

Exhibit No. _____
Issue: Operations
Witness: Todd Thomas
Type of Exhibit: Direct Testimony
Sponsoring Party: Confluence Rivers Utility
Operating Company, Inc.
File Nos.: WA-2019-0299
Date: July 25, 2019

Missouri Public Service Commission

Direct Testimony

of

Todd Thomas

On Behalf of

Confluence Rivers Utility Operating Company, Inc.

July 25, 2019


 Exhibit No. 4
Date 10/17/19 Reporter JnB
File No. WA-2019-0299

TABLE OF CONTENTS

WITNESS INTRODUCTION	1
PURPOSE.....	3
SYSTEMS TO BE ACQUIRED	4
Port Perry Water Service Area:.....	4
Port Perry Sewer Service Area:.....	8
CERTIFICATES OF CONVENIENCE AND NECESSITY	10

**DIRECT TESTIMONY OF
TODD THOMAS
CONFLUENCE RIVERS UTILITY OPERATING COMPANY, INC.**

WITNESS INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Todd Thomas. My business address is 500 Northwest Plaza Drive, Suite 500, St. Ann, Missouri, 63074.

Q. WHAT IS YOUR POSITION WITHIN THE CENTRAL STATES WATER RESOURCES FAMILY OF COMPANIES?

A. I hold the office of Senior Vice President of Central States Water Resources, Inc., the affiliated company that will have operational oversight of Confluence Rivers Utility Operating Company, Inc. ("Confluence Rivers"). We internally refer to all corporate operations as "Central States" or "CSWR."

Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL EXPERIENCE.

A. My education includes a Bachelor of Science in Civil Engineering from the Missouri University of Science and Technology, and a Master of Business Administration from Washington University in St. Louis.

Before joining CSWR, I was President of Brotcke Well and Pump (the 2nd largest well driller and service provider in the Midwest), Vice President of Operations and Business Development of the Midwest for American Water Contract Operations, and General Manager of Midwest Operations for Environmental Management Corporation. I currently serve on the Technical

1 Advisory Team for the Public Water Supply District 2 of St. Charles County,
2 Missouri.

3 Brotcke Well and Pump serves municipal potable, regulated potable, and
4 industrial ground water suppliers in the states of Missouri, Illinois, Kansas,
5 Tennessee, Kentucky, and Arkansas. Its total number of clients exceeds 200 and
6 they range in size from the City of Bloomington, Illinois, with 31,000 water
7 customers, to 230 customers in the City of Eminence, Missouri. Brotcke Well and
8 Pump drills wells, cleans and treats wells, installs pumps, services pumps, rebuilds
9 pumps, tests wells for regulatory compliance, and installs and services well
10 controls. As President of Brotcke Well and Pump, I was involved in the design,
11 maintenance, and repair of all client well systems. I have firsthand experience
12 with how much damage can be done by lack of maintenance on a well system and
13 how much money and effort is required to restore a well system after neglect.

14 As Vice President of Operations and Business Development of the Midwest
15 for American Water Contract Operations, I was responsible for the water and
16 wastewater operations and maintenance contracts for municipal and industrial
17 clients. These clients included wastewater systems owned and operated by the
18 City of St. Charles, in Missouri, and the cities of Godfrey, Mount Vernon, Quincy,
19 Litchfield, Lincoln, Pittsfield, and Elwood in Illinois. These clients also included
20 water and wastewater systems owned and operated by the City of Foristell,
21 Missouri, and the Illinois cities of Brighton, and Monmouth. At one time I had
22 responsibility for operating water and wastewater systems serving approximately

1 64,000 residential connections. My responsibilities included the direction and
2 management of annual budgeting for each plant's operations and maintenance,
3 design and planning of plant upgrades and maintenance projects, regulatory
4 reporting, plant operations, and regulatory compliance of these systems.

5 My position as General Manager of Midwest Operations for Environmental
6 Management Corporation (EMC) was similar to that of my position with American
7 Water Contract Operations with regard to the size and scope of the systems the
8 company managed.

