Exhibit No.: ____
Issue: Policy Issues Related to Southwest Power Pool
Witness: Richard A. Spring
Type of Exhibit: Direct Testimony
Sponsoring Party: Kansas City Power & Light Company
Case No.: EO-2006-0142
Date Testimony Prepared: September 27, 2005

DIRECT TESTIMONY

OF

RICHARD A. SPRING

ON BEHALF OF

KANSAS CITY POWER & LIGHT COMPANY



SEPTEMBER 27, 2005

**BEFORE THE PUBLIC SERVICE COMMISSION**
**OF THE STATE OF MISSOURI**

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| In the Matter of the Application of Kansas City Power & Light Company for Authority to Transfer Functional Control of Certain Transmission Assets to the Southwest Power Pool, Inc. | ) ) ) ) ) | Case No. EO-2006-0142 |

**AFFIDAVIT OF RICHARD A. SPRING**

**STATE OF MISSOURI** )
) **ss**
**COUNTY OF JACKSON** )

Richard A. Spring, being first duly sworn on his oath, states:

1. My name is Richard A. Spring. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Vice President – Transmission Service.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Kansas City Power & Light Company consisting of thirteen (13) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Richard A. Spring
Richard A. Spring

Subscribed and sworn before me this 28 day of September 2005.

Joseth Frakes
Notary Public

My commission expires: 2-25-06

JOBETH FRAKES
Notary Public-Notary Seal
State of Missouri
Buchanan County
My Commission Expires Feb 25, 2006

DIRECT TESTIMONY

OF

RICHARD A. SPRING

KANSAS CITY POWER & LIGHT COMPANY

**Q. Please state your name and business address.**

A. Richard A. Spring, 1201 Walnut, Kansas City, Missouri, 64106-2124.

**Q. What is your position and experience with Kansas City Power & Light Company (KCPL)?**

A. I am currently Vice President – Transmission Service. I have previously served as Vice President of Production, Plant Manager – LaCygne, Manager of Performance Programs, Plant Manager – Iatan, and have held various other operational and engineering positions with KCPL starting in 1978.

**Q. What is your educational background?**

A. I hold a Master of Business Administration from Rockhurst College, a Bachelor of Science in Mechanical Engineering from Wichita State University and an Associate of Arts degree from Butler County Community College.

**Q. Please describe your involvement with the Southwest Power Pool.**

A. I am currently the Chair of the Southwest Power Pool (SPP) Strategic Planning Committee, a member of the SPP Members Committee, and a member of the SPP Human Resources Committee. Prior to implementing a fully independent Board of Directors at SPP (in conjunction with formation of a regional transmission organization ("RTO")), I served as a Director on the SPP Board.

**Q. What is the purpose of your testimony in this case?**

A. The purpose of my testimony is to present information in support of the Company's request (Application) to transfer functional control of KCPL's transmission network to the SPP RTO. My testimony will cover three general areas: (i) regional transmission

organization background; (ii) the potential impact of SPP's functional control on transmission reliability, transmission planning, costs; and (iii) the potential impact on KCPL of not participating in an RTO.

**Q. Please provide an overview of KCPL's transmission system.**

A. KCPL operates approximately 1,300 miles of transmission lines to serve our approximately 497,000 retail and 10 full requirements wholesale customers in Missouri and Kansas. KCPL's transmission system consists of approximately 350 miles of 345 kV, 895 miles of 161 kV, and 45 miles of 69 kV overhead lines. In addition, KCPL has approximately 12 miles of 161 kV underground lines.

**Q. What are the affected assets for which KCPL is seeking permission to transfer functional control in this case?**

A. The affected assets are listed in Appendix C to the Application. This list includes KCPL transmission assets physically located in both Missouri and Kansas.

**RTO BACKGROUND**

**Q. What is the basis for RTO formation?**

A. The Federal Energy Regulatory Commission (FERC) policy concerning the operation and control of the interstate transmission system has been developing over the past several years. Most significant are FERC Order 888 and Order 2000.

