

Exhibit No.:
Issue: Distribution
Witness: William P. Herdegen
Type of Exhibit: Direct Testimony
Sponsoring Party: Kansas City Power & Light Company
Case No.: EO-2005-0329
Date Testimony Prepared: April 7, 2005

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: EO-2005-0329

FILED⁴

JUL 18 2005

DIRECT TESTIMONY

OF

**Missouri Public
Service Commission**

WILLIAM P. HERDEGEN

ON BEHALF OF

KANSAS CITY POWER & LIGHT COMPANY

**Kansas City, Missouri
April 2005**

Exhibit No. 5
Case No(s). EO-2005-0329
Date 6-23-05 Rptr RF

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

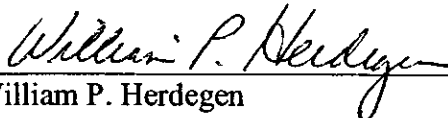
In the Matter of a Proposed Experimental Regulatory)
Plan of Kansas City Power & Light Company) Case No. EO-2005-0329

AFFIDAVIT OF WILLIAM P. HERDEGEN

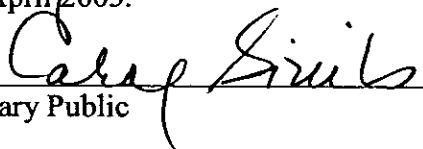
STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

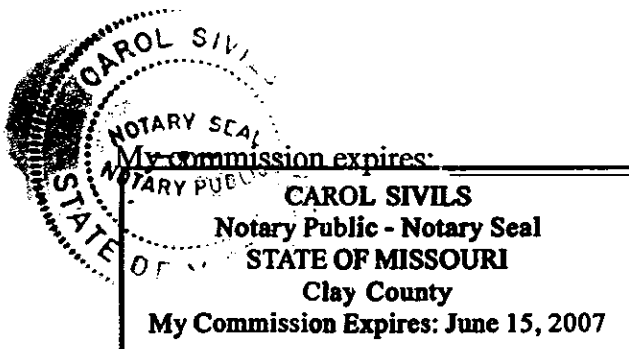
William P. Herdegen, being first duly sworn on his oath, states:

1. My name is William P. Herdegen. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Vice President, Distribution Operations.
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 four (4) pages and Schedule WPH-1, all of which 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.


William P. Herdegen

Subscribed and sworn before me this 7th day of April 2005.


Notary Public



DIRECT TESTIMONY
OF
WILLIAM P. HERDEGEN
Case No. EO-2005-0329

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

2 A: My name is William P. Herdegen. My business address is 1201 Walnut, Kansas City,
3 Missouri 64106.

4 **Q: By whom and in what capacity are you employed?**

5 A: I am employed by Kansas City Power & Light Company ("KCPL") as Vice President,
6 Distribution Operations.

7 **Q. What are your responsibilities?**

8 A. My responsibilities include the engineering, design, construction, maintenance, and
9 operation of KCPL's distribution system.

10 **Q. Please describe your education, experience and employment history.**

11 A. I graduated from the University of Illinois, Champaign-Urbana in 1976 with a Bachelor
12 of Science degree in Electrical Engineering, and in 1981, I received my M.B.A. from The
13 University of Chicago. I was first employed at KCPL in 2001. I have nearly 30 years of
14 experience in the electric utility industry. Prior to joining KCPL, I served as chief
15 operating officer for Laramore, Douglass and Popham, a consulting firm providing
16 engineering services to the electric utility industry. Additionally, I was vice president of
17 Utility Practice at System Development Integration, an IT consulting firm focused on
18 development and implementation of technology systems. I began my utility career at

1 Commonwealth Edison where I held various positions, including field engineer, district
2 manager, business unit supply manager, operations manager and vice president -
3 Engineering, Construction & Maintenance.

4 **Q. Have you previously testified in a proceeding at the Missouri Public Service**
5 **Commission or before any other utility regulatory agency?**

6 A. I have previously testified before both the Missouri Public Service Commission
7 ("MPSC") and the Kansas Corporation Commission ("KCC") on numerous issues
8 regarding reliability reporting and the current strategic intent proposal, including asset
9 management, demand response and energy efficiency/affordability programs.

