominee). One or more fully-registered Senior Note certificates will be issued as global securities for the Senior Notes, in the aggregate principal amount of the Senior Notes, and will be deposited with DTC.

DTC is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds securities that its participants ("Direct Participants") deposit with DTC. DTC also facilitates the settlement among Direct Participants of securities transactions, such as transfers and pledges, in deposited securities through electronic computerized book-entry changes in Direct Participants' accounts, thereby eliminating the need for physical movement of securities certificates. Direct Participants include securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is owned by a number of its Direct Participants and by the New York Stock Exchange, Inc., the American Stock Exchange, Inc., and the National Association of Securities Dealers, Inc. Access to the DTC system is also available to others such as securities brokers and dealers, banks, and trust companies that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants" and together with Direct Participants, "Participants"). The Rules applicable to DTC and its Participants are on file with the Securities and Exchange Commission.

Purchases of Senior Notes under the DTC system must be made by or through Direct Participants, which will receive a credit for the Senior Notes on DTC's records. The ownership interest of each actual purchaser of Senior Notes ("Beneficial Owner") is in turn to be recorded on the Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase, but Beneficial Owners are expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Senior Notes are to be accomplished by entries made on the books of Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Senior Notes, except in the event that use of the book-entry system for the Senior Notes is discontinued.

The deposit of Senior Notes with DTC and their registration in the name of Cede & Co. effect no change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Senior Notes; DTC's records reflect only the identity of the Direct Participants to whose accounts such Senior Notes are credited, which may or may not be the Beneficial Owners. The Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Neither DTC nor Cede & Co. will consent or vote with respect to Senior Notes. Under its usual procedures, DTC would mail an Omnibus Proxy to Kansas City Power & Light Company as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Senior Notes are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal and interest payments on the Senior Notes will be made to DTC. DTC's practice is to credit Direct Participants' accounts on the payable date in accordance with their respective holdings shown on DTC's records unless DTC has reason to believe that it will not receive payment on the payable date. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC or Kansas City Power & Light Company, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to DTC is the responsibility of Kansas City Power & Light Company, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursements of such payments to the Beneficial Owners shall be the responsibility of Participants.

DTC may discontinue providing its services as securities depository with respect to the Senior Notes at any time by giving reasonable notice to Kansas City Power & Light Company. Under such circumstances, in the event that a successor securities depository is not obtained, Senior Note certificates are required to be printed and delivered. Kansas City Power & Light Company may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, Senior Note certificates will be printed and delivered.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that Kansas City Power & Light Company believes to be reliable (including DTC), but neither Kansas City Power & Light Company nor the underwriters take responsibility for the accuracy thereof.

Neither Kansas City Power & Light Company, the trustee nor the underwriters will have any responsibility or obligation to Participants, or the persons for whom they act as nominees, with respect to the accuracy of the records of DTC, its nominee or any Participant with respect to any ownership interest in the Senior Notes, or payments to, or the providing of notice for, Participants or Beneficial Owners.

UNDERWRITING

Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to each of the underwriters named below and each of the underwriters has severally agreed to purchase from us the respective principal amount of Senior Notes set forth opposite its name below:

	PRINCIPAL AMOUNT
UNDERWRITER	OF SENIOR NOTES
Banc of America Securities LLC Merrill Lynch, Pierce, Fenner & Smith	\$
Incorporated	\$
Banc One Capital Markets, Inc	
ABN AMRO Incorporated	\$
BNY Capital Markets, Inc	\$
Total	\$
	=======

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act of 1933, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the Senior Notes, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of

the Senior Notes, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

COMMISSIONS AND DISCOUNTS

The underwriters have advised us that they propose initially to offer the Senior Notes to the public at the public offering price on the cover page of this prospectus supplement, and to dealers at that price less a concession not in excess of . % of the principal amount of the Senior Notes. The underwriters may allow, and such dealers may reallow, a discount not in excess of . % of the principal amount of the Senior Notes to certain brokers and other dealers. After the initial public offering, the public offering price, concession and reallowance may be changed.

The expenses of the offering, not including the underwriting discount, are estimated to be \$ and are payable by us.

NEW ISSUE OF SENIOR NOTES

The Senior Notes are a new issue of securities with no established trading market. We do not intend to apply for the listing of the Senior Notes on any national securities exchange or for quotation of the Senior Notes on any automated dealer quotation system. We have been advised by the underwriters that they presently intend to make a market in the Senior Notes after completion of the offering. However, the underwriters are under no obligation to do so and may discontinue any market-making activities at any time without any notice. We cannot assure the liquidity of the trading market for the Senior Notes or that an active public trading market for the Senior Notes does not develop, the market price and liquidity of the Senior Notes may be adversely affected.

