Exhibit No.	:	JCMO-1
Witness	:	ROBERT F. RENNICK
Type of Exhibit	:	Direct Testimony
Party	:	CITY OF JEFFERSON
Issue	:	City of Jefferson Fire Suppression
Case No	:	WR-2007-0216

CITY OF JEFFERSON

Case No. WR-2007-0216

DIRECT TESTIMONY

OF

ROBERT F. RENNICK

Jefferson City, Missouri
June, 2007

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Missouri-American Water Company's Request for Authority to Implement a General Rate Increase for Water Service Provided in Missouri Service Areas	))))	Case No. WR-2007-0216

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 5th day of June, 2007.

Notary Public

My Commission expires:
6/23/2010

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

AMY L. SHAW
Commission Expires
June 23, 2010
Cole County
Commission #06395812

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. There are three subjects I intend to address in my testimony. The first will serve as a follow up on the Joint Report filed by Missouri American Water Company (MAWC), the Staff of the Missouri Public Service Commission and the City of Jefferson in Case No.

WO-2004-0609. The Commission will recall that in connection with MAWC's rate case of 2003 (Case No. WR-2003-0500), these same parties entered a Stipulation and Agreement which required such a report and Case No. WO-2004-0609 was created as a vehicle of the cooperative study.

As part of my follow up on the Joint Study, I will discuss two areas of the study which I believe still require more treatment from the Commission and the parties. Those areas are electric power reliability at the treatment plant location and adequate storage.

I will also discuss the ongoing main replacement program MAWC has implemented in the City and areas that will require the Company's continuing attention in the future.

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. I have explained to the Commission in the past that MAWC's water system in Jefferson City is the essential component to fire suppression in the City. As the Fire Chief 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. COULD YOU EXPLAIN THE ORIGINS OF THE JOINT REPORT IN CASE NO. WO-2004-0609?

A. Yes. In MAWC's rate case of 2003, I testified about several important subjects related to fire safety in the City. Those included 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. WERE THESE MATTERS TAKEN UP IN THE JOINT STUDY CONDUCTED BY MAWC, THE STAFF AND YOUR DEPARTMENT?

A. Yes they were. The report was filed with the Commission on July 1, 2004 and provided the Commission with a summary of the joint study on available power supplies, storage, low river stages and main replacements.

Q. WERE YOU SATISFIED WITH THE RESULTS OF THE JOINT STUDY?

A. In general I was very pleased by what was accomplished by the study. The Commission should know that there was a high level of cooperation shown by all the parties in this investigation.

Q. SINCE THE FILING OF THE JOINT REPORT, ARE THERE ANY AREAS THAT WERE COVERED BY THE STUDY WHICH DESERVE MORE ATTENTION?

A. In my opinion there are at least two areas which continue to be of high importance to the City even though they were given considerable treatment in the study. Those areas are the power sources for the Company's pumping equipment and the reliability of those sources, and storage. The first area I mention is of course a major concern from the fire protection perspective; the second is a matter not necessarily restricted to fire suppression but is important to the convenience of each Company customer located in the City.

Power Supplies to the Company's Pumping Equipment

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 and power to the plant is provided from one of two feeder circuits. The primary source of power for MAWC'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 MAWC's plant. MAWC'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.

The Joint Study identified several vulnerabilities to the power supply and I understand steps have been taken to address them. For example, the feeder circuits shared a power pole which was located somewhat closely to West Main Street. If the pole were struck by a car, power would be lost or at least put at risk of interruption. Guard rails have been installed around this pole to prevent damage in the event a vehicle goes out of control at that location. Also, MAWC has improved the switching gear that routes power from one feeder to the other in the event of a low voltage incident. The improvement to the switching gear is designed to keep the main circuit breaker energized if a feeder should fail. Before the improvement, when a feeder circuit failed, the circuit breaker would not be energized until manually reset.

Q. ARE THERE OTHER VULNERABILITIES TO THE ENERGY SUPPLY AT THE PLANT WHICH WERE NOT IDENTIFIED IN THE JOINT STUDY?

A. On August 25, 2006, AmerenUE experienced a power outage on its system which affected most of the downtown Jefferson City area and much of the western side of the City. The outage de-energized both feeder circuits connected to MAWC's treatment plant and may have de-energized the other remote pumps serving the system. The power outage lasted for over two hours.

Had a fire emergency developed during this lengthy outage, my department would have been without water flows to extinguish it. Fortunately, no fires were reported during this outage but the event signaled to me that power issues at the treatment plant have not been

fully resolved. The Joint Study did not directly address the likelihood of this event and did not address the back up plans which should be in place to protect against it.

Q. DO YOU HAVE A RECOMMENDATION ON A MEANS TO MAINTAIN POWER AT THE PLANT IN THE EVENT POWER FROM BOTH FEEDER CIRCUITS IS INTERRUPTED?

A. To avoid the problem that occurred on August 25, 2006, I recommend that back up stationary power generation equipment be installed. The output of the generator should at least be at the level to meet the normal energy demand of the pumping equipment. The generator would be for temporary power but would need to have the capability of supplying power indefinitely until regular power was restored.

