

Exhibit No.: _____
Issue: Fire Safety and Suppression
Witness: Matthew D. Schofield
Sponsoring Party: City of Jefferson City, Missouri
Case No.: Case No. WR-2017-0285

CITY OF JEFFERSON CITY, MISSOURI

Case No. WR-2017-0285

DIRECT TESTIMONY

OF

MATTHEW D. SCHOFIELD

Jefferson City, Missouri
November 2017

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) Case No. WR-2017-0285, et al.
Increase for Water and Sewer Service Provided in)
Missouri Service Areas)

AFFIDAVIT OF MATTHEW D. SCHOFIELD

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

I, Matthew D. Schofield, of lawful age, and being duly sworn, do hereby depose and state:

1. My name is Matthew D. Schofield. I am presently Fire Chief for the Jefferson City Fire Department for the City of Jefferson, intervener in the referenced matter.
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.

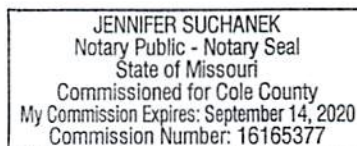

Matthew D. Schofield

Subscribed and sworn to before me, a Notary Public, this 30th day of November, 2017.


Notary Public

My Commission expires:

September 14, 2020



DIRECT TESTIMONY
MATTHEW D. SCHOFIELD

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

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

A. My name is Matthew D. Schofield, and I am the Fire Chief for the Jefferson City Fire Department. My business address is 305 E. Miller Street, 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, technical rescue, emergency medical response and fire prevention activities.

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

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

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I will be addressing two subjects in my testimony. First, I want to advise the Commission concerning the condition of water infrastructure in the City of Jefferson and the need for continued investment and refurbishment in that infrastructure. These fire water components and their aging condition have a significant impact on fire safety within the city. I am also concerned that water pressure and capacity at Jefferson City Municipal Airport needs to be addressed. As a side note there are still within our corporate boundaries private systems at Lincoln University, the old

1 State Prison, and the State Capitol Grounds. We believe these areas to be high risk and in
2 need of appropriate interconnection of water lines to ensure adequate flow, pressure, and
3 supply.

4 The second subject of my testimony concerns Missouri American Water Company's
5 (MAWC) rate structure that applies to fire suppression (fire sprinkler) systems and how
6 that tariff adversely affects the perception and installation rate of those systems within
7 our jurisdiction.

8 **Water Mains**

9 Q. PLEASE DESCRIBE FOR THE COMMISSION THE IMPORTANCE OF ADEQUATE
10 WATER FLOW CAPACITY AND DISTRIBUTION FACILITIES IN THE CITY.

11 A. A primary concern of any fire chief is the ability of a water system to produce adequate
12 water pressure and the flows necessary for safe and efficient fire suppression. I
13 understand that my predecessor, Robert F. Rennick, has explained to the Commission in
14 previous proceedings involving MAWC---an explanation which I hope to underscore in
15 my own testimony in the present case---that the water system owned and operated by
16 MAWC is a critical component to fire suppression in the capital city. Ideally, in all
17 locations within the corporate limits, firefighters should have access to water distribution
18 facilities that can supply water at pressures and flows that meet or exceed industry
19 standards. The objective is to attain the highest level of public safety. MAWC has
20 worked well with the City in the past on replacing undersized mains and our city-wide
21 insurance rating from the ISO has improved to its current assessment of 3/9 as of 2012.
22 Yet, there are still smaller mains that should be replaced within MAWC's Jefferson City

1 water system to increase the margin of fire safety. Additionally, there are larger
2 dimension mains in the City which because of their age have required frequent repair. At
3 some point those mains will be unreliable and should be replaced. When there is main
4 failure this puts additional strain on system components and leaves impacted areas more
5 vulnerable.

6 Q. HAS THE COMPANY ENGAGED IN A PROGRAM TO REPLACE SMALLER
7 WATER MAINS IN THE CITY?

8 A. Yes it has. I am aware that in a Joint Report filed on July 1, 2005 in Case No. WO-2004-
9 0609 by the Company, the Commission staff and the City of Jefferson, MAWC agreed to
10 a main replacement program in Jefferson City at a \$100,000 funding level per year, plus
11 an additional 3% per year inflation adjustment, as a minimum, for the next 10 years.
12 That program has since expired but during the decade of its implementation several
13 thousand feet of small dimension mains (mains less than 6 inches in diameter) were
14 replaced. Other projects I'm aware of have occurred at its new tower at Fire Station 3,
15 around the new LU/Parks Wellness Center, and currently at its treatment plant.