PRICE STABILIZATION, SHORT POSITIONS AND PENALTY BIDS

In order to facilitate the offering of the Senior Notes, the underwriters may engage in transactions that stabilize, maintain, or otherwise affect the price of the Senior Notes. Specifically, the underwriters may over-allot in connection with the offering, creating a short position in the Senior Notes for their account. In addition, to cover over-allotments or to stabilize the price of the Senior Notes, the underwriters may bid for, and purchase, the Senior Notes in the open market. Finally, the underwriting syndicate may reclaim selling concessions allowed to syndicate members or other broker dealers for distributing the Senior Notes in the offering if the syndicate repurchases previously distributed Senior Notes in transactions to cover syndicate short positions, in stabilization transactions, or otherwise. Any of these activities may stabilize or maintain the market price of the Senior Notes above independent market levels. The underwriters are not required to engage in these activities, and may end any of these activities at any time.

OTHER RELATIONSHIPS

The underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us. The underwriters have received customary fees and commissions for these transactions.

KANSAS CITY POWER & LIGHT COMPANY

DEBT SECURITIES

Kansas City Power & Light Company may offer and sell up to \$400,000,000 of our unsecured debt securities. We will establish the specific terms of each series of our debt securities, their offering prices and how they will be offered at the time we offer them, and we will describe them in one or more supplements to this prospectus. This prospectus may not be used to offer and sell our debt securities unless accompanied by a prospectus supplement. You should read this prospectus and the related supplement before you invest in our debt securities.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAVE THESE ORGANIZATIONS DETERMINED THAT THIS PROSPECTUS IS ACCURATE OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

We will offer and sell our debt securities through one or more underwriters or agents. We will set forth in the related prospectus supplement the name of the underwriters or agents, the discount or commission received by them from us as compensation, our other expenses for the offering and sale of the debt securities, and the net proceeds we receive from the sale. See "Plan of Distribution."

THE DATE OF THIS PROSPECTUS IS DECEMBER 4, 2000.

TABLE OF CONTENTS

About This Prospectus	2
Where You Can Find More Information	2
The Company	
Use of Proceeds	
Ratio of Earnings to Fixed Charges	
Description of Debt Securities	4
Plan of Distribution	13
Legal Matters	14
Experts	14

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement we have filed with the Securities and Exchange Commission using a "shelf" registration process. By using this process, we may offer up to a total dollar amount of \$400,000,000 of our debt securities in one or more offerings. This prospectus provides you with a general description of the debt securities we may offer. Each time we offer debt securities, we will provide you with a supplement to this prospectus that will describe the specific terms of that offering. The prospectus supplement may also add, update or change the information contained in this prospectus. Before you invest, you should carefully read this prospectus, the applicable 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 the terms "we", "us" or other similar terms mean Kansas City Power & Light Company, unless the context clearly indicates otherwise. We are also referred to in this prospectus as the Company.

You should rely only on the information contained or incorporated by reference in this prospectus and any accompanying 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 Securities and Exchange Commission (the "Commission") through the Commission's Electronic Data Gathering, Analysis and Retrieval system and these filings are publicly available through the Commission's Web site (http://www.sec.gov). You may read and copy such material at the public reference facilities maintained by the Commission at Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549; at the Commission's New York Regional Office, 7 World Trade Center, 13th Floor, New York, New York 10048; and at its Chicago Regional Office, Northwest Atrium Center, 500 West Madison Street, 14th Floor, Chicago, Illinois 60661. You may obtain information on the operation of the Public Reference Room by calling the Commission at 1-800-SEC-0330. You may also obtain copies of such material at prescribed rates from the Public

Reference Section of the Commission, 450 Fifth Street, N.W., Washington, D.C. 20549. In addition, you may inspect such material at the offices of the New York Stock Exchange, Inc., 20 Broad Street, New York, New York 10005.

The Commission 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 Commission that is incorporated by reference into this prospectus will automatically update and supercede this information. We are incorporating by reference into this prospectus the following documents that we have filed with the Commission and any subsequent filings we make with the Commission under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 until the offering of the debt securities described in this prospectus is completed:

- our Annual Report on Form 10-K for the year ended December 31, 1999 ("1999 Form 10-K"),
- our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2000 (as amended by Form 10-Q/A filed June 22, 2000), June 30, 2000 and September 30, 2000, and
- our Current Reports on Form 8-K, dated January 3, 2000 and February 15, 2000.

This prospectus is part of a registration statement we have filed with the Commission relating to our debt securities. As permitted by the Commission's rules, this prospectus does not contain all of the information included in the registration statement and the accompanying exhibits and schedules we file with the Commission. You should read the registration statement and the exhibits and schedules for more information about us and our debt securities. The registration statement, exhibits and schedules are also available at the Commission's Public Reference Section or through its Web site.