9 **Q. PLEASE DESCRIBE YOUR CURRENT POSITION.**

10 A. As Senior Vice President of Central States, my main responsibilities include the
11 acquisition, development, and rate stabilization of CSWR-affiliated utilities. These
12 duties include maintenance, capital planning, and regulatory compliance for all
13 CSWR-affiliated facilities. I am responsible for the management and maintenance
14 service providers, customer service and billing service providers, and engineering
15 firms.

16 **PURPOSE**

17 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

18 A. I will provide the Missouri Public Service Commission ("Commission") with a
19 description of the water and sewer systems that Confluence Rivers seeks to
20 acquire, improve, and operate on an ongoing basis.

1 **SYSTEMS TO BE ACQUIRED**

2 **Q. WHAT WATER AND WASTEWATER SYSTEMS DOES CONFLUENCE RIVERS**
3 **SEEK TO ACQUIRE IN THIS CASE?**

4 A. Confluence Rivers proposes to acquire substantially all the water and wastewater
5 system assets of Port Perry Service Company ("Port Perry"), including its
6 Certificates of Convenience and Necessity ("CCN").

7 **Q. IS THERE AN AGREEMENT CONCERNING THE SALE AND PURCHASE OF**
8 **PORT PERRY'S WATER AND SEWER SYSTEMS?**

9 A. Yes. The *Agreement For Sale of Utility System* ("Asset Purchase Agreement") is
10 attached to the Direct Testimony of Mr. Cox. Pursuant to the Asset Purchase
11 Agreement, CSWR proposes to acquire substantially all the water and wastewater
12 assets of Port Perry, including the CCNs, and transfer at closing all CSWR's rights,
13 title, and interest in Port Perry's assets to Confluence Rivers. Attached to Mr.
14 Cox's testimony is an Assignment of Rights that CWSR and Confluence Rivers
15 have executed.

16 **Port Perry Water Service Area:**

17 **Q. PLEASE DESCRIBE THE PORT PERRY WATER SYSTEM.**

18 A. The water system has two wells and one 223,000 gallon water storage tank. Both
19 wells are approximately 1.2 miles from the ground storage tank that supplies the
20 system pressure. Well #1 has liquid chlorine injected into the well house piping,
21 which then directly enters the water supply system without receiving the necessary
22 contact time. The well house has three 800-gallon hydropneumatics tanks to

1 normalize water pressure in the distribution system. However, those tanks have
2 been piped such that the newly disinfected water bypasses these hydropneumatic
3 tanks going directly into the system. Contact time is necessary when using chlorine
4 disinfection to kill salmonella and *E. coli* due to the process not being
5 instantaneous. The ground storage tank that is 1.2 miles southwest of Well #1 has
6 customers on the service line and will not provide the necessary contact time prior
7 to service connections and the possibility of consumption. Also, Well #1 had only
8 one chlorine pump on site during our visit. Redundant chlorine pumps are required
9 when disinfection is needed. This well was inspected on March 2, 2018, and
10 concerns were noted regarding the well's capacity. While the well was running
11 continuously during the summer without stopping on the weekends, this well
12 clearly does not have the capacity to be the sole water source for the community.
13 Additionally, the flow meter at Well #1 showed a lower flow rate than expected,
14 which is typically a sign of the well pump and motor nearing failure. This well needs
15 to be pulled, wire replaced, column piping replaced where it has failed, and the
16 well pump inspected to determine the extent of the issues to prevent complete
17 failure, which would leave the system without water.

