

Exhibit No. 206

Staff – Exhibit 206
Testimony of Andrew Harris, P.E.
Direct/Rebuttal
File No. WR-2024-0320

Exhibit No.:
Issue(s): *Water Loss and
Main Break
Reporting*
Witness: *Andrew Harris*
Sponsoring Party: *MoPSC Staff*
Type of Exhibit: *Direct / Rebuttal
Testimony*
Case No.: *WR-2024-0320*
Date Testimony Prepared: *December 6, 2024*

MISSOURI PUBLIC SERVICE COMMISSION

**INDUSTRIAL ANALYSIS DIVISION
WATER, SEWER, GAS, AND STEAM DEPARTMENT**

DIRECT / REBUTTAL TESTIMONY

OF

ANDREW HARRIS, P.E.

MISSOURI-AMERICAN WATER COMPANY

CASE NO. WR-2024-0320

*Jefferson City, Missouri
December 2024*

1 **DIRECT / REBUTTAL TESTIMONY**

2 **OF**

3 **ANDREW HARRIS, P.E.**

4 **MISSOURI-AMERICAN WATER COMPANY**

5 **CASE NO. WR-2024-0320**

6 Q. Please state your name and business address.

7 A. My name is Andrew Harris and my business address is 200 Madison Street,
8 Jefferson City, MO, 65101.

9 Q. By whom are you employed and in what capacity

10 A. I am employed by the Missouri Public Service Commission (“Commission”) as
11 a Senior Professional Engineer in the Water, Sewer, Gas, and Steam Department. I am also a
12 level A Certified Water Treatment System Operator, a level A Certified Wastewater Treatment
13 System Operator, and a Certified Distribution System Operator III.

14 Q. Please describe your educational experience, work experience, and any cases in
15 which you have previously filed testimony before this Commission.

16 A. My credentials and a list of cases in which I have participated and have previously
17 filed testimony before this Commission are attached as Schedule AH-d1

18 Q. What is the purpose of your direct testimony?

19 A. The purpose of my direct testimony is to discuss the history of Main Break and
20 Water Loss reporting filed by Missouri American Water Company (“MAWC”) and to
21 recommend an order from the Commission for MAWC to continue the same reporting for
22 additional service areas with greater than 20% water loss.

1 Q. What is the recent history of MAWC Main Breaks and Water Loss reporting to
2 the Commission?

3 A. In case WR-2020-0344 MAWC agreed to conduct an annual review regarding water
4 main breaks and water loss by district, and, for systems in those districts in which water loss is
5 greater than 20% in a service area, MAWC agreed to provide detail for items believed to be
6 major contributors to that water loss.

7 Q. Why is this effort a good idea?

8 A. Where major contributors to water loss can be identified, options such as replacing
9 aging equipment or optimizing existing processes are possibilities that can result in water
10 loss reduction.

11 Q. What are the service areas that were identified with greater than 20% water loss that
12 would receive review with an annual report filed?

13 A. There were five service areas identified: Joplin, St. Louis County, Mexico,
14 Jefferson City and St. Joseph. For three of those service areas (Joplin, St. Louis County, and
15 Mexico), reports were filed in each of the last three years.

16 Q. Can you discuss any examples of major contributors to water loss that were
17 identified and discussed in the filed reports for these three service areas?

18 A. At Joplin and St. Louis County, among other major contributors that include main
19 breaks, system delivery flow meters at the water treatment plants were no longer providing
20 accurate data, potentially resulting in water loss being over reported. These meters have been
21 replaced and data is being gathered to determine whether the reported water loss was accurate.
22 Additionally, MAWC was in the process of upgrading meters in Joplin and Mexico to advanced

1 metering infrastructure (“AMI”) at the time those reports were filed. It is anticipated that the
2 expansion of the AMI rollouts will contribute to lower percentages of reported water loss.

3 Q. What are the two service areas that MAWC has yet to study?

4 A. Jefferson City and St. Joseph are the two service areas that remain to be studied,
5 with a report to be filed.

6 Q. What is your recommendation to the Commission regarding continuing this effort
7 and reporting for the Jefferson City and St. Joseph service areas?

8 A. I recommend the Commission order Missouri American to continue the study and
9 reporting effort for the Jefferson City and St. Joseph service areas, with a report due for each,
10 in either order, with a report filed for one in 2025 and the other in 2026.

11 Q. Does this conclude your direct / rebuttal testimony?

12 A. Yes it does.

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-2024-0320
Increase for Water and Sewer Service Provided in)
Missouri Service Areas)

AFFIDAVIT OF ANDREW HARRIS, PE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW ANDREW HARRIS, PE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Direct / Rebuttal Testimony of Andrew Harris, PE*; and that the same is true and correct according to his best knowledge and belief.

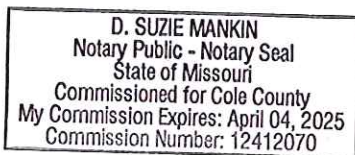
Further the Affiant sayeth not.



ANDREW HARRIS, PE

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 25th day of November 2024.



Notary Public

ANDREW HARRIS

CREDENTIALS AND CASE PARTICIPATION

I am employed by the Missouri Public Service Commission as a Senior Professional Engineer, in the Water, Sewer & Steam Department. My duties include the review, inspection, and investigation of water and sewer systems and the development and preparation of recommendations and testimony regarding those systems. Specifically included are technical issues associated with water and sewer utility rate and acquisition cases including quality of service matters, utility plant utilization, costs incurred for providing utility service, and tariff rules. In addition to formal case work, I handle informal customer complaints that are of a technical nature, and informally assist water and sewer utility companies with respect to day-to-day operations, planning, and customer service issues.

Educational Background and Work Experience

I graduated from University of Missouri – Rolla in 1997 with a Bachelor of Science degree in Chemical Engineering. I am a Registered Professional Engineer in the State of Missouri and have been continuously licensed in Missouri since 2003. Previous employment includes experience in water and sewer operations and engineering with municipal, industrial, and consulting organizations. I hold certificates of competency at the highest level available from Missouri Department of Natural Resources for water and wastewater treatment as well as distribution system operations.

Case Participation

<u>Company</u>	<u>Case No.</u>
Missouri American Water Company (MAWC)	SA-2019-0334
Timber Creek	SA-2020-0013
Liberty Utilities	SA-2020-0067
MAWC	SA-2020-0132
Elm Hills	SA-2020-0152
Liberty Utilities	SA-2020-0216
Liberty Utilities	SA-2020-0398
MAWC	SA-2021-0017
MAWC	SA-2021-0074
Mid-Mo Sanitation	SA-2022-0029
MAWC	SA-2022-0294
Confluence	SA-2023-0187
Elm Hills	SM-2020-0146
TUK, LLC	SM-2022-0131
MAWC	SR-2020-0345
Mid-Mo Sanitation	SR-2021-0372
MAWC	WA-2019-0259
MAWC	WA-2021-0376
Liberty Utilities	WA-2020-0397
MAWC	WA-2022-0293
MAWC	WA-2022-0361
I-70 Mobile City	WC-2022-0295
Liberty Utilities	WM-2022-0156
Middlefork	WM-2021-0003
Liberty Utilities / MAWC	WO-2022-0253 / WO-2024-0195
Raytown Water Company	WR-2020-0264
Elm Hills	WR-2020-0275
MAWC	WR-2020-0344
MAWC / Confluence	WR-2022-0303 / WR-2023-0006
Liberty	WR-2024-0104
MAWC	WT-2020-0353