You may obtain a free copy of our filings with the Commission by writing or telephoning us at the following address: Kansas City Power & Light Company, 1201 Walnut, Kansas City, Missouri 64106-2124 (Telephone No.: 816-556-2200) Attention: Corporate Secretary, or by contacting us at our internet web site www.kcpl.com.

THE COMPANY

We are a medium-sized electric utility incorporated in Missouri. We generate and distribute electricity to over 463,000 customers located in all or portions of 22 counties in western Missouri and eastern Kansas. Our customers include approximately 407,000 residences, 53,000 commercial firms, and over 3,000 industries, municipalities and other electric utilities. About two-thirds of our retail sales are to Missouri customers and the remainder are to Kansas customers. Our principal executive office is located at 1201 Walnut, Kansas City, Missouri 64106 (Telephone: (816) 556-2200).

USE OF PROCEEDS

Unless we inform you otherwise in a supplement to this prospectus, we anticipate using any net proceeds received by us from the sale of the debt securities for general corporate purposes, including, among others:

- Repayment of short term debt,
- Repurchase, retirement or refinancing of other securities,
- Funding of construction expenditures,
- Acquisitions, and
- Investments in subsidiaries.

RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth our ratio of earnings to fixed charges for the periods indicated:

THELVE MONTHS ENDED	YEAR ENDED DECEMBER 31,				
TWELVE MONTHS ENDED SEPTEMBER 30, 2000		1998(A)		1996(A)	1995
2.41	2.07	2.87	2.03	3.06	3.94

⁽a) We incurred significant merger-related costs relating to two planned mergers, one of which was terminated in 1996 and the other was terminated in 2000.

DESCRIPTION OF DEBT SECURITIES

The debt securities are to be issued under an Indenture to be entered into between the Company and The Bank of New York, as Trustee ("Trustee"), (the "Indenture"), a form of which is included as an exhibit to the registration statement of which this prospectus is a part. The Company may also enter into one or more amendments or supplements to the Indenture, or additional indentures with other trustees, with respect to certain of the debt securities. Any such indenture would contain covenants and other provisions similar to those described below. Reference is made to the prospectus supplement regarding any additional indentures or additional terms and provisions under which debt securities will be issued.

The Company may from time to time offer under this prospectus unsecured debt securities, which may be senior debt securities or subordinated debt securities. Unless otherwise provided in a prospectus supplement, the senior debt securities will be unsecured obligations of the Company and will rank on a parity with all other unsecured and unsubordinated indebtedness of the Company. The subordinated debt securities ("Subordinated Securities") will be unsecured obligations of the Company, unless otherwise provided in a prospectus supplement, subordinated in right of payment to the prior payment in full of all Senior Indebtedness (which term includes senior debt securities) of the Company as described below under "Subordination" and in the applicable prospectus supplement.

There is no requirement that future issues of debt securities of the Company be issued under the Indenture, and the Company will be free to employ other indentures or documentation, containing provisions different from those included in the Indenture or

applicable to one or more issues of securities, in connection with future issues of such other debt securities.

Unless otherwise provided in a prospectus supplement, the debt securities will effectively rank junior to the first mortgage bonds ("General Mortgage Bonds") of the Company which were issued under the General Mortgage Indenture and Deed of Trust, dated as of December 1, 1986, from the Company to United Missouri Bank of Kansas City, N.A., Trustee, as supplemented ("Mortgage Indenture"). The Mortgage Indenture constitutes a first mortgage lien upon substantially all of the fixed property and franchises of the Company. At September 30, 2000, there was approximately \$455,300,000 principal amount of General Mortgage Bonds outstanding. Certain outstanding series of the Company's unsecured debt restrict the issuance of additional General Mortgage Bonds, unless these series are similarly secured, and also generally restrict, subject to exceptions, providing collateral to secure debt of the Company unless they are comparably secured.

The Indenture does not specifically restrict the ability of the Company to engage in transactions which could have the effect of increasing the ratio of debt to equity capitalization of the Company or a successor corporation. For example, the Indenture does not limit the amount of indebtedness of the Company or the acquisition by the Company of any of the equity securities of the Company. The Indenture also permits the Company to merge or consolidate or to transfer its assets, subject to certain conditions (see "Consolidation, Merger and Sale" below).

The following summary of the Indenture does not purport to be complete and is subject to, and qualified in its entirety by reference to, the Indenture, including the definitions therein of certain terms.

GENERAL: The Indenture provides that the debt securities offered and other unsecured debt securities of the Company, without limitation as to aggregate principal amount (collectively the "Indenture Securities"), may be issued in one or more series, in each case as authorized from time to time by the Company.

