Exhibit No.	:	27
Witness	:	ROBERT F. RENNICK
Type of Exhibit	:	Direct Testimony
Party	:	CITY OF JEFFERSON
Case No.	:	WR-2003-0500

CITY OF JEFFERSON

Case No. WR-2003-0500

DIRECT TESTIMONY

OF

ROBERT F. RENNICK

Jefferson City, Missouri
October 3, 2003

BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Missouri-American Water Company's Tariff to Revise Water and Sewer Rate Schedules	))	Case No. WR-2003-0500

AFFIDAVIT OF ROBERT F. RENNICK

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

I, ROBERT F. RENNICK, of lawful age, being duly sworn, do hereby depose and state:

1. My name is ROBERT F. RENNICK. I am the Fire Chief for the Jefferson City Fire Department.

2. Attached hereto and made a part hereof for all purposes is my direct testimony.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my personal knowledge, information and belief.

Robert F. Rennick

Subscribed and sworn to before me, a Notary Public, this 3rd day of October, 2003.

Katie J. Everett
Notary Public

My Commission expires:
May 12, 2007

Katie J. Everett, Notary Public
Cole County, State of Missouri
My Commission Expires 5/12/2007

DIRECT TESTIMONY

Q. WHAT IS YOUR NAME, TITLE AND BUSINESS ADDRESS?

A. My name is Robert Frank Rennick, and I am the Fire Chief for the Jefferson City Fire Department. My business address is City Hall, 320 East McCarty, Jefferson City, Missouri.

Q. ON WHOSE BEHALF DO YOU APPEAR IN THIS PROCEEDING?

A. City of Jefferson.

Q. WHAT ARE YOUR RESPONSIBILITIES AS FIRE CHIEF OF THE CITY OF JEFFERSON?

A. I direct the Fire Department operation with regard to fire suppression, emergency medical response and prevention activities.

Q. HAVE YOU ATTACHED A SCHEDULE WHICH SUMMARIZES YOUR EDUCATIONAL AND PROFESSIONAL EXPERIENCE?

A. Yes, it is attached as RFR Schedule 1.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of this testimony is to discuss my concerns about Missouri-American Water Company's (Missouri- American)system generally, and especially the company's distribution and delivery capabilities in the City of Jefferson.

Q. PLEASE DESCRIBE FOR THE COMMISSION THE INTEREST YOU HAVE AS THE FIRE CHIEF FOR THE CITY OF JEFFERSON IN THE WATER FLOW CAPACITY AND DISTRIBUTION SYSTEM OF MISSOURI-AMERICAN.

A. Basically, Missouri-American's water system in Jefferson City provides the Fire Department the ammunition it needs for fire suppression activities. As the chief fire protection officer

for the city of Jefferson, my first concern is the ability of the water company to produce the adequate flows needed for fire suppression. Part of our city-wide insurance rating from the ISO is contingent upon the water company's capability of producing water and adequately distributing and delivering that water to various locations throughout the city.

Q. FOR PURPOSES OF THIS CASE, HAVE YOU IDENTIFIED ANY AREAS OF CONCERN IN CONNECTION WITH THE COMPANY'S OPERATIONS, CAPACITY AND DISTRIBUTION SYSTEM.

A. Yes, I have. These include 1) reliable power supplies for the company's pumping operations, 2) planning for population growth and related building construction in the Jefferson City area; 3) continued replacement of outdated hydrants and narrow dimension water mains; and 4) adequate shallow water pumping equipment in view of lower Missouri River water levels.

Q. PLEASE EXPLAIN YOUR CONCERN ABOUT POWER SUPPLIES TO THE COMPANY'S PUMPING OPERATIONS.

A. As the Commission knows, the pressure in the Company's distribution system is maintained by high pressure pumps powered by electricity. If the pumps are disconnected from electrical power, the pressure and volume of water in the system cannot be maintained at adequate levels not only for general distribution but particularly for fire suppression. The energy supplier for the pumping operation is AmerenUE. The primary source of power for Missouri American's pumping operations is a feeder line that serves western portions of Jefferson City and parallels Industrial Drive until it reaches a point south of Missouri American's plant. Missouri American's pumping operations are also connected to a secondary source of power supplied by a feeder line that is extended from AmerenUE's facilities in the "Mill Bottoms" just west of the Capitol. I have been advised that if the primary source of power to the pumps fails, a specially designed switch dedicated to

Missouri American's operations will cause the secondary power source to activate and energize the pumps and other related equipment.

Q. HAVE THERE BEEN ANY POWER OUTAGES IN THE AREA OF MISSOURI AMERICAN'S PLANT, AND WAS POWER MAINTAINED AT THE COMPANY'S PUMPS?