I realize that MAWC has portable generators which can be dispatched to pumping stations in emergencies. In my opinion, the time taken to move the portable generator to, say, the pumps at the treatment plant is unreasonable and potentially hazardous because if the pumps are inoperable for any length of time, the water flow and pressure for fire equipment will prove to be below acceptable standards.

MAWC has advised me that it is currently studying the electrical system at the plant to determine the size of the generator necessary to power the facility. The Company has placed a temporary unit on the site now. I will say that MAWC is well aware of the importance of this matter to the City and the importance of a permanently affixed power

generator that can supply power to the pumping equipment without an interruption during an emergency. I look forward to its installation.

Q. YOU MENTIONED THAT STORAGE CONTINUED TO BE AN ISSUE. WOULD YOU EXPLAIN WHY.

A. Actually, the issue may be related to both storage and treatment capacity of MAWC. The Commission will note that in the Joint Study the parties analyzed storage requirements for Jefferson City. It was determined that clear well storage volume was sufficient to meet daily demand along with providing a 3,500 gallon per minute fire flow for three hours. Future storage capacity needs were also a concern of the study and the Company agreed to make improvements to storage and pumping capacity as demand (such as any redevelopment of the prison site) would require.

Notwithstanding the parties' report that storage was sufficient, in July 2005 and again in August of 2006, the Mayor of the City exercised rights conferred by ordinance to curtail water usage in the City because MAWC's water system pumping could not keep up with demand. The conservation measures were required until air temperatures returned to more moderate summer levels and demand subsided. These events are indeed an inconvenience to customers in the City and do pose a threat to fire protection.

Although events of prolonged drought and high temperatures may be classified as infrequent, they bring to light particularly in the Jefferson City service area of the

Company that the system has capacity challenges that in my estimation should be corrected.

Q. WHAT IS THE SOLUTION THAT WOULD ELIMINATE THE NEED FOR CITY IMPOSED WATER RESTRICTIONS LIKE THOSE OF THE PRECEDING TWO SUMMERS?

A. Very simply, to avoid imposition of mandatory water restrictions in the Jefferson City service area, the Company should have more storage, or more access to storage, and increased treatment capacity.

Main Replacement Program

Q. HAS MAWC MADE PROGRESS ON REPLACEMENT OF THE SMALL WATER MAINS IN THE CITY?

A. MAWC has made good progress in replacing the small water mains (mains that are 4" or less in diameter) that are in the downtown area, and is currently working on main upgrades or replacements in areas which I consider beyond the downtown area. One such project is in the Old Munichburg area of the City. I believe that MAWC's annual investment in replacement mains and hydrants, if needed, has been in the $100,000 range that was reported in the Joint Study.

Q. ARE MAWC'S LARGER WATER MAINS OF UNIFORM SIZE IN THE CITY?

A. No. MAWC's larger water mains (which are above 10" in diameter), which I sometimes call "feeder" or "transmission" mains, vary in diameter from point to point and because of their configuration they are a topic of notice to my department.

Q. WOULD YOU EXPLAIN WHY THIS IS OF IMPORTANCE?

A. The feeder or transmission lines are of a larger diameter leading from the plant feeding the developed area along the way to the edges of MAWC's service area or a major consumer. At the edges of MAWC's Jefferson City service area or at the point of connection to a large water consumer, we see a feeder line of a larger size feeding a smaller line that in turn feeds a larger line as the mains extend away from the plant. Mains in place along Missouri Boulevard, Industrial Drive, Main Street, and McCarty Street are examples of this. Continued development or redevelopment within MAWC's service area will mean increasing demands for water and they will tax the current distribution system unless the feeder or transmission line diameter differences are solved.

Q. WITH RESPECT TO THE EXAMPLES YOU JUST REFERRED TO, WOULD YOU TELL THE COMMISSION THE SIZE OF THE MAINS INVOLVED?

A. Yes. For instance, the area along Missouri Boulevard is fed by a 16" feeder line. This 16" line branches to a 10" line that feeds Dunklin Street near St. Mary's Hospital, and an 8" line that goes west along Missouri Boulevard. The 8" line becomes a 12" line at MODOT's Central District facilities. From there the line returns to an 8" line past the Dix Road intersection and reverts to a 12" line near Heisinger Rd. At Stadium Boulevard, the line narrows to 8" again.

At the intersection of Dix Road and Missouri Boulevard, there is an interconnection with an 8" main that follows Dix Road to Industrial Drive. At Southwest Boulevard there is an interconnection with a 12" main. The same kind of main size change can be seen on Boonville Road and Industrial Drive.

Q. WHAT ARE THE EFFECTS OF HAVING WATER FROM A SMALLER DIAMETER MAIN FLOW INTO A LARGER MAIN?

A. The smaller diameter mains create a choke point restricting water flow and they have a negative impact on water pressure.

Q. WHAT IS YOUR RECOMMENDATION TO SOLVE THIS PROBLEM.

A. MAWC should be required to institute a progressive program to upgrade the size of the smaller feeder/transmission water mains and in conjunction with that program, or perhaps alternatively, it should interconnect the transmission lines to form a more recognized grid system much like the present main replacement along Dunklin Street between Jefferson Street and Locust Street.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY

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, Fire Engineer, Fire Inspector, Fire Lieutenant, Training Officer

Jefferson City Fire Department, November 1979 to present

Position: Fire Chief