Reference is made to the prospectus supplement relating to the series of debt securities offered for the following terms:

- (1) the title of the debt securities;
- (2) the aggregate principal amount of the debt securities;
- (3) the percentage of the principal amount representing the price for which the debt securities shall be issued;
- (4) the date or dates on which the principal of, and premium, if any, on the debt securities shall be payable;
- (5) the rate or rates (which may be fixed or variable) at which the debt securities shall bear interest, if any, or the method by which such rate or rates shall be determined;
- (6) if the amount of payments of the principal of, premium, if any, or interest, if any, on the debt securities may be determined with reference to an index, formula or other method, the manner in which such amounts shall be determined;

- (7) the date or dates from which any such interest shall accrue, or the method by which such date or dates shall be determined, the dates on which any such interest shall be payable and any record dates therefor;
- (8) the place or places where the principal of, and premium, if any, and interest, if any, on the debt securities shall be payable;
- (9) the period or periods, if any, within which, the price or prices at which, and the terms and conditions upon which the debt securities may be redeemed, in whole or in part, at the option of the Company;
- (10) the obligation, if any, of the Company to redeem, purchase or repay the debt securities pursuant to any sinking fund or analogous provision or at the option of a holder thereof and the period or periods within which, the price or prices at which, and the terms and conditions upon which the debt securities shall be redeemed, purchased or repaid pursuant to such obligation;
- (11) whether the debt securities are to be issued in whole or in part in the form of one or more Global Securities and, if so, the identity of the Depositary for such Global Security or Global Securities;
- (12) if other than \$1,000 or an integral multiple thereof, the denominations in which the debt securities shall be issued;
- (13) if other than the principal amount thereof, the portion of the principal amount of the debt securities payable upon declaration of acceleration of the maturity of the debt securities;
- (14) any deletions from or modifications of or additions to the Events of Default set forth in Section 6.01 of the Indenture pertaining to the debt securities;
- (15) the provisions, if any, relating to the cancellation and satisfaction of the Indenture with respect to the debt securities prior to the maturity thereof pursuant to Section 12.02 of the Indenture (see "Satisfaction and Discharge of Indenture; Defeasance");
- (16) the terms, if any, upon which the Company may defer payment of interest on an interest payment date;
- (17) the provisions, if any, relating to the subordination of the debt securities pursuant to Article 14 of the Indenture (see "Subordination");
- (18) the terms and conditions, if any, pursuant to which any debt securities are to be secured;
- (19) any exchangeability, conversion, prepayment or tender provisions (whether at the option of the Company or a holder of debt securities) of the debt securities, including exchangeability, conversion, prepayment or tender date or dates of such series, if any, and the price or prices and other terms and conditions applicable to the exchange, conversion, prepayment or tender (including any premium);
- (20) any additional covenants for the benefit of the holders of the debt securities; and

(21) any other terms of the debt securities not inconsistent with the provisions of the Indenture and not adversely affecting the rights of any other series of Indenture Securities then outstanding. (Section 2.03)

The Company may authorize the issuance and provide for the terms of a series of Indenture Securities by or pursuant to a resolution of its Board of Directors or any duly authorized committee thereof or pursuant to a supplemental indenture. The provisions of the Indenture described above permit the Company, in addition to issuing Indenture Securities with terms different from those of Indenture Securities previously issued, to "reopen" a previous issue of a series of Indenture Securities and to issue additional Indenture Securities of such series.

The Indenture Securities will be issued only in registered form without coupons and, unless otherwise provided with respect to a series of Indenture Securities, in denominations of \$1,000 and integral multiples thereof. (Section 2.02) Indenture Securities of a series may be issued in whole or in part in the form of one or more Global Securities (see "Global Securities"). One or more Global Securities will be issued in a denomination or aggregate denominations equal to the aggregate principal amount of outstanding Indenture Securities of the series to be represented by such Global Security or Global Securities. (Section 2.01) No service charge will be made for any transfer or exchange of Indenture Securities, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection therewith. (Section 2.05)

One or more series of the Indenture Securities may be issued with the same or various maturities at par, above par or at a discount. Debt securities bearing no interest or interest at a rate which at the time of issuance is below the market rate ("Original Issue Discount Securities") will be sold at a discount (which may be substantial) below their stated principal amount. Federal income tax consequences and other special considerations applicable to any such Original Issue Discount Securities will be described in the prospectus supplement relating thereto.