10 **Q. What is the purpose of your testimony?**

11 A. The purpose of my testimony is to discuss the goals and objectives of the Asset
12 Management plan, including distribution & transmission investments and distribution
13 automation projects. I will also discuss some of the specific elements of the plan, and the
14 capital budget requirements to support those programs.

15 **Q. What are the goals and objectives of the Asset Management Plan?**

16 A. Asset Management at KCPL is the structured and disciplined process to develop the
17 program of work for system expansion, system improvements, and maintenance (both
18 corrective and preventive). Our objective is to provide a scope of work to achieve three
19 key strategic goals at the most optimal cost: (i) Mitigate risks of major outage events to
20 our customers; (ii) Minimize the System Average Interruption Duration Index ("SAIDI")
21 as it relates to the duration and frequency of outages to our customers; and (iii) Minimize
22 the number of customers with multiple interruptions.

1 **Q. What are the specific elements of the Asset Management plan?**

2 A. KCPL's current budget was developed to manage identified risks, maintain system
3 capacity levels to meet forecasted growth, and repair facilities as they reach the end of
4 their useful life. We have also included in this budget the implementation of
5 technologies like Distribution Automation to help control costs and improve
6 performance. The budget has certain inherent risk because the system is aging and we
7 have known pockets of poor performing facilities. We expect from experiences of other
8 utilities that failure rates of certain components will increase over time. The current
9 budget does not address this issue, which will result in negative impacts on operations,
10 including an aging infrastructure leading to more frequent component failures, higher
11 operating and maintenance ("O&M") and unplanned capital costs, and reduced customer
12 reliability.

13 As part of the Strategic Intent, we have developed plans to address this issue that require
14 additional funds. This plan allocates resources to address known issues on the system
15 that either present the highest risk of a major system outage or impact customers through
16 multiple outages over relatively short spans of time.

17 The plan includes a number of projects and programs. We will conduct a system-wide
18 condition assessment and inventory of the overhead distribution system. We will
19 implement projects to address components that are nearing the end of their useful life and
20 are experiencing high failure rates on both the transmission and distribution systems.

21 Customer outage data will be used to develop programs targeted at improving reliability
22 for the customers that experience the highest number of outages. We will utilize industry
23 experience along with our inventory and performance data to conduct studies that will

1 lead to targeted asset renewal programs. Maintenance practices will be refined to extend
2 the useful life of existing facilities while optimizing costs. Implementation of automation
3 programs will enable automated fault detection, isolation, and reconfiguration of the
4 distribution network to improve reliability and minimize outage duration. Additional
5 automation programs will automate substation equipment to reduce momentary outages
6 and monitor key components of our highly reliable but aging downtown and Plaza area
7 underground secondary networks.

8 By implementing this plan, we can expect to manage asset replacement schedules and our
9 aging infrastructure. We will also optimize system maintenance programs, improve
10 system design for better long term performance, and optimize strategic capital and O&M
11 investments while maintaining Tier 1 reliability performance. Tier 1 reliability
12 performance is defined as SAIDI (the industry standard measure for overall system
13 reliability) in the top 25% of utilities participating in benchmark studies.

14 **Q. What are the capital investment requirements needed to support the Asset**
15 **Management Plan?**

16 **A.** The capital requirements for this plan are \$42.3 million for the five-year period 2005
17 through 2009, as set forth in the attached schedule (Schedule WPH-1).

18 **Q. Does that conclude your testimony?**

19 **A.** Yes, it does.

Schedule WPH-1

Asset Management Plan Capital Expenditures

Proposed Capital Expenditure Level Increases

| (in millions) | 2005 | 2006 | 2007 | 2008 | 2009 | Total |
|----------------|-------|-------|-------|--------|--------|--------|
| Plan Request * | \$4.0 | \$5.7 | \$8.5 | \$11.3 | \$12.8 | \$42.3 |

* These multi-year expenditures are increases above the normal capital expenditures for the years stated