In April 1996, FERC issued Order 888. FERC found that functional unbundling of the wholesale generation function from the provision of transmission service was necessary to establish non-discriminatory access to the transmission network. FERC required utilities to separate these two functions and file an Open Access Transmission Tariff (OATT) based on a pro forma tariff. In addition, FERC encouraged the voluntary formation of Independent System Operators (ISOs) as a means to ensure non-discriminatory access. The anticipated outcome was for transmission owning entities to turn over control of their systems to an ISO. FERC established several principles that were to govern ISOs, such as independence from market

participants, responsibility for short-term transmission system reliability and control over transmission system operation.

Even after the OATTs were in place, FERC's concerns over equal access to the transmission network continued. As a result, FERC issued Order 2000 in December 1999. The intent behind this order was to encourage all transmission owning entities, including public power, to place control of their transmission systems with an RTO. In Order 2000, FERC established what they termed Minimum Characteristics and Functions for RTOs. The Minimum Characteristics are:

(1) Independence from market participants;

(2) Appropriate configuration and scope;

(3) Operational authority; and

(4) Exclusive authority to maintain short-term reliability.

The Minimum Functions include:

(1) Tariff administration and design;

(2) Congestion management;

(3) Parallel path flow management;

(4) Ancillary services;

(5) OASIS, total transmission capability and available transmission capability;

(6) Market monitoring;

(7) Planning and expansion; and

(8) Interregional coordination.

These characteristics and functions are more fully described in the testimony of Leslie E. Dillahunty to be filed by SPP in its intervention in support of KCPL's Application.

FERC stated that RTOs configured as such could provide several public benefits including improved congestion management, enhanced inter-regional trade and enhanced reliability.

In an attempt to further standardize access to the nation's transmission network and standardize wholesale electric market design, FERC issued a Notice of Proposed Rulemaking (NOPR) on standard market design (SMD) on July 31, 2002. FERC found that the absence of a single set of wholesale market rules prevents the full benefits of competitive markets to be realized. The intent was to establish this single set of rules for the country, with the exception of Texas. This set of rules includes modifications to the pro forma OATT to remedy what FERC considers as remaining undue discrimination in the provision of interstate transmission services.

Due to concerns expressed over the SMD NOPR, on April 28, 2003 FERC issued a "White Paper" which proposed additional flexibility in RTO formation. However, due to continued concerns over FERC's attempts to standardize RTO formation and the progress that has been made to date in voluntary RTO formation (e.g., SPP and the Midwest Independent Transmission System Operator "MISO"), FERC issued an order terminating the SMD proceedings on July 19, 2005.

**Q. Please briefly describe why participation in an RTO is advisable.**

A. There are several benefits derived from combining the transmission assets of utilities within a region under an RTO. These benefits include increased reliability, more efficient use of existing transmission and generation assets, increased access to external generation and load, and increased regional transmission planning and expansion coordination. These benefits are more fully described later in my testimony.

## IMPACT ON RELIABILITY

**Q. How will participation in the SPP RTO affect reliability?**

A. The SPP RTO will continue to maintain regional reliability. The SPP operators have functional control over the facilities within the RTO region and knowledge of the status of the facilities internal and external to it. In addition, once the SPP Energy Imbalance Service (EIS) market is operational (scheduled to start May 1, 2006), SPP will have an additional mechanism available to manage transmission congestion, thus improving reliability. RTO operation will also

be coordinated with neighboring entities such as the Midwest Independent Transmission System Operator (MISO).

**Q. Is the RTO in a better position to respond in conditions where reliability limits are being exceeded or have the potential of being exceeded if a contingency occurs?**

A. Yes. The RTO has knowledge of all transmission facilities under its control and has the authority to correct operational problems. Since many of the generation resources will be offered for SPP dispatch once the EIS market is operational, SPP will have the ability not only to manage transmission constraints, but will have the ability to do so more economically than can occur today using the NERC Transmission Line Loading Relief (TLR) process. Also, when coordination across RTO boundaries is required, the RTO will do so with adjacent entities (both RTO and non-RTO).