SUBORDINATION: If the prospectus supplement relating to a particular series of Indenture Securities so provides, such debt securities will be Subordinated Securities and the payment of the principal of, premium, if any, and interest on the Subordinated Securities will be subordinate and junior in right of payment to the prior payment in full of all Senior Indebtedness to the extent set forth in the next paragraph. (Section 14.01)

In the event (a) of any distribution of assets of the Company in bankruptcy, reorganization or receivership proceedings, or upon an assignment for the benefit of creditors, or any other marshalling of assets and liabilities of the Company, except for a distribution in connection with a consolidation, merger, sale, transfer or lease permitted under the Indenture (see "Consolidation, Merger and Sale"), or (b) the principal of any Senior Indebtedness shall have been declared due and payable by reason of an event of default with respect thereto and such event of default shall not have been rescinded, then the holders of Subordinated Securities will not be entitled to receive or retain any payment, or distribution of assets of the Company, in respect of the principal of, premium, if any, and interest on the Subordinated Securities until the holders of all Senior Indebtedness receive payment of the full amount due in respect of the principal of, premium, if any, and interest on the Senior Indebtedness or provision for such payment on the Senior Indebtedness shall have been made. (Section 14.02)

Subject to the payment in full of all Senior Indebtedness, the holders of the Subordinated Securities shall be subrogated to the rights of the holders of the Senior Indebtedness to receive payments or distributions applicable to the Senior Indebtedness until all amounts owing on the Subordinated Securities shall be paid in full. (Section 14.03)

"Senior Indebtedness" means all indebtedness of the Company for the repayment of money borrowed (whether or not represented by bonds, debentures, notes or other securities) other than the indebtedness evidenced by the Subordinated Securities and any indebtedness subordinated to, or subordinated on parity with, the Subordinated Securities. "Senior Indebtedness" does not include customer deposits or other amounts securing obligations of others to the Company. (Section 14.01)

The Indenture does not limit the aggregate amount of Senior Indebtedness that the Company may issue. As of September 30, 2000, \$1,076 million of Senior Indebtedness was outstanding in the form of bonds, debentures, notes or other securities, bank borrowings and capital leases.

REDEMPTION: If the prospectus supplement relating to a particular series of Indenture Securities so provides, such securities will be subject to redemption by the Company prior to maturity. Notice of any redemption of Indenture Securities shall be given to the registered holders of such securities not less than 30 days nor more than 60 days prior to the date fixed for redemption. If less than all of a series of Indenture Securities are to be redeemed, the Trustee shall select, in such manner as in its sole discretion it shall deem appropriate and fair, the Indenture Securities of such series or portions thereof to be redeemed. (Section 3.02)

GLOBAL SECURITIES: The Indenture Securities of a series may be issued in whole or in part in the form of one or more Global Securities that will be deposited with, or on behalf of, the Depositary identified in the prospectus supplement relating thereto. Unless and until it is exchanged in whole or in part for Indenture Securities in definitive form, a Global Security may not be transferred except as a whole by the Depositary for such Global Security to a nominee of such Depositary or by a nominee of such Depositary to such Depositary or another nominee of such Depositary or by such Depositary or any such nominee to a successor Depositary or a nominee of such successor Depositary. (Sections 2.01 and 2.05)

The specific terms of the depositary arrangement with respect to any Indenture Securities of a series will be described in the prospectus supplement relating thereto. The Company anticipates that the following provisions will apply to all depositary arrangements.

Upon the issuance of a Global Security, the Depositary for such Global Security will credit, on its book entry registration and transfer system, the respective principal amounts of the Indenture Securities represented by such Global Security to the accounts of institutions that have accounts with such Depositary ("participants"). The accounts to be credited shall be designated by the underwriters through which such Indenture Securities were sold. Ownership of beneficial interests in a Global Security will be limited to participants or persons that may hold interests through participants. Ownership of beneficial interests in such Global Security will be shown on, and the transfer of that ownership will be effected only through, records maintained by the Depositary for such Global Security or by participants or persons that hold through

participants. The laws of some states require that certain purchasers of securities take physical delivery of such securities in definitive form. Such limits and such laws may impair the ability to transfer beneficial interests in a Global Security.

So long as the Depositary for a Global Security, or its nominee, is the owner of such Global Security, such Depositary or such nominee, as the case may be, will be considered the sole owner or holder of the Indenture Securities represented by such Global Security for all purposes under the Indenture. Except as set forth below, owners of beneficial interests in a Global Security will not be entitled to have Indenture Securities of the series represented by such Global Security registered in their names, will not receive or be entitled to receive physical delivery of Indenture Securities of such series in definitive form and will not be considered the owners or holders thereof under the Indenture.

Payments of principal of, premium, if any, and interest, if any, on Indenture Securities registered in the name of or held by a Depositary or its nominee will be made to the Depositary or its nominee, as the case may be, as the registered owner of the Global Security representing such Indenture Securities. None of the Company, the Trustee or any paying agent for such Indenture Securities will have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in a Global Security for such Indenture Securities or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

The Company expects that the Depositary for Indenture Securities of a series, upon receipt of any payment of principal, premium, if any, or interest, if any, in respect of a Global Security will credit immediately participants' accounts with payments in amounts proportionate to their respective beneficial interests in the principal amount of such Global Security as shown on the records of such Depositary. The Company also expects that payments by participants to owners of beneficial interests in such Global Security held through such participants will be governed by standing instructions and customary practices, as is now the case with securities registered in "street name," and will be the responsibility of such participants.

