Exhibit No.:

Issue: System Operations/

Improvements
Witness: Jimmy L. Davis
Type of Exhibit: Direct Testimony

Sponsoring Party: Union Electric Company

Case No.:

Date Testimony Prepared: May 23, 2003

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. _____

DIRECT TESTIMONY

OF

JIMMY L. DAVIS

ON BEHALF OF

UNION ELECTRIC COMPANY, d/b/a AmerenUE

St. Louis, Missouri May 2003

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Union Electric Company, d/b/a AmerenUE, for Authority to File Tariffs Increasing Rates for Gas Service Provided to Customers in the Company's Missouri Service Area.) Case No			
AFFIDAVIT OF JIMMY L. DAVIS			
STATE OF MISSOURI)) ss. CITY OF ST. LOUIS)			
Jimmy L. Davis, being first duly sworn on his oath, states:			
1. My name is Jimmy L. Davis. I work in Springfield, Illinois, and I am employed			
by Ameren Services Company as Vice President of Energy Delivery – Gas Operations.			
2. Attached hereto and made a part hereof for all purposes is my Direct Testimony			
on behalf of Union Electric Company, d/b/a AmerenUE, consisting of 8 pages, and			
Appendix A, all of which have been prepared in written form for introduction into evidence in			
the above-referenced docket.			
3. I hereby swear and affirm that my answers contained in the attached testimony to			
the questions therein propounded are true and correct. Jimmy L. Davis			
Subscribed and sworn to before me this 22 day of May, 2003.			
My commission expires: 4-1-2006 MARY HOYT Notary Public - Notary Seal STATE OF MISSOURI			

Jefferson County
My Commission Expires: April 1, 2006

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1		DIRECT TESTIMONY	
2		OF	
3		JIMMY L. DAVIS	
4		CASE NO	
5		I. <u>INTRODUCTION</u>	
6	Q.	Please state your name and business address.	
7	A.	My name is Jimmy L. Davis. My business address is 607 East Adams	
8	Street, Spring	gfield, Illinois 62739.	
9	Q.	By whom are you employed and in what capacity?	
10	A.	I am Vice President of Division Operations and Gas Operations Support,	
11	Ameren Services Company.		
12	Q.	Please summarize your education and business experience.	
13	A.	This information is set forth in Appendix A attached to this direct	
14	testimony.		
15	Q.	What are your primary responsibilities as Vice President of Division	
16	Operations	and Gas Operations Support?	
17	A.	My current duties include operational responsibility for the Company-	
18	owned gas	storage fields, gas system control, gas training and various gas technical	
19	support functions, including the gas metering operations of Central Illinois Public Service		
20	Company, d	/b/a AmerenCIPS ("AmerenCIPS"), and Union Electric Company, d/b/a	
21	AmerenUE ("AmerenUE" or "the Company"), subsidiaries of Ameren Corporation. I am	
22	also responsible for the Division gas and electric operations in Illinois of both		
23	AmerenCIPS	and AmerenUE.	

Q. What is the purpose of your direct testimony in this proceeding?

A. The purpose of my direct testimony is to describe the gas operations of
AmerenUE as well as the Company's investments in gas system improvement projects
which have been implemented throughout the AmerenUE service territory. Over the last
few years, these investments have included cast iron main and service line replacement
programs and technological and operational improvements. Lastly, I will address our
commitments for improvements to the gas distribution system and operations that extend
beyond the test year in this rate case.

II. DESCRIPTION OF AMERENUE'S GAS OPERATIONS

Q. Please describe AmerenUE's gas operations in Missouri.

A. AmerenUE serves approximately 111,000 gas customers in 87 communities throughout Missouri and operates approximately 2,578 miles of gas distribution mains. The customers are served by three distinct and separate, non-interconnected distribution systems. Each system is captive to one interstate pipeline for delivery of natural gas supplies. In addition, one of these distribution systems is served by an intrastate pipeline. None of the AmerenUE systems have on-system gas storage facilities. We lease storage capacity from interstate pipelines or from third-party storage providers. The customers served by our distribution systems are primarily residential and commercial. Our customer load requirements for each system are highly weather sensitive with sharp variations in demand occurring during the peak winter season.

AmerenUE's largest distribution system is located in central and eastern
Missouri. It is connected to the interstate pipeline Panhandle Eastern Pipe Line Company

- 1 ("Panhandle Eastern") and to the intrastate pipeline Missouri Pipeline Company, which is
- 2 also connected to Panhandle Eastern. The Company's two remaining distribution
- 3 systems are located in southeast Missouri and are served by the interstate pipelines Texas
- 4 Eastern Transmission L.P. and Natural Gas Pipeline Company of America. The annual
- 5 throughput of AmerenUE's system is approximately 18 BCF.

