As filed with the Securities and Exchange Commission on March 16, 2000

### SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form S-8
REGISTRATION STATEMENT
Under
THE SECURITIES ACT OF 1933

Kansas City Power & Light Company (Exact name of registrant as specified in its charter)

Missouri (State or other jurisdiction of incorporation or organization) 44-0308720 (I.R.S. Employer Identification No.)

1201 Walnut
Kansas City, Missouri 64106
(Address and Zip Code principal executive offices)

#### EMPLOYEE SAVINGS PLUS PLAN

Jeanie Sell Latz, Corporate Secretary 1201 Walnut Kansas City, Missouri 64106 (Name and address of agent for service)

(816) 556-2936 (Telephone number, including area code, of agent of service)

## CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price per Share*	Proposed Maximum Aggregate Offering Price*	Amount of Registration Fee
Common Stock without Par Value	1,500,000 shares	\$23.875	\$35,812,500.00	\$9,955.88

In addition, pursuant to Rule 416(c) under the Securities Act of 1933, this registration statement also covers an indeterminate amount of interests to be offered or sold pursuant to the employee benefit plan described herein.

\*Estimated solely for purpose of determining the registration fee. The average of the high and low prices in Common Stock on March 14, 2000, as reported on the NYSE Composite Transaction, was \$23.875.

This employee benefit plan was originally filed pursuant to Registration Statement No. 33-17403. Additional securities were registered for use in the Plan pursuant to Registration Statement No. 33-33377, Registration Statement No. 33-42187, Registration Statement No. 33-62942, Registration Statement No. 33-58917, and Registration No. 333-49353. The appropriate portions of those Registration Statements are incorporated by reference.

No opinions of counsel are required with this filing.

The consents of independent accountants are included with

this filing.

Powers of Attorney for individual signatories are included with this filing.

## CONSENT OF INDEPENDENT ACCOUNTANTS

We consent to the incorporation by reference in the Registration Statement of Kansas City Power & Light Company (the Company) on Form S-8 (i) our report dated February 1, 2000, on our audits of the consolidated financial statements of the Company as of December 31, 1999, and 1998, and for the years ended December 31, 1999, 1998, and 1997, which report is included in the Company's Annual Report on Form 10-K; and (ii) our report dated June 17, 1998, on our audits of the financial statements of the Kansas City Power and Light Company Cash or Deferred Arrangement Employee Savings Plus Plan as of December 31, 1997, and for the years ended December 31, 1997, and 1996, which report is included in Kansas City Power & Light Company Cash or Deferred Arrangement Employee Savings Plus Plan Annual Report on Form 11-K.

Kansas City, Missouri March 16, 2000 /s/PricewaterhouseCoopers LLP PricewaterhouseCoopers LLP

### CONSENT OF INDEPENDENT AUDITORS

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Kansas City Power & Light Company Cash or Deferred Arrangement Employee Savings Plus Plan of our report dated June 11, 1999, with respect to the financial statements and schedules of the Kansas City Power & Light Company Cash or Deferred Arrangement Employee Savings Plus Plan included in the Plan's Annual Report on Form 11-K for the year ended December 31, 1998, filed with the Securities and Exchange Commission.

/s/Ernst & Young LLP Ernst & Young LLP

Kansas City, Missouri March 16, 2000

# KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, a Director of Kansas City Power & Light Company, a Missouri corporation, does hereby constitute and appoint Drue Jennings, his 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 a Registration Statement on Form S-8 and all amendments thereto; 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 14th day of March, 2000.

/s/Bernard J. Beaudoin Bernard J. Beaudoin

STATE OF MISSOURI ) ss

On this 14th day of March, 2000, before me the undersigned, a Notary Public, personally appeared Bernard J. Beaudoin, 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 he executed the same as his 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:

### KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, a Director of Kansas City Power & Light Company, a Missouri corporation, does hereby constitute and appoint Drue Jennings, his 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 a Registration Statement on Form S-8 and all amendments thereto; 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 14th day of March, 2000.