If a Depositary for Indenture Securities of a series is at any time unwilling or unable to continue as Depositary and a successor Depositary is not appointed by the Company within 90 days, the Company will issue Indenture Securities of such series in definitive form in exchange for the Global Security or Global Securities representing the Indenture Securities of such series. In addition, the Company may at any time and in its sole discretion determine not to have any Indenture Securities of a series represented by one or more Global Securities and, in such event, will issue Indenture Securities of such series in definitive form in exchange for the Global Security or Global Securities representing such Indenture Securities. Further, if the Company so specifies with respect to the Indenture Securities of a series, each person specified by the Depositary of the Global Security representing Indenture Securities of such series may, on terms acceptable to the Company and the Depositary for such Global Security, receive Indenture Securities of the series in definitive form. In any such instance, each person so specified by the Depositary of the Global Security will be entitled to physical delivery in definitive form of Indenture Securities of the series represented by such Global

Security equal in principal amount to such person's beneficial interest in the Global Security.

PAYMENTS AND PAYING AGENTS: Payment of principal of and premium, if any, on Indenture Securities will be made against surrender of such Indenture Securities at the principal offices of the Trustee. Unless otherwise indicated in the prospectus supplement, payment of any installment of interest on Indenture Securities will be made to the person in whose name such Indenture Security is registered at the close of business on the record date for such interest. Unless otherwise indicated in the prospectus supplement, payments of such interest will be made at the principal offices of the Trustee, or by a check mailed to each holder of an Indenture Security at such holder's registered address.

All moneys paid by the Company to a paying agent for the payment of principal of, premium, if any, or interest, if any, on any Indenture Security that remain unclaimed at the end of two years after such principal, premium or interest shall have become due and payable will be repaid to the Company and the holder of such Indenture Security entitled to receive such payment will thereafter look only to the Company for payment thereof. (Section 12.05) However, any such payment shall be subject to escheat pursuant to state abandoned property laws.

CONSOLIDATION, MERGER AND SALE: The Indenture permits the Company, without the consent of the holders of any of the Indenture Securities, to consolidate with or merge into any other corporation or sell, transfer or lease its assets as an entirety or substantially as an entirety to any person, provided that: (i) the successor corporation formed by or surviving any such consolidation or merger, or the person to which such sale, transfer or lease shall have been made (the "Successor") is a corporation organized under the laws of the United States of America or any state thereof; (ii) the Successor assumes the Company's obligations under the Indenture and the Indenture Securities; (iii) immediately after giving effect to the transaction, no Event of Default (see "Default and Certain Rights on Default") and no event that, after notice or lapse of time, or both, would become an Event of Default, shall have occurred and be continuing; and (iv) certain other conditions are met. (Section 11.02) The Indenture does not restrict the merger of another corporation into the Company. The Successor, other than a Successor by reason of a lease of the Company's properties, will succeed to the Company's rights and obligations under the Indenture and the Indenture Securities and the Company will be relieved of its obligations.

These provisions will not, however, be applicable to the sale, transfer or lease by the Company to an affiliated company of facilities used for the generation of electricity (and not used for the transmission or distribution of electric energy), provided that, all such sales, transfers or leases occurring after the date of this Indenture shall not in the aggregate represent assets with a depreciated value on the books of the Company, calculated with respect to the assets sold, transferred or leased at the time of such sale, transfer or lease, in excess of 65% of the depreciated value on the books of the Company of its total assets as set forth in its balance sheet at September 30, 2000.

MODIFICATION OF THE INDENTURE: The Indenture contains provisions permitting the Company and the Trustee, without the consent of the holders of the Indenture Securities, to establish, among other things, the form and terms of any series of Indenture Securities issuable thereunder by one or more supplemental indentures, and,

with the consent of the holders of a majority in aggregate principal amount of the Indenture Securities of any series at the time outstanding, evidenced as in the Indenture provided, to execute supplemental indentures adding any provisions to or changing in any manner or eliminating any of the provisions of the Indenture or of any supplemental indenture with respect to Indenture Securities of such series, or modifying in any manner the rights of the holders of the Indenture Securities of such series; provided, however, that no such supplemental indenture shall (i) extend the fixed maturity, or the earlier optional date of maturity, if any, of any Indenture Security of a particular series or reduce the principal amount thereof or the premium thereon, if any, or reduce the rate of payment of interest thereon, or make the principal thereof or premium, if any, or interest thereon payable in any coin or currency other than that provided in the Indenture Security, without the consent of the holder of each Indenture Security so affected, or (ii) reduce the principal amount of Indenture Securities of any series, the holders of which are required to consent to any such supplemental indenture, without the consent of the holders of all Indenture Securities of such series outstanding thereunder. (Sections 10.01 and 10.02)