18 The second well also is located 1.5 miles away from the ground storage
19 tank. This well is not currently in operation and does not have a disinfection system
20 in place. During our inspection, we attempted to have a well test performed. Once
21 we arrived at the site, the owner directed us not to run the test due to concerns of
22 water hammer that will harm customer appliances. Water hammer is caused by

1 the sudden pressure that has rapidly built up in the water line when the pump kicks
2 on and is looking for a place to go. In addition, severe water hammer can cause
3 a blow out in the water main. This blow out would cause a loss of pressure below
4 the Missouri Department of Natural Resources ("MDNR") minimum of 21 psi, which
5 enables potential pathogens to enter the water system and would require the
6 system to undergo a boil order. Homeowners would need to boil their water to kill
7 the potential harmful pathogens. This well has been out of service due to this
8 water hammer problem, which leaves the system operating without a second well.
9 The well is listed as an emergency backup but using it for that purpose may cause
10 more harm than good in its current form of installation.

11 MDNR design guidelines recommend a system of this size have a second
12 well. This recommendation is based on MDNR's extreme concern regarding the
13 number of customers who would be out of water if the single well failed. With only
14 one active well with a single chlorine pump, the system is in danger of failure on
15 multiple levels. For example, customers are in danger of receiving drinking water
16 that is not disinfected if the single chlorine pump fails or Well #1 fails. Salmonella
17 and *E. coli* contamination are an ongoing concern.

18 Additionally, if Well #1 fails and Well #2 was turned on for use, the system
19 would be receiving water that is not disinfected. The system also would be at risk
20 of extreme water hammer that would be harmful to customer appliances. This
21 would also put unneeded stress on the distribution system due to water hammer
22 and would lead to leaks and possibly main breaks. Breaks allow contaminants to

1 enter the drinking water system during repair. And since no disinfection would be
2 in place at Well #2, the system would struggle to produce clean samples that would
3 allow operators to lift a potential boil water advisory.

4 The well house should also receive wiring upgrades to deem the well house
5 safe per current electrical codes. It also needs to be cleaned of all the excess
6 materials being stored there. Storing excess materials and leaving the well house
7 in an unsanitary condition as it sits can lead to contamination of the water supply.

8 **Q. WERE THERE ANY ISSUES WITH THE PORT PERRY WATER SYSTEM**
9 **WHILE IT WAS OPERATED BY PORT PERRY?**

10 A. Yes. On March 6, 2015, the owners were cited by MDNR for running the system
11 without having a properly certified stand-by chief operator to operate and maintain
12 the drinking water system in the event the chief operator is unavailable or
13 incapacitated. The owners were also cited for being in violation of Missouri Safe
14 Drinking Water Commission's regulations as of 2015.

15 **Q. WHAT IS THE CURRENT CONDITION OF THE PORT PERRY WATER SYSTEM**
16 **ASSETS?**

17 A. The water system is currently at risk of failure for basic drinking water security,
18 physical separation of chlorine disinfection systems, emergency redundant
19 chlorine pumps and monitoring of residual chlorine. Completing upgrades
20 necessary to remedy these problems also would require corresponding
21 operational management upgrades, including a new chlorination system with
22 redundancy, testing equipment, and new fencing. MDNR recommends a backup

1 source of water for communities serving over 500 people. Port Perry has over
2 500 customers but the backup well is not operationally sound to provide the
3 needed backup source of water for the community. The backup well does not
4 have a chlorination system for disinfection. Turnover of water in the existing
5 ground storage tank is also a concern due to the configuration of the water
6 system.

7 **Q. DOES CONFLUENCE RIVERS HAVE A PLAN TO REMEDY THESE**
8 **RELIABILITY AND SAFETY ISSUES?**

9 A. Yes. Confluence Rivers plans to address water issues in the most cost-effective
10 manner. Repairs would include improvements to Well House #1 to become
11 safer, more secure, and more sanitary; make modifications to provide the
12 necessary contact time for chlorine disinfection; provide a redundant chlorine
13 pump, and an active, safe and reliable redundant well pump. These
14 improvements would ensure that in the event of an outage, an adequate supply
15 of water is available that is chlorinated with proper disinfection contact time.

