Registration No. ___

As filed with the Securities and Exchange Commission on April 3, 1998

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	1,000,000 shares	\$31.46875	\$31,468,750	\$9,283.28

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 30, 1998, as reported on the NYSE Composite Transaction, was \$31.46875.

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 and Registration Statement No. 33-58917. The appropriate portions of those Registration Statements are incorporated herein by reference.

No opinions of counsel are required herewith.

The consent of independent accountants is herein included.

Powers of Attorney for individual signatories are herein included.

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 of (i) our report dated January 30, 1998, on our audits of the consolidated financial statements of the Company as of December 31, 1997, and 1996, and for the years ended December 31, 1997, 1996, and 1995, which report is included in the Company's Annual Report on Form 10-K; and (ii) our report dated June 6, 1997, on our audits of the financial statements of the Kansas City Power & Light Company's Employee Savings Plus Plan as of December 31, 1996, and 1995, and for the years ended December 31, 1996, 1995, and 1994, which report is included in Kansas City Power & Light Company's Employee Savings Plus Plan Annual Report on Form 11-K.

> /s/Coopers & Lybrand L. L. P. (COOPERS & LYBRAND L. L. P.)

Kansas City, Missouri April 3, 1995

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 10th day of March, 1998.

SS

/s/David L. Bodde David L. Bodde

STATE OF MISSOURI)) COUNTY OF JACKSON)

On this 10th day of March, 1998, 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:

April 8, 2000

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 10th day of March, 1998.

SS

/s/William H. Clark William H. Clark

STATE OF MISSOURI)) COUNTY OF JACKSON)

On this 10th day of March, 1998, 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:

April 8, 2000

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 11th day of March, 1998.

/s/Robert J. Dineen Robert J. Dineen

STATE OF MISSOURI)) ss COUNTY OF JACKSON)

On this 11th day of March, 1998, 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:

April 8, 2000

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 10th day of March, 1998.

/s/Arthur J. Doyle Arthur J. Doyle

STATE OF MISSOURI)) ss COUNTY OF JACKSON)

On this 10th day of March, 1998, before me the undersigned, a Notary Public, personally appeared Arthur J. Doyle, 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:

April 8, 2000

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 17th day of March, 1998.

SS

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

STATE OF MISSOURI)) COUNTY OF JACKSON)

On this 17th day of March, 1998, 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:

April 8, 2000

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 10th day of March, 1998.

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

STATE OF MISSOURI)) SS COUNTY OF JACKSON)

On this 10th day of March, 1998, 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:

April 8, 2000

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 10th day of March, 1998.

/s/Linda H. Talbott Linda H. Talbott

STATE OF MISSOURI)) ss COUNTY OF JACKSON)

On this 10th day of March, 1998, 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:

April 8, 2000

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 10th day of March, 1998.

/s/Robert H. West Robert H. West

STATE OF MISSOURI)) ss COUNTY OF JACKSON)

On this 10th day of March, 1998, 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:

April 8, 2000

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 3rd day of April, 1998.

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, President and) Chief Executive) Officer (Principal) Executive Officer)	
/s/Bernard J. Beaudoin (Beaudoin J. Beaudoin)	Executive Vice) President and Chief) Financial Officer) (Principal Financial) Officer)	
/s/Neil Roadman (Neil Roadman)	Controller) (Principal) Accounting Officer)	
David L. Bodde* (David L. Bodde)) Director)	
William H. Clark* (William H. Clark)) Director))	
Robert J. Dineen* (Robert J. Dineen)) Director)	April 3, 1998
Arthur J. Doyle* (Arthur J. Doyle)) 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		