DEFAULT AND CERTAIN RIGHTS ON DEFAULT: The Indenture provides that the Trustee or the holders of 33% or more in aggregate principal amount of Indenture Securities of a series outstanding thereunder may declare the principal of all Indenture Securities of such series to be due and payable immediately, if any Event of Default with respect to such series of Indenture Securities shall occur and be continuing. However, if all defaults with respect to Indenture Securities of such series (other than non-payment of accelerated principal) are cured, the holders of a majority in aggregate principal amount of the Indenture Securities of such series outstanding thereunder may waive the default and rescind the declaration and its consequences. Events of Default with respect to a series of Indenture Securities include (unless specifically deleted in the supplemental indenture or Board Resolution under which such series of Indenture Securities is issued, or modified in any such supplemental indenture):

- (i) failure to pay interest when due on any Indenture Security of such series, continued for 30 days;
- (ii) failure to pay principal or premium, if any, when due on any Indenture Security of such series, continued for 1 business day;
- (iii) failure to perform any other covenant of the Company in the Indenture or the Indenture Securities of such series (other than a covenant included in the Indenture or the Indenture Securities solely for the benefit of series of Indenture Securities other than such series), continued for 60 days after written notice from the Trustee or the holders of 33% or more in aggregate principal amount of the Indenture Securities of such series outstanding thereunder;
- (iv) certain events of bankruptcy, insolvency or reorganization; and
- (v) any other Event of Default as may be specified for such series. (Section 6.01)

The Indenture provides that the holders of a majority in aggregate principal amount of the Indenture Securities of any series outstanding thereunder may, subject to certain exceptions, direct the time, method and place of conducting any proceeding for any remedy available to, or exercising any power or trust conferred upon, the Trustee with

respect to Indenture Securities of such series and may on behalf of all holders of Indenture Securities of such series waive any past default and its consequences with respect to Indenture Securities of such series, except a default in the payment of the principal of or premium, if any, or interest on any of the Indenture Securities of such series. (Section 6.06)

Holders of Indenture Securities of any series may not institute any proceeding to enforce the Indenture unless the Trustee thereunder shall have refused or neglected to act for 60 days after a request and offer of satisfactory indemnity by the holders of 33% or more in aggregate principal amount of the Indenture Securities of such series outstanding thereunder, but the right of any holder of Indenture Securities of any series to enforce payment of principal of or premium, if any, or interest on the holder's Indenture Securities when due shall not be impaired. (Section 6.04)

The Trustee is required to give the holders of Indenture Securities of any series notice of defaults with respect to such series (Events of Default summarized above, exclusive of any grace period and irrespective of any requirement that notice of default be given) known to it within 90 days after the happening thereof, unless cured before the giving of such notice, but, except for defaults in payments of principal of, premium, if any, or interest on the Indenture Securities of such series, the Trustee may withhold notice if and so long as it determines in good faith that the withholding of such notice is in the interests of such holders. (Section 6.07)

The Company is required to deliver to the Trustee each year an Officers' Certificate stating whether such officers have obtained knowledge of any default by the Company in the performance of certain covenants and, if so, specifying the nature thereof. (Section 4.06)

CONCERNING THE TRUSTEE: The Indenture provides that the Trustee shall, prior to the occurrence of any Event of Default with respect to the Indenture Securities of any series and after the curing or waiving of all Events of Default with respect to such series which have occurred, perform only such duties as are specifically set forth in the Indenture. During the existence of any Event of Default with respect to the Indenture Securities of any series, the Trustee shall exercise such of the rights and powers vested in it under the Indenture with respect to such series and use the same degree of care and skill in their exercise as a prudent man would exercise or use under the circumstances in the conduct of his own affairs. (Section 7.01)

The Trustee may acquire and hold Indenture Securities and, subject to certain conditions, otherwise deal with the Company as if it were not the Trustee under the Indenture. (Section 7.04)

As of September 30, 2000, The Bank of New York, which will be the Trustee under the Indenture, is the trustee for the Company's \$296,500,000 principal amount of currently outstanding medium-term notes issued under Indentures dated February 15, 1992, November 15, 1992, November 1, 1994 and December 1, 1996. The Bank of New York is also a depository for funds and performs other services for, and transacts other banking business with, the Company and its affiliates in the normal course of business.

SATISFACTION AND DISCHARGE OF INDENTURE; DEFEASANCE: The Indenture may be discharged upon payment of the principal of, premium, if any, and interest on all the Indenture Securities and all other sums due under the Indenture. In addition, the

Indenture provides that if, at any time after the date of the Indenture, the Company, if so permitted with respect to Indenture Securities of a particular series, shall deposit with the Trustee, in trust for the benefit of the holders thereof, (i) funds sufficient to pay, or (ii) such amount of obligations issued or guaranteed by the United States of America as will, or will together with the income thereon without consideration of any reinvestment thereof, be sufficient to pay all sums due for principal of, premium, if any, and interest on the Indenture Securities of such series, as they shall become due from time to time, and certain other conditions are met, the Trustee shall cancel and satisfy the Indenture with respect to such series to the extent provided therein. (Sections 12.01 and 12.02) The prospectus supplement describing the Indenture Securities of such series will more fully describe the provisions, if any, relating to such cancellation and satisfaction of the Indenture with respect to such series.