**Q. What will happen to the local transmission control centers?**

A. There will be little or no change to the local transmission control centers. The local transmission control centers (such as KCPL's) will continue to operate, focusing on local reliability assessment and addressing local problems, scheduling and switching transmission facilities in and out with RTO approval, and carrying out RTO directives.

**Q. How will RTO participation affect transmission maintenance?**

A. KCPL will continue to have responsibility for maintenance of KCPL's transmission facilities. Schedules for performing maintenance will be approved by the RTO so as to minimize any reliability impacts. From a practical standpoint, this is no change from what occurs today. For more than seven years, KCPL has coordinated transmission maintenance activities through SPP.

**IMPACT ON PLANNING**

**Q. How will the SPP RTO affect planning for transmission facilities?**

A. The SPP RTO should optimize plans for transmission facilities and the cost of new facilities. As a result, the transmission system should become more efficient. The SPP RTO

will also consolidate the local transmission plans for serving load, possibly reducing costs by coordinating those plans, particularly at the seams between utilities.

**Q. How will this happen?**

A. The planning process will be a collaborative process with all transmission owners, transmission customers, and other interested parties to develop the RTO transmission plan. Transmission owners will each develop expansion plans for their transmission facilities utilizing their knowledge of their systems, their loads and load growth, new generation sources and connections, and confirmed or committed transmission requests provided by the RTO. The Transmission owners will provide their local transmission plans to the RTO planning staff, along with modeling and supporting data, applicable planning criteria and any other relevant local parameters. The RTO will ensure these individual plans are compatible with the RTO transmission plan, and the plans must be accepted by the RTO before implementation.

**Q. What is the benefit of planning between RTOs?**

A. Coordinated regional planning between the RTOs will promote coordination of available transmission capacity calculations and coordination of long-term transmission service requests between RTOs including system impact and facilities studies for transmission service and generator interconnection if the interconnection is expected to affect neighboring RTOs. This should reduce the potential for over-selling transmission service that results in increased TLR events. Benefits also include development of cost-effective plans to resolve transmission constraints that would otherwise preclude requested transmission service between RTOs.

**Q. Will RTO transmission planning help in obtaining approval for transmission siting?**

A. It is believed that the RTO transmission planning process will assist in demonstrating the need for new transmission facilities, and as such, support the siting approval process.

## IMPACT ON COSTS

**Q. What is the expected initial impact on wholesale energy prices from the SPP RTO formation?**

A. Initially, there will be no change to regional wholesale energy prices due to the RTO formation. The current SPP regional transmission tariff will remain substantially unchanged until the EIS market implementation.

**Q. What is the expected impact on energy prices in the long run?**

A. In the long run, it is anticipated that RTO development will result in relatively lower average wholesale energy prices due to generation dispatch coordination (through the proposed EIS market) and increased competition at the wholesale level. For the SPP region, the impact of coordinated dispatch is analyzed in the CRA International (previously Charles River Associates) cost/benefit study (CRA Study) conducted for the SPP Regional State Committee. This study estimates a reduction in spot market prices of approximately seven percent due to the proposed EIS market implementation.

**Q. Are there any mechanisms in place to protect KCPL and its retail customers from exorbitantly high real-time energy prices?**

A. Yes. KCPL will continue to meet its obligation to serve through a combination of generation plant ownership, capacity and energy contracts, and demand side resources. As such, KCPL will have minimal exposure to the real-time energy markets created by the RTO EIS market when such exposure is detrimental. KCPL will continue to have the option of building generation plants to serve native load should that be the most cost effective option.

In addition, FERC Order 2000 requires that each RTO retain an Independent Market Monitor (IMM) to review market participant behavior for the ability to exercise market power. The IMM is also responsible for review of the RTO's market rules for potential gaming opportunities. SPP has retained an IMM, Boston Pacific, who has developed a market monitoring and mitigation plan for the region. This plan contains provisions for capping the

offer price from certain generators during periods of transmission constraints. The proposed tariff also contains provisions for the "disgorgement" of revenues a market participant may unfairly gain from over or under-scheduling.

