

Exhibit No:
Issue: Worn Out or Deteriorated
Condition of Cast Iron and Bare
Steel Facilities
Witness: Robert R. Leonberger
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: Spire Missouri Inc.
Case Nos.: GO-2018-0309, GO-2018-0310

Date Prepared: May 20, 2020

SPIRE MISSOURI, INC.

File Nos. GO-2018-0309, GO-2018-0310

REBUTTAL TESTIMONY

OF

ROBERT R. LEONBERGER

MAY 2020

REBUTTAL TESTIMONY OF ROBERT R. LEONBERGER

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Robert R. Leonberger and the business address for the consulting firm for
3 whom I currently work (NatGas Consulting) is: One Westinghouse Plaza; Suite 36; Boston,
4 Massachusetts 02136. However, I work from my residence at 1920 Sylvan Hills Road;
5 Jefferson City, Missouri 65109.

6 **Q. ARE YOU THE SAME ROBERT R. LEONBERGER THAT FILED DIRECT**
7 **TESTIMONY ON MAY 13 IN THESE CASES?**

8 A. Yes.

I. PURPOSE OF REBUTTAL TESTIMONY

10 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

11 A. The purpose of my testimony is to address the direct testimony in the Staff's report and the
12 direct testimony of OPC witness John Robinett. Specifically, I will address what evidence
13 is needed to demonstrate that cast iron and bare steel is worn out or deteriorated.

14 **Q. WHAT ISSUE DO YOU HAVE WITH STAFF'S REPORT AND OPC'S**
15 **TESTIMONY?**

16 A. Staff's Report assumes that none of the costs involved in replacing cast iron and bare steel
17 as part of Spire's Section 15 (Commission Rule 40.030(15)) main replacement programs
18 are ISRS-eligible. Staff simply wipes out the entire program as if none of these costs have
19 replaced cast iron and bare steel that is worn out or in a deteriorated condition. OPC is
20 willing to accept work order authorization sheets in the 2018 cases, but only to the extent
21 they specifically state corrosion, leak repair, main relocation, main re-lining and joint

1 encapsulation. In both cases, this ignores evidence that cast iron and bare steel are worn
2 out or in a deteriorated condition.

3 **Q. HOW DO THESE TESTIMONIES IGNORE EVIDENCE THAT CAST IRON AND**
4 **BARE STEEL ARE WORN OUT OR DETERIORATED?**

5 A. In general, the federal government sets minimum gas safety standards through the Pipeline
6 Hazardous Materials Safety Administration (“PHMSA”). The states can then register to
7 enforce intrastate gas safety, which Missouri has done. Missouri’s gas safety rules cannot
8 be less stringent than the minimum federal rules, but they can be more stringent.

9 **Q. HOW DOES THIS APPLY TO CAST IRON AND BARE STEEL?**

10 A. Let’s start with cast iron. Under minimum federal gas safety rules, cast iron *must* be
11 replaced if it has general graphitization to a degree where a fracture or any leakage might
12 result. The federal rule is 49 CFR 192.489, adopted by Missouri in gas safety rule
13 40.030(9)(U). However, on the topic of cast iron, the State of Missouri has a more stringent
14 rule. Specifically, Missouri has a main replacement program in which all cast iron must
15 be replaced. (See Commission Rule 40.030(15)(D)). Since the state rule must be at least
16 as stringent as the federal rule, Missouri has effectively said through Rule 15(D) that all
17 cast iron is graphitized to a degree where a fracture or any leakage might result. The
18 minimum federal rule leaves it to the utility to decide on the level of graphitization on a
19 cast iron pipe. But in Missouri, the Commission has taken that decision away from the
20 utilities. The Commission has used its expertise and experience to decide that cast iron has
21 become so impaired in quality, state or condition, and so inferior in quality and value, that
22 it warrants removal without further inspection. In other words, the Commission has
23 determined that all cast iron is in a deteriorated condition.

1 **Q. WHAT ABOUT BARE STEEL?**

2 A. For distribution lines other than cast iron, the federal rule is 49 CFR 192.487, adopted by
3 Missouri in gas safety rule 40.030(9)(T). The minimum federal rule requires replacement
4 of each segment of pipe with generalized corrosion, and replacement or repair of pipe with
5 localized corrosion pitting to a degree where leakage might result. In this area, the State
6 of Missouri also has a more stringent rule. Specifically, Missouri has a main replacement
7 program for bare steel. (See Commission Rule 40.030(15)(E)). When this rule was
8 adopted in 1989, the Commission and the Safety Staff recognized that bare steel mains
9 were in a deteriorated condition. More than 20 years later, in April 2011, the Commission
10 issued a Pipeline Safety Program Report that cited two recent incidents in Missouri
11 involving steel pipelines, and warned utilities to pick up the pace on cast iron and steel
12 replacements, specifically citing the age and integrity factors that call for steel to be
13 replaced. (See Hoferlin Direct, August 22, 2018, p. 9). By 2018, nearly 30 years of
14 further deterioration had taken place since the Commission and Safety Staff first
15 determined that bare steel was deteriorated. I have absolutely no doubt that all of the bare
16 steel in the ground in 2018 is in a deteriorated condition.

17 **Q. WAS REPLACING CAST IRON AND BARE STEEL A MAJOR REASON**
18 **BEHIND THE ENACTMENT OF THE ISRS?**

19 A. Sure it was. That's why ISRS cases never included evidence regarding the deteriorated
20 nature of cast iron or bare steel replaced as part of replacement programs. The Commission
21 had already decided they were by their very nature deteriorated, and the legislature passed
22 the ISRS to more fairly compensate utilities for the expensive replacement work. OPC

1 knew all of this, told the Court so in 2017, and acted consistent with this position from
2 2003 until 2018.

3 **Q. BUT DIDN'T THE COURT RULE THAT WORK DONE UNDER A MANDATED**
4 **SAFETY REPLACEMENT PROGRAM DOESN'T AUTOMATICALLY MAKE IT**
5 **ISRS-ELIGIBLE?**

6 A. The court did not have the benefit of full information when it made its decision in these
7 cases. First, the condition of cast iron and bare steel was not even an issue in the original
8 case. Second, the court denied Spire the right to participate in OPC's appeal, so the court
9 did not get the benefit of Spire's arguments. Finally, it is the Commission, not the courts,
10 who determine whether pipeline material is safe, that is, whether it is worn out or
11 deteriorated. The Commission should use the evidence and arguments offered in this case
12 to do its duty under the law and make the right decision. The Commission should find that
13 cast iron and bare steel has been shown to be worn out or deteriorated.

14 **Q. DOES THIS COMPLETE YOUR REBUTTAL TESTIMONY?**

A. Yes.

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Application of Spire)
Missouri Inc. to Establish an Infrastructure)
System Replacement Surcharge in its Spire) **File No. GO-2018-0309**
Missouri East Service Territory)

In the Matter of the Application of Spire)
Missouri Inc. to Establish an Infrastructure)
System Replacement Surcharge in its Spire) **File No. GO-2018-0310**
Missouri West Service Territory)

A F F I D A V I T

STATE OF MISSOURI)
) SS.
COUNTY OF COLE)

Robert R. Leonberger, of lawful age, being first duly sworn, deposes and states:

1. My name is Robert R. Leonberger. I am Engineer/Natural Gas Expert for NatGas Consulting. My business address is One Westinghouse Plaza; Suite 36; Boston, Massachusetts 02136.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony on behalf of Spire Missouri Inc.
3. Under penalty of perjury 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 knowledge and belief.

Robert R. Leonberger
Robert R. Leonberger

This 20th day of May 2020.