/s/David L. Bodde David L. Bodde

STATE OF MISSOURI )

SS
COUNTY OF JACKSON )

On this 14th day of March, 2000, 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 he executed the same as his 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:

### KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, a Director of Kansas City Power & Light Company, a Missouri corporation, does hereby constitute and appoint Drue Jennings, his 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 a Registration Statement on Form S-8 and all amendments thereto; 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 14th day of March, 2000.

/s/William H. Clark William H. Clark

STATE OF MISSOURI )

SS
COUNTY OF JACKSON )

On this 14th day of March, 2000, before me the undersigned, a Notary Public, personally appeared William H. Clark, 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 he executed the same as his 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:

### KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, a Director of Kansas City Power & Light Company, a Missouri corporation, does hereby constitute and appoint Drue Jennings, his 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 a Registration Statement on Form S-8 and all amendments thereto; 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 14th day of March, 2000.

/s/Robert J. Dineen Robert J. Dineen

STATE OF MISSOURI )

SS
COUNTY OF JACKSON )

On this 14th day of March, 2000, before me the undersigned, a Notary Public, personally appeared Robert J. Dineen, 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 he executed the same as his 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:

### KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, a Director of Kansas City Power & Light Company, a Missouri corporation, does hereby constitute and appoint Drue Jennings, his 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 a Registration Statement on Form S-8 and all amendments thereto; 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 14th day of March, 2000.

/s/W. Thomas Grant II W. Thomas Grant II

STATE OF MISSOURI )

SS
COUNTY OF JACKSON )

On this 14th day of March, 2000, before me the undersigned, a Notary Public, personally appeared W. Thomas Grant II, 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 he executed the same as his 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:

### KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, a Director of Kansas City Power & Light Company, a Missouri corporation, does hereby constitute and appoint Drue Jennings, his 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 a Registration Statement on Form S-8 and all amendments thereto; 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 14th day of March, 2000.

/s/George E. Nettels, Jr. George E. Nettels, Jr.

STATE OF MISSOURI )

COUNTY OF JACKSON )

On this 14th day of March, 2000, before me the undersigned, a Notary Public, personally appeared George E. Nettels, Jr., 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 he executed the same as his 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:

### KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, a Director of Kansas City Power & Light Company, a Missouri corporation, does hereby constitute and appoint Drue Jennings, her 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 a Registration Statement on Form S-8 and all amendments thereto; 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 14th day of March, 2000.

/s/Linda H. Talbott Linda H. Talbott

STATE OF MISSOURI )

SS
COUNTY OF JACKSON )

On this 14th day of March, 2000, 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 she executed the same as her 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:

### KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, a Director of Kansas City Power & Light Company, a Missouri corporation, does hereby constitute and appoint Drue Jennings, his 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 a Registration Statement on Form S-8 and all amendments thereto; 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 14th day of March, 2000.

/s/Robert H. West Robert H. West

STATE OF MISSOURI )

SS
COUNTY OF JACKSON )

On this 14th day of March, 2000, 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 he executed the same as his 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:

### 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-8 and has duly caused this registration statement or amendment thereto to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Kansas City, and State of Missouri, on the 16th day of March, 2000.

# KANSAS CITY POWER & LIGHT COMPANY

By: /s/Drue Jennings (Drue Jennings) Chairman of the Board, President and Chief Executive Officer

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

Signature	Title 	Date 
/s/Drue Jennings (Drue Jennings)	Chairman of the ) Board and Chief ) Executive Officer ) (Principal Executive ) Officer)	
/s/Marcus Jackson (Marcus Jackson)	Executive Vice ) President and Chief ) Financial Officer ) (Principal Financial ) Officer)	
/s/Neil Roadman (Neil Roadman)	Controller ) (Principal ) Accounting Officer)	
Bernard J. Beaudoin* (Bernard J. Beaudoin)	Director )	
David L. Bodde* (David L. Bodde)	Director )	
William H. Clark* (William H. Clark)	Director )	March 16, 2000
Robert J. Dineen* (Robert J. Dineen)	Director )	
W. Thomas Grant II* (W. Thomas Grant II)	Director )	
George E. Nettels, Jr.* (George E. Nettels, Jr.)	Director )	
Linda Hood Talbott* (Linda Hood Talbott)	Director )	
Robert H. West* (Robert H. West)	Director )	
*By /s/Drue Jennings (Drue Jennings)		

Attorney-in-fact