Exhibit No. 123

Staff – Exhibit 123
David C. Roos
Rebuttal Testimony (Cost of Service)
File No. WR-2022-0303

Exhibit No.:	
Issue(s):	*Restoration Costs Related to Municipal Ordinances*
Witness:	*David C. Roos*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Rebuttal Testimony*
Case No.:	*WR-2022-0303*
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MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

WATER, SEWER & STEAM DEPARTMENT

REBUTTAL TESTIMONY

OF

DAVID C. ROOS

MISSOURI-AMERICAN WATER COMPANY

CASE NO. WR-2022-0303

Jefferson City, Missouri
January 2023

****** Denotes Confidential Information ******

REBUTTAL TESTIMONY OF

DAVID C. ROOS

MISSOURI-AMERICAN WATER COMPANY

CASE NO. WR-2022-0303

Q. Please state your name and business address.

A. My name is David C. Roos and my business address is 200 Madison Street, Suite 500, Jefferson City, MO 65101.

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

A. I am employed by the Missouri Public Service Commission ("Commission") as an Associate Engineer in the Water, Sewer, & Steam Department of the Industry Analysis Division, a member of Commission Staff ("Staff").

Q. Please describe your educational background and work experience.

A. A copy of my work and educational experience is attached to this testimony as Schedule DCR-r1.

Q. Have you previously filed testimony before the Commission?

A. Yes. Please refer to Schedule DCR-r1, attached to this Rebuttal Testimony, for a list of cases in which I have assisted and filed testimony with the Commission.

EXECUTIVE SUMMARY

Q. Please summarize your Rebuttal Testimony in this proceeding.

A. In this testimony I respond to the direct testimony of Missouri-American Water Company ("MAWC") witness Rebecca B. Losli regarding MAWC's increase in street restoration costs caused by local municipal and county requirements. I also respond to the

direct testimony of the Office of the Public Council ("OPC") witness Geoff Marke regarding "Utility Coordination of Excavation of Distribution System."

RESTORATION COSTS RELATED TO MUNICIPAL ORDINANCES

Q. Please summarize Ms. Losli's direct testimony regarding the increase in restoration costs caused by local municipal and county requirements.

A. In general, Ms. Losli states that costs of water main replacement have increased due to increasing labor and material costs. In addition, some municipalities and counties have increased local right-of-way restoration requirements such that for some main replacement projects, the right-of-way restoration cost is more than 50 percent of the total cost of water main replacement.[1]

Q. What is a "right-of-way" and how does MAWC use the right-of-way?

A. In the context of this testimony, a right-of-way means a "public right-of-way" which is "the area on, below or above a public roadway, highway, street or alleyway in which [a] political subdivision [meaning municipality or county] has an ownership interest…", as defined by Section 67.1830(8), RSMo. MAWC is a "public utility" that owns the water mains, valving, laterals, and fire hydrants underneath and along the right-of-way, and is considered a "public utility right-of-way user" per Section 67.1830(9) and (10), RSMo.

Within its jurisdiction, a municipality or county has the authority to set right-of-way permitting requirements for use of the right-of-way,[2] and in the case of water main replacement, the use of the right-of-way includes the excavation, and restoration of the right-of-way. These permitting requirements typically include standards and specifications for restoring the

[1] *Direct Testimony of Rebecca B. Losli*, WR-2022-0303, P. 6:14-15.
[2] Section 67.1830(6)(d), RSMo.

subsurface, roadbed, curbing, and other infrastructure in the area of the excavation. When MAWC replaces water mains that are underneath a right-of-way, MAWC is subject to the requirements of the right-of-way permit issued to perform the excavation.

Q. When do municipal and county permit requirements typically increase the cost of water main replacement projects?

A. When the municipal and county permit requirements of the right-of-way permit exceed MAWC's internal standard requirements for right-of-way restoration, MAWC typically incurs additional costs.