REPORTS FURNISHED SECURITYHOLDERS: The Company will furnish the holders of Indenture Securities copies of all annual financial reports distributed to its stockholders generally as soon as practicable after the mailing of such material to the stockholders. (Section 4.07)

MEDIUM-TERM NOTES: The debt securities that we offer from time to time may also take the form of medium-term notes. The particular terms of the medium-term notes will be described in the applicable prospectus supplement.

PLAN OF DISTRIBUTION

The Company will offer the debt securities through one or more underwriters or agents or directly to purchasers. The names of the managing underwriter or underwriters and any other underwriters or any agents, and the terms of the transaction, including compensation of the underwriters, agents and dealers, if any, will be set forth in the prospectus supplement relating to the offering of the debt securities.

Only underwriters or agents named in a prospectus supplement will be deemed to be underwriters or agents in connection with the debt securities described therein. Firms not so named will have no direct or indirect participation in the underwriting of such debt securities, although such a firm may participate in the distribution of such debt securities under circumstances entitling it to a dealer's commission.

It is anticipated that any agreement pertaining to any debt securities will (1) entitle the underwriters or agents to indemnification by the Company against certain civil liabilities under the Securities Act of 1933, as amended, or to contribution for payments the underwriters may be required to make in respect thereof and (2) provide that the obligations of the underwriters or agents will be subject to certain conditions precedent. The underwriters or agents may engage in transactions with, or perform services for, the Company in the ordinary course of business.

In connection with an offering made hereby, the underwriters may purchase and sell the debt securities in the open market. These transactions may include over-allotment and stabilizing transactions and purchases to cover short positions created by the underwriters in connection with an offering. Stabilizing transactions consist of certain bids or purchases for the purpose of preventing or delaying a decline in the market price of the debt securities, and short positions created by the underwriters involve the sale by the underwriters of a greater aggregate principal amount of debt securities than

they are required to purchase from the Company. The underwriters also may impose a penalty bid, whereby selling concessions allowed to broker-dealers in respect of the debt securities sold in the offering may be reclaimed by the underwriters if such debt securities are repurchased by the underwriters in stabilizing or covering transactions. These activities may stabilize, maintain or otherwise affect the market price of the debt securities, which may be higher than the price that might otherwise prevail in the open market; and these activities, if commenced, may be discontinued at any time. These transactions may be affected in the over-the-counter market or otherwise.

The anticipated date of delivery of the debt securities will be as set forth in the prospectus supplement relating to the offering of the debt securities.

LEGAL MATTERS

Legal matters with respect to the debt securities offered hereby will be passed upon for the Company by Jeanie Sell Latz, Senior Vice President-Corporate Services and Corporate Secretary, and for the Underwriters by Dewey Ballantine LLP, 1301 Avenue of the Americas, New York, New York 10019-6092. Dewey Ballantine LLP will rely for purposes of their opinions upon the opinion of Ms. Latz as to matters of Missouri law. At September 30, 2000, Ms. Latz owned beneficially 4,508 shares of the Company's common stock; she also has options (with dividend equivalent) to purchase 18,586 shares of the Company's common stock at the fair market value on the dates of the grants. Dewey Ballantine LLP may from time to time perform legal services for the Company.

The statements herein under "Description of Debt Securities," as to the matters of law and legal conclusions, have been prepared under the supervision of and review by, and are made on the authority of Ms. Latz, who has given her opinion that such statements as to such matters and conclusions are correct.

EXPERTS

The consolidated financial statements included in the latest Annual Report on Form 10-K of the Company, incorporated by reference in this prospectus, have been audited by PricewaterhouseCoopers LLP, independent accountants, as stated in their report included in the latest Annual Report on Form 10-K of the Company, and have been incorporated by reference in this prospectus in reliance upon the report of such firm, given upon their authority as experts in auditing and accounting.

\$250,000,000

KANSAS CITY POWER & LIGHT COMPANY

% SENIOR NOTES DUE DECEMBER , 20

PROSPECTUS SUPPLEMENT DECEMBER , 2000

JOINT BOOK-RUNNING MANAGERS

BANC OF AMERICA SECURITIES LLC MERRILL LYNCH & CO.

CO-MANAGERS

BANC ONE CAPITAL MARKETS, INC. ABN AMRO INCORPORATED BNY CAPITAL MARKETS, INC.