16 Q. HAVE ALL SMALL DIMENSION MAINS IN THE CITY WATER SYSTEM BEEN
17 REPLACED?

18 A. To the extent small dimension mains and undersized fire hydrants are still part of the
19 water system serving Jefferson City they are a potential obstacle to maintaining standards
20 of fire safety and growth for new projects that would require additional capacity.

1 Q. YOU MENTIONED THE NEED TO REPAIR LARGER DIMENSION MAINS IN THE
2 CITY SYSTEM. ARE YOU CONCERNED ABOUT SPECIFIC MAINS IN THE CITY
3 SYSTEM?

4 A. Mr. Britt E. Smith, Operations Division Director with Jefferson City's Department of
5 Public Works, whom I understand will be a witness for the City in this matter, will
6 address this question in his testimony.

7 **Jefferson City Airport**

8 Q. HAVE FACILITIES AT THE JEFFERSON CITY AIRPORT EXPERIENCED LOSS
9 OF WATER PRESSURE RECENTLY?

10 A. Yes. I know of an incident that occurred while firefighters were filling the holding tank
11 on a department fire engine. On July 11, 2017, while firefighters were filling the 2000
12 gallon tank on one of our tankers the water pressure at the terminal dropped causing low
13 pressure alarms to sound. The filling of the tank on the engine was not at high demand
14 but at the regular or residual "fill" pressure. This incident causes me concern for the
15 water system in north Jefferson City. If a significant fire incident occurs at the air field it
16 appears to me that the water distribution system may not be adequate to support the
17 department in suppressing the fire. Shortly after the event I spoke with our local director
18 of operations and we have been working on possible solutions.

19 Q. DO YOU MEET WITH THE COMPANY PERIODICALLY TO DISCUSS MAIN
20 REPLACEMENTS AND OTHER MATTERS?

21 A. Yes we enjoy an excellent relationship with both the Company's local staff and its
22 regional/state leadership. We recently worked toward a water usage solution at our

1 training facility that has benefited local and regional fire training initiatives.
2 Additionally, just last week the Company agreed to allow the Cole County Chiefs'
3 Association to park its most important prevention platform, the kids safety house (trailer),
4 out of the weather inside the Company's new water tower. Finally, we just entered into a
5 data sharing agreement to make water supply information readily available to public
6 safety personnel in the field via emerging technology and GIS systems. I believe the
7 Company shares my commitment to adequate fire flows and we continue to look for ways
8 to collaborate moving forward.

9 Q. DO YOU HAVE A RECOMMENDATION CONCERNING THE WATER MAIN
10 REPAIRS AND REPLACEMENTS THAT ARE NEEDED IN THE CITY?

11 A. In the last ten to twelve years the Company has made needed infrastructure
12 improvements to its Jefferson City water system, including substantial upgrades to the
13 intake system. It is currently making major improvements at its plant. Identifying the
14 need for many of these improvements and scheduling them were the result of a
15 coordinated effort between the City, the Company and the Commission staff. It is my
16 recommendation that the City, the Company and the staff seek ways to improve that
17 coordinated effort with added intensity and engage in a conscientious study of
18 weaknesses in the system and the means of eliminating them. I realize that the Company
19 has probably established a project list for Jefferson City but depending upon the outcome
20 of the joint review of mains and other facilities some projects may need to be placed
21 ahead of others and new projects drafted.

1 **Sprinkling Systems**

2 Q. PLEASE EXPLAIN THE IMPORTANCE OF MODERN SPRINKLING SYSTEMS
3 FOR FIRE SUPPRESSION.

4 A. Modern construction materials and building contents cause a building to “flash” much
5 more quickly than in years past. A properly functioning sprinkler system is the most
6 effective and efficient way to save both life and property under fire conditions.

7 Q. ARE SPRINKLING SYSTEMS REQUIRED BY CITY ORDINANCE FOR CERTAIN
8 BUILDINGS WITHIN JEFFERSON CITY?

9 A. In October the city implemented the 2015 IBC (International Building Code) and IFC
10 (International Fire Code). Through that process the City now requires fire sprinklers in
11 new construction for building with three or more residential units. Previously this rule
12 only applied to 10 residential units or more. This is a major step forward and we hope
13 state law will eventually follow suit to protect people where they are most at risk---at
14 home. Likewise many commercial buildings of certain sizes and types are also required
15 to have fire sprinklers when replaced or significantly remodeled. Even with limited
16 expansion in Jefferson City these upgraded buildings will require additional water flow
17 and pressure.

18 Q. HAVE BUILDERS IN THE CITY REGULARLY INSTALLED SPRINKLING
19 SYSTEMS FOR NEW STRUCTURES IN THE CITY?

20 A. We have encouraged our community to consider fire sprinklers in both residential and
21 commercial applications. While we experience limited success in 1 and 2 family
22 dwellings, the multi-family rule above really does move the flag forward on this issue.