For example, on page 6, lines 10 through 14 of her direct testimony, Ms. Losli states that, "utilities historically were required to restore pavement to a standard of two feet wider than the width of the trench required for pipe replacement, or typically four to six feet. Now, it is typical for pavement replacement to include the full width of the traffic lane (twelve feet) and in some cases, the full width of the street (24 feet or more)."

It is possible that these additional requirements may become unduly burdensome to the ratepayer, because they require MAWC to replace aging or non-compliant Americans with Disabilities Act ("ADA") infrastructure such as roadway, curbing, and crosswalks at intersections and surrounding areas that extend beyond the area of excavation.

Q. How do municipalities and counties impose additional right-of-way restoration requirements on MAWC?

A. Based on responses to Staff Data Request ("DR") No. 0192 and conversations with MAWC personnel, the municipalities and government agencies have imposed additional right-of-way restoration requirements on MAWC through the issuing of "Special Use Permits" that contain terms and conditions which include the additional right-of-way restoration

requirements. The municipalities and government agencies may also add additional conditions during workplace inspections and before the approval or acceptance of completed work.

Q. Where are the municipalities and counties imposing these additional requirements located?

A. Based on MAWC's response to Staff's DRs and conversations with MAWC personnel, the municipalities and counties that have requirements that exceed MAWC's standard right-of-way restoration specifications are located in the greater St. Louis Metropolitan Area.

Q. Has Staff reviewed MAWC's standard right-of-way restoration specifications?

A. Yes, Staff reviewed MAWC's standard right-of-way restoration specifications, which MAWC provided in its response to Staff DR No. 0192. Staff considers them as acceptable design/construct specifications that are necessary and sufficient for bidding and executing this type of work.

Q. Has Staff reviewed municipal and county standard right-of-way restoration specifications?

A. Yes, based on MAWC's response to Staff DR No. 0192, Staff reviewed municipal and county standard right-of-way restoration specifications, some of which exceed MAWC's standard right-of-way restoration specifications. These specifications include the additional paving requirements discussed earlier in this testimony.

Q. Do these additional right-of-way restoration requirements typically increase the cost of a main replacement project?

A. Yes. These costs are project specific and vary from project to project. Based on MAWC's response to Staff DR No. 0192, the following provides a range of costs for main

replacement projects that have additional right-of-way restoration requirements imposed by a municipality or county:

Original Restoration Cost as a Percentage of Total Project Cost

** [redacted] **

Actual Restoration Cost as a Percentage of Total Project Cost

** [redacted] **

Restoration Cost Percentage Increase as a Percent of Total Project Cost

** [redacted] **

** [redacted] **

This data indicates that when MAWC uses its standard scope of work for right-of-way restoration for main replacement projects, the cost of restoration is, on average, ** [redacted] ** of the total cost of the project. In cases where municipalities or government agencies require restoration above MAWC's standard scope of work, the cost for right-of-way restoration is, on average, ** [redacted] ** of the total project cost, which is an average increase of ** [redacted] **.

Q. Does Staff have a position on MAWC conforming to additional right-of-way restoration requirements imposed on it by municipalities or government agencies that typically increase project costs?

A. Yes. Staff is aware of the rising costs of right-of-way restoration when replacing water mains, as Ms. Losli describes in her direct testimony, and based on the data and information to date, Staff does not consider it imprudent for MAWC to follow the local standards when performing work within the municipal or government agencies' jurisdiction. Based on Staff's previous inspections of main replacement projects and discussions with

MAWC personnel, Staff is aware of MAWC coordinating, when possible, with the municipalities in scheduling water main replacement such that the main replacement coincides with the municipality's planned road improvements. This reduces MAWC's right-of-way restoration costs. Staff encourages MAWC to continue to schedule and coordinate main replacement projects with local municipalities and county agencies, as well as with other utilities to reduce costs whenever possible.