Q. Does AmerenUE operate any propane/air plants?

- 7 A. Yes, AmerenUE owns and operates two propane/air plants in Missouri,
- 8 located in Cape Girardeau and Jefferson City. The Cape Girardeau plant was relocated
- 9 and significantly upgraded in 1989, while the Jefferson City plant remains a 1958 vintage
- 10 plant.

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11 Q. Please describe the operation of the Jefferson City propane/air plant.

A. The plant was constructed in 1958 and designed to provide peak shaving capabilities. The purpose of the plant is to supplement the gas supply received from Panhandle Eastern during extreme weather conditions when capacity or supply is constrained or at maximum deliverability. The plant was operated on a frequent basis through the 1960's and 1970's, most notably during the periods of gas supply shortages experienced in the 1970's. During the past 20 years the plant has not been needed for supplementary supply, so it has been operated infrequently and only for peak day deliverability. The plant has been operated only three times in the last 15 years and was last utilized in February, 1996. The age of the plant and the obsolescence of some of the equipment, coupled with updated NFPA code requirements will necessitate a number of upgrades to the plant and related facilities which are estimated to cost approximately \$1.8 - \$2 million. The upgrades required are extensive and include a new propane

- unloading station, installation of leak and fire detection equipment, installation of a water
- 2 deluge system for fire protection, storage tank valve upgrades, air source upgrades,
- 3 propane-air mixer upgrade, maintenance of propane pumps, replacement of the steam
- 4 source to a water bath vaporizer, installation of propane-air/natural gas ratio monitoring
- 5 equipment, and the installation of mixing temperature equipment.

Q. What actions will the Company be taking in regard to the Jefferson City propane/air plant?

- 8 A. The Company will retire the plant in 2003 in lieu of completing the
- 9 required upgrades. As a result, the capital investment in this plant and the related
- operating costs are not being included in the Company's cost of service in this rate case.
- Moreover, the retirement of the plant will prevent the rather substantial cost of the
- upgrades from being included in future rate cases.

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Q. Will the retirement of the propane plant jeopardize the Company's peak day operations?

- A. No. The retirement of the propane plant will not jeopardize future peak
 day operations because the Company has recently determined that it has sufficient firm
 pipeline capacity on Panhandle Eastern to substitute for the propane plant in its
 diminished condition.
 - Q. Please describe the general manner in which the Company currently arranges for the procurement, pipeline transportation and storage of natural gas supply for its Missouri gas sales customers.
- A. Since the implementation of FERC Order No. 636 in the early 1990's, the
 Company has been required to purchase all of its natural gas supply requirements from

1 gas producers and marketers in the non-regulated market. The Company enters into contractual arrangements primarily with producers and marketers in order to provide 2 sufficient and reliable gas supplies for its Missouri gas sales customers. 3 Firm 4 transportation capacity must be contracted from interstate and intrastate pipelines to transport gas supplies from the production areas to the Company's distribution system. 5 In addition, storage capacity is contracted from the interstate pipelines to provide the 6 Company with additional flexibility in meeting the highly variable daily and hourly 7 8 demands of its gas customers, to provide the most secure source of gas supply, and to provide price hedging opportunities. The Company's use of storage is a major 9 component of its hedging strategy to mitigate gas price volatility. The acquisition and 10 management of these gas supply, pipeline transportation and storage services are the 11 responsibility of AmerenEnergy Fuels and Services Company ("AFS"), an Ameren 12 subsidiary operating as an affiliated agent on behalf of AmerenUE. 13

INVESTMENTS IN GAS SYSTEM EXPANSION AND IMPROVEMENT PROJECTS

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Q. Has the Company made significant investments in its gas system since its last gas rate case in 2000?

- A. Yes. AmerenUE has invested in its system in order to expand, maintain and upgrade the system for the benefit of its customers.
 - Q. Please describe expenditures in the expansion of the gas infrastructure.
- A. Significant investments in new facilities have been made since May 1, 2000 to meet extensive customer growth, predominantly in the Boone Trails Division in the Wentzville area and in the Columbia area of the Missouri Valley Division. The new

- 1 facilities installed by the Company include approximately 142 miles of new polyethylene
- and steel mains and over 7,000 new service lines. Expenditures for expansion and 2
- extensions total approximately \$13 million from May 1, 2000 through the end of the test 3
- 4 year.