1 We reached out early in the process to MAWC with a specific initiative involving Habitat
2 for Humanity. This 13D system was a success partially because the water company
3 agreed to waive its sprinkler “tariff” in part because the spec was a multipurpose system
4 with low demand tied to the domestic supply of a single family home. I believe the
5 success of this program could be extended to all NFPA 13D systems installed in Jefferson
6 City in the future. It should also be noted: the water company assisted in other ways to
7 support the H4H program and was integral to its success. It is my sincere hope that water
8 purveyors across the state will follow MAWC's lead in supporting 13D fire sprinkler
9 systems.

10 Q. WHAT FACTORS ARE DISCOURAGING BUILDERS FROM INSTALLING THE
11 SPRINKLING SYSTEMS?

12 A. Moving forward, the sprinkler tariff seems to be our biggest issue. We routinely see
13 construction projects designed around threshold size and fire barrier limits thus avoiding
14 the code requiring a fire suppression system. I would like to see the tariff dramatically
15 reduced, restructured, or eliminated. If there is a rate increase the fire sprinkler tariff
16 should be chopping block.

17 Q. HAVE THE COMPANY'S RATES FOR SPRINKLING SYSTEMS AFFECTED THE
18 DEGREE TO WHICH THOSE SYSTEMS ARE INSTALLED ON NEW
19 STRUCTURES IN THE CITY?

20 A. Yes. We have fewer sprinklered buildings because owners, contractors, and architects
21 want to avoid paying the monthly fee provided for in the tariff and they specifically
22 design buildings to sidestep the code and avoid ongoing cost of fire suppression systems.

1 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

2 A. Yes.

MDS SCHEDULE 1

EDUCATIONAL AND PROFESSIONAL EXPERIENCE FOR MATTHEW D. SCHOFIELD

EDUCATION

Master of Business Administration - William Woods University (2006)
Bachelor of Science in Consumer Economics - University of Missouri Columbia (1999)
Associate of Applied Science in Fire Science Technology - Ozarks Technical College (2002)
Emergency Management Institute - Professional Development Series (2005)
Emergency Medical Technician - Boone County Fire District (1997)
Wilderness First Responder- University of New Mexico (1998)

LEADERSHIP AND WORK EXPERIENCE

Missouri Task Force 1: Task Force Leader (current)

Senior Leadership Position for 12 of the 14 federal deployments. Worked with multiple jurisdictions, directly responsible for managing 40+ search and rescue team members rendering aid to victims in collapsed structures, under rubble, and in floodwaters. Additional tasks included collecting and analyzing field data, triaging victims, providing humanitarian assistance, and providing logistical support in austere environments during natural and manmade disasters.

- New York City/World Trade Center on 9/11
- Columbia Shuttle Disaster
- Republican National Convention
- Hurricanes: Rita, Katrina I/II, Isabel, Dennis, Dolly, Dean, Ernesto & Ike
- F5 Joplin, Missouri Tornado (State Deployment)
- Clinton, Missouri Elks Lodge Building Collapse (State Deployment)
- Super Storm Sandy
- Colorado Flood
- Hurricane Irma (IST Division Supervisor Island of St. John USVI)

Boone County Fire District Volunteer: Captain & Station Commander (1996- 2013)

Command and Control on Fire, Medical, Hazardous Materials incidents, Administrative Authority over 15 volunteers, 5 station residents, apparatus, public relations, and building and grounds.

FEMA Search Information Standards: Working group (2013-current)

Instrumental in developing standard search practices and geospatial information to be adopted nationwide.

LEADERSHIP AND WORK EXPERIENCE (continued)

Jefferson City Fire Department Improvement Plan Representative: (2007)

Worked with multiple city department representatives evaluating & assessing department needs; subsequently making long term recommendation for capital improvements

Planning Section Chief-All Hazard Incident Management Team/Springfield, MO Ice Storm (2006)

Managed the collection, distribution, and display of critical incident information. As a member of the General Staff conducted planning meetings and produced comprehensive after action reports.

Philmont Adventure Base: Associate Chief Ranger & Search and Rescue Leader (1996-1999)

Trained and supervised a group of over 200 Staff Rangers in wilderness survival for 20,000 high adventure participants (scouts) in the mountains of New Mexico. Overall responsibility for Search and Rescue operations, equipment, and training.

University Ambulance Service: EMT (1998-1999)

I learned first-hand what it takes to work for an ambulance service and the unique challenges of patient care in a pre-hospital environment.

CURRENT EMPLOYMENT

City of Jefferson: Firefighter-Fire Chief (1999-current)

Callaway Energy Center (Ameren UE): Fire Protection Specialist (2011-current)

SPEC Rescue International: Lead Instructor (2013-current)

FEMA US&R: Rescue Specialist-Task Force Leader (1999-current)