The IMM will make annual reports to FERC on the state of the RTO's markets and has the ability to directly notify FERC at the first indication of market power abuse.

**Q. What are the implications of a decrease in wholesale market prices on KCPL?**

A. While profits on off-system sales may be reduced with lower wholesale prices, lower prices may allow KCPL to purchase power for less than the cost of production. To the extent that KCPL's costs are reduced, these lower costs are reflected in retail rates.

**Q. While you anticipate that the formation of RTOs will reduce energy prices in the long run, what would be the implications of an increase in wholesale market prices on KCPL?**

A. KCPL's retail customers can benefit from an increase in wholesale energy prices. On average, KCPL is a net exporter of energy. Increases in wholesale electricity prices can result in increased revenue from KCPL's off-system sales. Under the current regulatory structure, profits from these sales are credited to KCPL's retail customers, resulting in lower retail rates.

**Q. What are the expected impacts on transmission costs?**

A. In total, KCPL expects an increase in transmission related costs. This increase in costs is a result of the development and operating costs of the RTO, passed on to its members in the form of an administrative adder. FERC has determined that all load within the footprint of an RTO must pay the administrative adder as all load within the footprint benefits from the existence of the RTO. These costs are recognized in the CRA Study.

**Q. Is there any review of the administrative fees of the SPP RTO?**

A. Yes. KCPL intends to join with other market participants on an annual basis to perform an audit of RTO operations. In addition, as a member of the SPP Members Committee,

I am involved in the review and vote on SPP's annual budget. On a quarterly basis, there is a review of SPP's budget vs. actual performance conducted by the SPP Board and Members Committee.

**Q. Are there any direct transmission savings from KCPL's participation in the SPP RTO?**

A. Yes. After this Commission approves KCPL's Application and a similar process is completed in Kansas, KCPL will take network transmission service from SPP. This allows KCPL to obtain non-firm transmission service from any generating facility within the SPP's footprint at no additional charge for the purpose of serving KCPL native load.

Under today's arrangement with the SPP, KCPL must pay an additional point-to-point (PTP) transmission service fee for importing electricity from non-KCPL generation. The savings for KCPL related to avoiding these PTP charges is approximately $250,000 per year. These savings are not reflected in the CRA Study.

**Q. Are there any safeguards for insuring proper billing by the SPP RTO?**

A. Yes. KCPL has plans to review all invoices received from the RTO including transmission and EIS market-related charges and credits. This will likely be accomplished using software designed specifically for performing "shadow settlements" of SPP settlement statements.

**Q. Are there any other transmission-related costs that could potentially impact KCPL customers?**

A. Yes. Under SPP's proposed EIS market, KCPL will potentially be exposed to paying congestion charges for transmission system use. These charges arise when the SPP EIS market prices differ between generation and the load served by that generation. If transactions are scheduled appropriately, these charges should be minimal.

Since KCPL's customers (retail and firm wholesale) currently pay for the embedded cost of KCPL's transmission network, KCPL will be allowed to schedule generation and load to avoid these charges on the preponderance of KCPL native load.

In addition to potential congestion charges, KCPL will be exposed to paying for a portion of certain new transmission facilities built in the SPP region. This comes as a result of the recently approved methodology for funding certain new transmission facilities needed for reliability and for new (or changed) designated network resources. This methodology was developed under the guidance of the SPP Regional State Committee and has been conditionally accepted by FERC with relatively minor changes.

**Q. What are the net financial benefits for KCPL of participating in the SPP RTO?**

A. According to the CRA Study, KCPL will experience of net benefit of $2.073 million on a net present value basis over a 10-year period for its Missouri retail operations. As discussed in the CRA Study, the results for KCPL are probably smaller than the margin of error of this study and should be interpreted as essentially breaking even. As I discuss later in my testimony, the potential costs of not participating are easily larger than the results indicated in the CRA Study.