A. On the evening of September 7, 2003, Fire Station No. 4, located at 820 Ellis Boulevard had a loss in water pressure. The fire crew at Station No. 4 contacted the on duty Assistant Fire Chief, who, in turn, checked with the other fire stations to see if there was a drop in water pressure. When the Assistant Chief learned that there was little or no water pressure at several stations, he went to Missouri American's plant on West Main and found no one. He also called Missouri American's offices in Jefferson City but was connected to an employee in St. Louis, Missouri, who had no knowledge of the pumping system at Jefferson City and had no means of investigating the loss in pressure. Eventually, the system was brought to adequate operating pressure but this required nearly two hours. The on duty reported his findings to me and contacted me when pressure was restored. The period the Company was without operational high pressure pumping demonstrates that whatever back up power system may be in place lacks reliability. It is my recommendation that the Commission investigate the back up power systems in place for the pumping operations and direct Missouri American to upgrade the emergency systems where indicated. A generator could serve as a back up power supply and an emergency source of power in the event the automatic switch or breaker should fail. The lack of reliable back up power systems for the Missouri American's pumping operations seriously compromises the pressure needed by the fire department for its response. That was the case on September 7, 2003.

Q. WHAT IS YOUR CONCERN ABOUT POPULATION GROWTH AND BUILDING CONSTRUCTION IN THE CITY.

A. This is an issue related to the storage capacity of the Company's system. I understand that the company's agreement with Public Water District No. 2 expired as of the close of 2000 and as a consequence, the company lost approximately 3 million gallons of storage. The Company brought a new storage tower into service in 2002 and it has an approximate capacity of 1.5 million gallons. When compared to pre-2000 levels, there is a shortfall in storage capacity. I have been advised that the company intends to remove a clear well storage tank from its plant in Jefferson City. This will also affect its storage capacity. Jefferson City will continue to grow and the territory served by the company should see more demand for water. As the population grows, so will the construction of new residences and commercial buildings or improvement or additions to existing homes and offices. Given the changes in the company's storage capacity caused by the expiration of the District contract, and its anticipated elimination of the clear well storage tank, I suggest that the Commission investigate whether the company's projected storage capacity will be sufficient for future demand and fire protection.

Q. WITH RESPECT TO FIRE PROTECTION, IS A KEY ELEMENT THE PLACEMENT AND LOCATION OF HYDRANTS.

A. Yes, definitely, and this has been the subject of my testimony in the past. Hydrant placement is one of the factors that makes up part of the city's overall insurance rating as well as our ability to deliver flows on a fire.

Q. DID YOU REVIEW THE LOCATION OF HYDRANTS FOR PURPOSES OF EVALUATING THE ADEQUACY OF EXISTING HYDRANTS, AND THE NEED FOR ADDITIONAL HYDRANTS?

A. Yes. That review was done in conjunction with the water company personnel in 1999 and was the basis of my testimony in Case No. WR-99-326. Based upon my review at that time, it was my opinion that the system lacked adequate placement of fire hydrants and needed approximately 40 additional hydrants. The parties were able to reach a stipulation in Case

No. WR-99-326 and the stipulation and agreement filed in that case set forth the agreement of the parties in which United Water Missouri agreed to work with the City to address hydrant spacing issues and arrive at a mutually agreed upon fire hydrant placement program. which will install approximately forty (40) new hydrants over the next five (5) years.

Q. SINCE THE APPROVAL OF THE STIPULATION AND AGREEMENT IN CASE NO. WR-99-326, HAVE THE CITY AND THE COMPANY IMPLEMENTED A FIRE HYDRANT PLACEMENT PROGRAM.

A. Yes. The program started as planned and to date about 20 new hydrants have been placed, leaving about 20 to be placed before the end of the project period.

Q. HAS THE COMPANY PERFORMED ITS PART OF THE HYDRANT PLACEMENT AGREEMENT SATISFACTORILY.

A. Yes, my department has been very pleased with the cooperation it has received from Missouri American in connection with the ongoing hydrant placement program.

Q. HAS THE COMPANY REPLACED ANY WATER MAINS IN CONNECTION WITH THE HYDRANT PLACEMENT PROGRAM.

A. No, and several water mains should be replaced.

Q. YOU HAVE ATTACHED A MAP AS AN EXHIBIT TO YOUR TESTIMONY. COULD YOU DESCRIBE IT FOR THE COMMISSION?

A. Yes. Exhibit One is a water main distribution map showing fire hydrant locations and various water main sizes that make up the water system for the Company in Jefferson City. This is the same map that was attached to my direct testimony in Case No.WR-99-326, which involved Missouri American's predecessor.

Q. WHERE DID YOU ACQUIRE THIS MAP?

A. The map was acquired several years ago from United Water Missouri, Inc. pursuant to my request. It is my understanding that the map was prepared by employees of United Water Missouri, Inc. It is my understanding that with the exception of the hydrants that have been placed pursuant to the hydrant placement program I have just mentioned, the map is a fair representation of the location of Missouri American's water mains and hydrant placement throughout the city.