Q. Have other parties to this case filed testimony on this issue?

A. Yes, OPC witness Dr. Geoff Marke filed direct testimony that is relevant to this issue.

Q. What does Dr. Marke recommend?

A. On page 15 of his direct testimony, Dr. Marke recommends that the Commission order:

> 1. MAWC to meet with representatives from Staff and OPC at least twice to discuss what actions MAWC will take to pursue cost savings by coordinating main replacement projects with municipalities and other public utilities.
>
> 2. MAWC to document and report its efforts to pursue cost savings by coordinating main replacement projects with public and private sector parties.
>
> 3. That the Commission open a working docket with a reoccurring annual workshop for municipalities, government agencies and public utilities that examines the possibility for cost savings through formal or informal agreements and shared best practices on coordinated activities.

Q. How does Staff respond to Dr. Marke's recommendations?

A. It is important to note that Staff has had several conversations with MAWC during the past several years about its efforts to coordinate with municipalities and county governments so as to reduce cost where possible. This issue has been examined in previous rate cases, and Staff remains satisfied that MAWC is doing what it can to conduct planned projects in coordination with planned roadwork by local government entities.

However, Staff is willing to discuss the issue of increasing costs of replacing water mains with interested parties during this rate case and outside of this rate case. Staff suggests that if the Commission orders MAWC to provide additional information on efforts to reduce these costs, MAWC be allowed to provide this information in future Water and Sewer Infrastructure Rate Adjustment ("WSIRA") filings, rather than to order separate new filings.

Since MAWC is the initiator of the water main replacement projects, Staff considers MAWC the primary party responsible for completing water main replacement projects in a safe and cost effective manner. It is MAWC's responsibility to coordinate with the local authorities, use the line locator services to identify other utility infrastructure, coordinate excavation with the other utilities, and use local contacts to further coordinate work and minimize surprises.

Staff sees little value in setting up an annual, reoccurring workshop. Some of the entities that Dr. Marke envisions as potentially being involved are regulated, some are not. These entities are subject to their own independent plans, schedules, and budgets, and are vulnerable to uncertainties in planning and completion of infrastructure projects. For example, it is not reasonable or cost effective to ask MAWC to wait several years to replace a section of main that keeps breaking, in order to do the work at the same time as a proposed city stormwater project. Not only could the example stormwater project be postponed, but MAWC customers

would continue to be harmed by outages in the meantime. Where an infrastructure project is imminent in the same area, MAWC already works with local governments to complete the work in a way that minimizes restoration projects where possible.

It is also important to keep in mind that these efforts only affect planned projects. Restoration requirements for emergency repair of main breaks cannot be coordinated with other entities to reduce costs.

Q. Is there a way to recover the unusual additional costs imposed on MAWC by certain municipalities and counties from the customers who live in those municipalities and counties?

A. One approach is to create separate rates for each local government entity that is imposing additional right-of-way restoration requirements. This would allow the cost causers, who benefit from the additional requirements, to be billed for these additional costs. However, Staff does not recommend setting separate rates for local municipalities and counties in this rate case. Creating a multitude of separate rate districts would be inefficient, and would reverse the Commission's approval of consolidation down to two rate districts. Another approach is to create a surcharge for these types of projects that is added to the bills of customers within the political subdivision requiring the additional cost. However, without more study, neither of these solutions would necessarily directly improve the problem that MAWC describes.

However, Staff will continue to examine this developing issue and reserves the right to change its position in a future case.

Q. Does this conclude your rebuttal testimony?

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 General Rate Increase for Water and Sewer Service Provided in Missouri Service Areas	)))))	Case No. WR-2022-0303

AFFIDAVIT OF DAVID C. ROOS

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW DAVID C. ROOS and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Rebuttal Testimony of David C. Roos*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

DAVID C. ROOS

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 13th day of January 2023.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070

Notary Public

David C. Roos

Present Position

I am an Associate Engineer in the Water, Sewer and Steam Department, Industry Analysis Division for the Missouri Public Service Commission, and formerly a Regulatory Economist III in the Energy Resources Department, Industry Analysis Division for the Missouri Public Service Commission. I transferred to the position of Associate Engineer in the Water and Sewer Department in August 2017.