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- Q. 5 Please describe the Company's approach to maintaining and upgrading its gas infrastructure.
 - A. Gas distribution utilities historically used cast iron or bare steel to construct gas mains, and distribution service lines. Over time, these materials are susceptible to corrosion, resulting in leaks that can impact the reliability of gas service provided to customers. Starting in the mid 1980's, AmerenUE began replacing cast iron mains and the associated service lines with new polyethylene piping. In 1989, the Missouri Public Service Commission formalized the requirement that gas utilities file a specific replacement program for cast iron and bare steel mains, as well as unprotected steel service lines. Significant investments have been made since May 1, 2000, which include the replacement of approximately 55 miles of cast iron main and over 3,000 service lines with expenditures of approximately \$11.5 million through the end of the test year. Capital expenditures are expected to continue until the replacement program is completed.

TECHNOLOGICAL AND OPERATIONAL **IMPROVEMENT PROJECTS**

- Q. Has the Company undertaken other projects designed to improve service to customers?
- A. Yes, we have. In addition to the system expansion and main and service 23 replacement program that I described earlier, the Company has deployed technology in a 24

- number of areas to improve operational performance. Specifically, the Company has
- 2 implemented a Meter Management System ("MMS"), upgraded its Supervisory Control
- and Data Acquisition ("SCADA") system and migrated residential and small commercial
- 4 customers to its improved Customer Service System ("CSS").

Q. What is the Company's MMS?

programs approved by the Commission.

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A. MMS is a comprehensive meter management and inventory system, implemented in 2001, that interfaces with the Company's billing system, known as the Customer Service System. MSS tracks the gas meters installed in the field and those available for installation while in storage. MMS also provides the functionality which permits the Company to complete the required sample and periodic gas meter testing

Q. Please describe the upgrade in the SCADA system.

A. In 2002, the Company began implementing a software and hardware upgrade to its SCADA system. The existing SCADA system is near the end of its life cycle and is no longer supported by the vendor. SCADA allows the Company to monitor, and in certain instances control the movement of gas throughout its system so as to maximize efficiencies in the supply and cost of gas, and operate within contractual pipeline capacity and daily operating limits. Through SCADA, the Company can also monitor gas flows and pressure so as to detect potential operational disturbances on the high-pressure transmission and distribution system, such as a pipeline rupture, third party damage, or a regulator failure.

Q. Please describe the improvements to the Company's CSS system.

A. Ameren installed an improved customer service and billing system, CSS, in 1998, and initially migrated only large commercial and industrial customers to the new system. Small commercial and residential customers were migrated to CSS in May, 2002. CSS improves service to customers by providing call takers with enhanced information to deal with customer requests, facilitating standardized customer service work processes across the Ameren service territory, and improving both the timeliness and accuracy of customer bills.

III. OPERATIONAL PRO FORMA ADJUSTMENTS TO TEST YEAR

Q. What are the Company's plans for major capital and maintenance projects that extend beyond the test year in this rate case?

A. The Company is committed to continuing the replacement of cast iron and bare steel mains and unprotected steel services within its Missouri distribution systems. This work will be a major focus of AmerenUE over the coming years with estimated annual expenditures of \$4-5 million. Contracts and/or purchase orders for 2003 projects have been issued or are in the process of development and negotiation. The cost associated with the portion of the upgrades and improvements that will be in service by June 30, 2003 has been included as part of this rate filing. In addition, as explained in the direct testimony of AmerenUE witness Gary S. Weiss, the Company will be requesting that the Commission issue an Accounting Authority Order to facilitate its recovery of expenses related to future pipeline replacement work.

Q. Does this conclude your direct testimony?

A. Yes, it does.

QUALIFICATIONS OF JIMMY L. DAVIS

I received a Bachelor of Science Degree in Mechanical Engineering from the University of Missouri at Rolla in 1970 and a Master of Arts Degree in Business Administration from Sangamon State University in 1977. I am a Registered Professional Engineer in the State of Illinois.

I joined Central Illinois Public Service Company (CIPS) in May 1972 as Assistant Engineer in the Company's gas department. In August 1974, I was named Gas Supply Engineer, and in December 1976, I became Gas Supply Supervisor.

From October 1978 until March 1987, I was assigned to the Company's Eastern Operating Division holding the positions of District Superintendent at Taylorville, District Superintendent at Effingham, and Area Superintendent at Olney.

In March 1987, I returned to Springfield as Manager of the Company's General Services

Department. On November 1, 1989, I was named Manager of the Gas Department.

Effective with the completion of the merger of CIPSCO, Inc. (the then parent company of CIPS) and Union Electric Company (UE) on December 31, 1997, I was named Vice President with Gas Operations and Engineering Support responsibilities for both AmerenCIPS and AmerenUE.