## EFFECT OF TRANSFER OF FUNCTIONAL CONTROL ON PUBLIC INTEREST

**Q. How will the transfer of functional control of KCPL's transmission facilities affect the public interest?**

A. KCPL believes that the transfer of control of KCPL's transmission facilities to the SPP RTO will be beneficial to the public interest, as I have already described. The major benefits come from increased reliability of the transmission network and enhancements to wholesale energy markets.

The CRA Study indicates that retail customers of Missouri's investor-owned utilities in SPP will see a net present value benefit of $41.7 million over a 10-year period.

**Q. Won't KCPL be giving up control over an essential part of its electric transmission network?**

A. Yes. However, on balance, KCPL believes that it is more important to further the coordination of regional transmission network use, than to have functional control of its transmission facilities.

**Q. Please describe the governance of SPP.**

A. SPP is governed by an independent Board of Directors. FERC has approved the governance structure of the SPP as meeting the conditions of independence per Order 2000. This structure is intended to ensure that access to, and development of, the transmission network is granted on an equitable basis across the SPP footprint along with equal access to wholesale energy markets. As stated earlier, benefits to ratepayers of this arrangement include improved reliability and greater access for KCPL to competitive wholesale markets. This governance structure is not expected to have any impact on the Commission's ability to regulate KCPL.

**Q. What safeguards will be in place to ensure that there are no unexpected problems with the operation of the SPP?**

A. From an operational standpoint, KCPL will continue to maintain the existing transmission control center. While KCPL will take direction from the SPP, the actual physical control over KCPL assets remains in KCPL hands. KCPL will have the ability to question any instructions from the RTO that would unnecessarily jeopardize reliable transmission system operation.

Reliability standards will continue to be established by NERC (or a FERC-approved ERO) and adhered to by the SPP and SPP members.

## IMPACTS OF NOT PARTICPATING IN THE RTO

**Q. Is there any potential detriment to KCPL or their customers if KCPL does not participate in the SPP RTO?**

A. Yes. There are several detrimental effects on KCPL of not participating in an RTO.

The first, and potentially largest detriment, is the impact on KCPL's ability to make off-system sales. The FERC has publicly stated that for utilities that do not join an RTO, FERC may deny them the benefits of the "new world." In other words, any jurisdictional utility that does not join an RTO may have its market-based rate authority revoked. This could limit the ability of a utility to make certain off-system sales. During 2004, KCPL received approximately $196 million in revenue from off-system sales. Anything that jeopardizes KCPL's ability to make these sales at market-based rates imposes a risk to KCPL. Under an RTO structure with a FERC approved market power monitoring and mitigation plan, the likelihood of obtaining or retaining the ability to make off-system sales at market-based rates is greater.

In addition to the potential loss of market-based rate authority, KCPL's off-system sales may be negatively impacted by the inability of an RTO member to get "one stop shopping" for purchases from KCPL. Separate transmission service would have to be arranged through both KCPL and through the SPP if KCPL were not an SPP member.

Second, if KCPL does not obtain approval to participate in the SPP RTO, KCPL will terminate its SPP membership and incur an exit fee of approximately $4.7 million. This represents KCPL's portion of SPP's liabilities.

Lastly, since KCPL's transmission system would no longer be a participant in a regional tariff, the transmission service revenues currently collected from participation in SPP's regional tariff would disappear. This currently amounts to about $4.5 million per year. Market participants would schedule service with the RTO, skipping over KCPL. KCPL would experience the impact of loop flows over our transmission system, but would not receive

compensation from SPP. It must be noted that the current level of revenues received from SPP will be reduced over time as SPP members switch to SPP network service, and as such this potential detriment to KCPL's non-participation in SPP will decrease as well.

**Q. Do you believe that the Commission should approve KCPL's Application in this proceeding?**

A. Yes. It is important that KCPL receive approval from the Commission. Otherwise as I have already described, KCPL will not receive the benefits of RTO participation, and (1) may lose its ability to make certain off-system sales; (2) will terminate its SPP membership with a consequent $4.7 million liability; and (3) will lose transmission service revenues.

**Q. Does this conclude your direct testimony?**

A. Yes.