Educational Background and Work Experience

In May 1983, I graduated from the University of Notre Dame, Notre Dame, Indiana, with a Bachelor of Science Degree in Chemical Engineering. I also graduated from the University of Missouri in December 2005, with a Master of Arts in Economics. I have been employed at the Missouri Public Service Commission as a Regulatory Economist III from March 2006 through July 2017. Since August 2017, I have been employed at the Missouri Public Service Commission as an Associate Engineer. I began my employment with the Commission in the Economics Analysis section where my responsibilities included class cost of service and rate design. In 2008, I moved to the Energy Resource Analysis section where my testimony and responsibility topics include energy efficiency, resource analysis, and fuel adjustment clauses. In 2017, I transferred to the Water and Sewer Department as an Associate Engineer. My responsibilities include performing system inspections for rate and acquisition cases and performing special investigations related to the various regulatory requirements that affect Missouri's investor-owned water and sewer utilities and their customers.

Prior to joining the Public Service Commission, I taught introductory economics and conducted research as a graduate teaching assistant and graduate research assistant at the University of Missouri. Prior to the University of Missouri, I was employed by several private firms where I provided consulting, design, and construction oversight of environmental projects for private and public sector clients.

Previous Cases

Company	Case No.
Empire District Electric Company	ER-2006-0315
AmerenUE	ER-2007-0002
Aquila Inc.	ER-2007-0004
Kansas City Power and Light Company	ER-2007-0291
AmerenUE	EO-2007-0409
Empire District Electric Company	ER-2008-0093
Kansas City Power and Light Company	ER-2008-0034
Greater Missouri Operations	HR-2008-0340
Greater Missouri Operations	ER-2009-0091
Greater Missouri Operations	EO-2009-0115
Greater Missouri Operations	EE-2009-0237
Greater Missouri Operations	EO-2009-0431
Empire District Electric Company	ER-2010-0105
Greater Missouri Operations	EO-2010-0002
AmerenUE	ER-2010-0036
AmerenUE	ER-2010-0044
Empire District Electric Company	EO-2010-0084
Empire District Electric Company	ER-2010-0105
AmerenUE	ER-2010-0165
Greater Missouri Operations	EO-2010-0167
AmerenUE	EO-2010-0255
Greater Missouri Operations (Aquila)	EO-2008-0216
Ameren Missouri	ER-2011-0028
Empire District Electric Company	EO-2011-0066
Empire District Electric Company	EO-2011-0285
Ameren Missouri	EO-2012-0074
Greater Missouri Operations	EO-2012-0009
Ameren Missouri	EO-2012-0142
Ameren Missouri	ER-2012-0166
Greater Missouri Operations	EO-2013-0325
Ameren Missouri	EO-2013-0407
Empire District Electric Company	EO-2014-0057
Greater Missouri Operations	EO-2014-0256
Empire District Electric Company	ER-2014-0351
Greater Missouri Operations	EO-2015-0252
Kansas City Power and Light Company	EO-2015-0254
Empire District Electric Company	ER-2015-0214
Greater Missouri Operations	EO-2016-0053
Empire District Electric Company	ER-2016-0023
KCP&L Greater Missouri Operations Company	ER-2016-0156
KCPL	ER-2016-0285
Empire District Electric Company	EO-2017-0065
Greater Missouri Operations	EO-2017-0231

Liberty Utilities LLC	WR-2018-0170
SK&M	SR-2019-0157
Osage Utility	WA-2019-0185
Confluence / Port Perry	WA-2019-0299
CSWR Rate Case	WR-2020-0053
Confluence Rivers	WM-2020-0282
MAWC	WR-2020-0344
Carl Mills	WM-2020-0387
Harris Complaint	WC-2021-0129
Carl Mills	WR-2021-0177
MAWC / Eureka	WA-2021-0376
Carl Mills	WM-2022-0144
Carl Mills	WC-2021-0223
SK&M	WR-2022-0240
Argyle	WR-2022-0345