16 **Port Perry Sewer Service Area:**

17 **Q. PLEASE DESCRIBE THE PORT PERRY WASTEWATER SYSTEM.**

18 A. Port Perry's wastewater treatment facility is a no-discharge system utilizing land
19 irrigation for the effluent. The collection system consists of both pressure sewers
20 and gravity sewers. There are issues with the land application system that
21 preclude it from correctly applying waste. The irrigation system has failed in its
22 current state. During various site visits during February, March and April 2018, the

1 system was applying the effluent to a radius of less than 5 feet despite the fact
2 original design plans show an application area approximately 100 feet in diameter.
3 Soil will get over saturated and overloaded with wastewater contaminants.
4 Allowing this system to operate as is would be a health concern for humans who
5 come in contact with the area, as well as for the wildlife in the area. During summer
6 drought conditions, wildlife is attracted to water and could drink from these
7 irrigation heads that are allowing over saturated conditions. Additionally, saturated
8 conditions like this lead to mosquitos, which create potential health concerns for
9 nearby customers. The wastewater system also lacks appropriate fencing to
10 provide adequate security.

11 **Q. WERE THERE ANY ISSUES WITH THE SYSTEM WHILE IT WAS OPERATED**
12 **BY PORT PERRY?**

13 A. During our site visits in February, March and April 2018, the land application
14 system was not applying the wastewater to the appropriate area. Soil saturation
15 and overloading will continue to occur if the system continues to operate in the
16 failed situation it was in during the various site visits.

17 **Q. WHAT IS THE CURRENT CONDITION OF THE PORT PERRY SEWER SYSTEM**
18 **ASSETS?**

19 A. The wastewater operations are in danger of failing due to a lack of basic
20 maintenance on the berms housing the wastewater storage lagoon cells. The
21 sprinkler system does not function properly due to sprinkler heads in disrepair
22 and automated valves not functioning as needed. The valves were all locked in

1 the open position. The system is not able to spray the wastewater effectively as
2 they are typically designed to load selected zones rather than all the zones at
3 one time. The wastewater system is failing for basic sewer security, discharge
4 recording and physical protection of the system.

5 **Q. DOES CONFLUENCE RIVERS HAVE A PLAN TO REMEDY THESE SAFETY**
6 **ISSUES?**

7 A. Yes. Confluence Rivers plans to address wastewater issues by replacing the
8 defective sprinkler heads, repairing the automated valving for the application area,
9 and repairing fencing as needed. We would also hire qualified operators that
10 would oversee the system. In addition, we would install remote monitoring software
11 that would allow us to better monitor when components are failing.

12 **CERTIFICATES OF CONVENIENCE AND NECESSITY**

13 **Q. WHAT DOES CONFLUENCE RIVERS NEED FROM THE COMMISSION TO**
14 **PROVIDE SERVICE TO THE WATER AND SEWER SERVICE AREAS OF PORT**
15 **PERRY?**

16 A. As requested in the Application, Confluence Rivers asks the Commission to allow
17 it to acquire the water and sewer assets of Port Perry, including its CCNs, to
18 provide water and sewer service in the area now served by Port Perry, and cancel
19 the certificates of Port Perry. Confluence Rivers also requests the Commission
20 authorize Port Perry and Confluence Rivers to execute and perform in accordance
21 with the terms described in the *Agreement For Sale of Utility System* attached to

1 the Direct Testimony of Mr. Cox and to take any and all other actions which may
2 be reasonably necessary and incidental to the performance of the acquisitions.

3 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

4 **A.** Yes, it does.

AFFIDAVIT

STATE OF MISSOURI)
)
COUNTY OF St Louis) ss

I, Todd Thomas, state that I am the Senior Vice President of Central States Water Resources, Inc.; that the Direct Testimony and schedules attached hereto have been prepared by me or under my direction and supervision; and, that the answers to the questions posed therein are true to the best of my knowledge, information and belief.

Todd Thomas

Subscribed and sworn to before me this 22 day of July, 2019.

Brenda Eaves
Notary Public

My Commission Expires: 01/31/2021

(SEAL)