Q. WOULD REFERENCE TO THE MAP ATTACHED TO YOUR TESTIMONY AS EXHIBIT 1 ASSIST THE COMMISSION IN BETTER UNDERSTANDING YOUR TESTIMONY?

A. Yes, it would.

Q. PLEASE EXPLAIN THE SIGNIFICANCE OF THE BLUE AND YELLOW LINES THAT ARE HIGHLIGHTED ON EXHIBIT 1?

A. These lines represent existing water distribution lines in the company's system. The yellow lines are three inch lines or smaller, and the blue lines are four inch lines.

Q. ARE YOU CONCERNED ABOUT THESE LINES AND THE AREAS THEY SERVE?

A. Yes. I voiced this concern in Case No. WR-99-326 and wish to point it out once more to the Commission. The lines make up a significant part of the network where fire flows are inadequate in the sense that hydrants cannot be placed on three inch or smaller mains, and four inch mains do not provide adequate fire flows for major developments.

Q. ARE THERE HYDRANTS CONNECTED TO THE FOUR INCH MAINS?

A. Yes, hydrants are connected to some four inch mains. By my recent count, there are 45 hydrants on four inch branches and 16 hydrants directly connected to four inch mains. The

volume of water than can flow through these hydrants is restricted of course by the diameter of the main. To optimize the water volume for fire suppression, the water lines should be upgraded to at least six inch lines, and new hydrants that are proportionately sized should be connected to the new lines.

Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION.

A. I recommend that the company undertake as soon as possible a water main replacement program in conjunction with my department to remove the three inch and four inch water lines and install larger diameter lines (six inches or larger) to which appropriately sized hydrants can be connected. This will complement the ongoing hydrant placement program. New hydrants will be installed at locations where none were installed and larger hydrants will be installed in areas where four inch lines restricted fire flows. In the process the margin of fire safety in the city will be increased.

Q. THE LAST TOPIC OF CONCERN YOU IDENTIFIED AT THE BEGINNING OF YOUR TESTIMONY WAS ADEQUATE SHALLOW WATER PUMPING. WILL YOU EXPLAIN THIS CONCERN FOR THE COMMISSION.

A. During the closing week of August of this year, the Missouri River fell to record low levels as a consequence of rainfall shortages upstream as well as a court decision that reduced the water flow. The level of the river reached low stages of three to five feet. Out of apprehension that the river may drop so low that it may be beyond the company's low service pump intakes, I understand the company positioned a barge and emergency pump near the pump house. I question whether the use of a floating pump like that I just described is a sufficient and adequate long term solution to what I suspect will be a long term legal issue involving the river stage. The company should plan on severely low river stages throughout the year and have storage or pumping capacity that will guarantee at least the level of

pressure and volume that the company could supply if the river were running at a normal stage. Absent this type of protection, the department faces an impairment in its ability to fight fires.

Q. YOU REFERRED TO ISO RATINGS. COULD YOU BRIEFLY TELL THE COMMISSION WHAT AN ISO RATING IS?

A. An ISO rating is the reference to the Insurance Service Office's (or Organization) review of a municipality for fire protection. That rating is contingent upon basically three items. One is the Fire Department's ability to deliver fire protection within the community. A second is the communications network that supplements the receipt of alarms and distribution of those alarms to the Fire Department. The third component is the water system's ability to supply water to the Fire Department.

Q. THE ISO RATING THAT IS GIVEN AFFECTS RESIDENTS IN WHAT WAY?

A. The ISO rating affects their premiums that an insurance company charges for home owners insurance. The insurance cost will be higher or lower depending on the ISO rating.

Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

A. Yes it does.

RFR Schedule 1

EDUCATIONAL AND PROFESSIONAL EXPERIENCE

FOR

ROBERT F. RENNICK

Education:

Earned an Associate of Arts Degree from Columbia College

Attended numerous fire training courses offered by the University of Missouri

Attended numerous courses offered by the National Fire Academy

Attended numerous continuing education courses

Teaching:

Associate Faculty Instructor for the Missouri Fire and Rescue Training Institute

Fire Service Instructor II Certification by Missouri State Fire Marshal Office

Professional:

Washington, Missouri, Volunteer Fire Company, 1964 to 1965

Boone Country Fire Protection District, 1965 to 1979

Positions: Firefighter, Property Officer, Fire Lieutenant, Fire Captain, Battalion Chief

Columbia Fire Department, October 1970 to November 1979

Positions: Firefighter Drive, Fire Engineer, Fire Inspector, Fire Lieutenant, Training Officer

Jefferson City Fire Department, November 1979 to present

Position: Fire Chief

Non-Scannable Maps

(Can be viewable in the Data Center)