Exhibit No.:	
Issue:	**Propriety of Including Telemetric Equipment as an ISRS-Eligible Cost**
Witness:	**Patrick A. Seamands**
Type of Exhibit:	**Direct Testimony**
Sponsoring Party:	**Laclede Gas Company**
Case No.:	**GO-2015-0178**
Date Prepared:	**April 9, 2015**

LACLEDE GAS COMPANY

GO-2015-0178

DIRECT TESTIMONY

OF

PATRICK A. SEAMANDS

APRIL 2015

<u>DIRECT TESTIMONY OF PATRICK A. SEAMANDS</u>

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

A. My name is Patrick A. Seamands, and my business address is 700 Market St., St. Louis, Missouri, 63101.

Q. **WHAT IS YOUR PRESENT POSITION?**

A. I am presently employed as Director, Field Operations Standards for Laclede Gas Company ("Laclede" or "Company").

Q. **PLEASE STATE HOW LONG YOU HAVE HELD YOUR POSITION AND BRIEFLY DESCRIBE YOUR RESPONSIBILITIES.**

A. I was appointed to my present position in March 2013. In this position, I am responsible for overseeing standards and testing for distribution operations, operations training and pipeline safety compliance for the Company. In that capacity, I have gained substantial experience with and knowledge of the various physical assets necessary to ensure that our distribution system is operating in a safe manner. I am also very familiar with the human resource side of ensuring the safe operation of our distribution system given my oversight of our training programs for employees who work to achieve that goal. Finally, and by necessity, I have working knowledge of the federal, state and local safety requirements with which the Company has to comply in providing distribution services.

Q. **WHAT WAS YOUR WORK EXPERIENCE PRIOR TO JOINING LACLEDE?**

A Prior to joining Laclede in 1999, I worked for Southern Union Company as Vice President of Engineering and Chief Engineer. I have has also worked in an engineering capacity for an engineering consulting firm, CenterPoint Energy, and Pennzoil.

Q. **WHAT IS YOUR EDUCATIONAL BACKGROUND AND OTHER PROFESSIONAL QUALIFICATIONS AND EXPERIENCE?**

A. I have an M.B.A. and B.S., M.S., and Doctorate degrees in Chemical Engineering from Louisiana Tech University. I have also taught as an adjunct professor in the University of Kansas' Masters in Engineering Management program. I am a registered Professional Engineer in Missouri, Alabama, California (chemical), and Louisiana (chemical and environmental). I am also Chair of the Regulations Section of the Accredited Standards Committee (ASC) Z380, Gas Piping Technology Committee (GPTC). The GPTC develops and publishes ANSI Z380.1, Guide for Gas Transmission and Distribution Piping Systems. I served on a National Council of Examiners for Engineering and Surveying (NCEES) sub-committee that worked to review and update the PE exam. I am also a member of the American Institute of Chemical Engineers (AIChE) and the Society of Petroleum Engineers.

Q. **HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE THIS COMMISSION?**

A. Yes, I filed written testimony and gave live testimony at the hearing in Case No. GC-2006-0390.

PURPOSE OF TESTIMONY

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

A. The purpose of my testimony is to present evidence to the Commission concerning the appropriateness of including telemetric equipment in the Company's Infrastructure System Replacement Surcharge ("ISRS") filing. First, as discussed below, such plant and equipment is critical to the safe operation of our distribution equipment and to the Company's compliance with a number of safety rules and regulations. Second, because such plant and equipment was in a "deteriorated condition," as provided in the ISRS statute, I believe the investments made by the Company to replace such equipment are fully eligible for inclusion in, and recovery through, our ISRS mechanism.

NATURE AND PURPOSE OF TELEMETRIC EQUIPMENT

Q. **WHAT IS TELEMETRIC EQUIPMENT AND WHAT PURPOSE DOES IT SERVE?**

A. Telemetric equipment is widely used in a variety of industries and applications to electronically transmit critical data from remote locations to a centralized location where trained personnel can monitor the data and take appropriate action if the data suggests that an anomaly has occurred. In terms of natural gas distribution operations, the telemetric instrumentation and equipment included in work orders 60418 and 60419 are pipeline system components that permit the Company to constantly monitor and control in "real time" critical pressure and other data from pressure regulating, pressure monitoring, odorization and metering stations. Such data is essential to determining whether our distribution system is operating within allowable pressure tolerances, whether a disruption to our facilities has occurred that could result in escaping gas, with a corresponding risk of an incident or service outage, and whether other system control conditions are operating at expected and safe levels.

Q. **WHY IS IT NECESSARY TO OBTAIN SUCH DATA IN "REAL TIME"?**

A. Because a gas distribution system is dynamic, with gas constantly flowing at different pressures from a variety of different transmission pipelines and to an even larger assortment of different end users, it is imperative that appropriate flows and pressures be maintained at all times to ensure the safety, integrity and reliability of our distribution system. That goal can only be achieved if Company personnel have a constant stream of data showing whether these pressures and flows are being maintained or, conversely, disrupted in some way. If the latter, the availability of real time data allows Company personnel to take preventative or remedial action in a timely manner. Telemetric equipment is the means by which this constant stream of data is collected and communicated.

ELIGIBILITY FOR INCLUSION IN ISRS FILING

Q. IS HAVING SUCH A REAL TIME MONITORING SYSTEM IN PLACE TO EFFECTIVELY CONTROL PIPELINE PRESSURES AND FLOWS RECOGNIZED AS A REQUIREMENT FOR OPERATING A GAS DISTRIBUTION SYSTEM SAFELY?

A. Without question it is. Commission Rule 4 CSR-240-40.030(13)(S)(1) and Federal Rule 49 CFR Part 192.741 require a utility with more than one regulating station or more than 1,000 customers to maintain graphic telemetering to monitor gas pressures. Commission Rules 4 CSR 240-40.030(4)(CC)-(FF) are the specific state law requirements concerning pressure control. The equivalent federal cites are 49 CFR Parts 192.195-201.

Q. **WHY DID THE COMPANY DECIDE TO REPLACE THE TELEMETRIC EQUIPMENT THAT HAD PREVIOUSLY BEEN INSTALLED AND USED TO PERFORM THIS FUNCTION?**

A. The telemetric equipment was both old and obsolete. We acquired this equipment in the 2000-2002 time frame. Its manufacturer was providing neither replacement parts nor service support. We viewed this equipment as having diminished reliability to perform its important function. In short, having gotten 10+ years of service out of this equipment, we felt that it was at the end of its useful life.

Q. **DOES THIS MEAN THE TELEMETRIC EQUIPMENT WAS IN A "DETERIORATED CONDITION" AND THUS ELIGIBLE FOR ISRS INCLUSION UNDER SECTION 393.1009(5)(a)?**

A. Yes. Depending on which dictionary you consult, being in a deteriorated condition means the telemetric equipment either: was diminished or lowered in quality, character or value, was made inferior in quality or value, was impaired, or had grown worse. Under any of the above definitions, there is no doubt that the old telemetric equipment was in a deteriorated condition. In fact, if the equipment could no longer be professionally serviced and/or supported in the event of a failure – as was the case with this equipment – then its quality or value for the function it was supposed to serve had been made severely "inferior" or "impaired." In addition, the equipment was over 10 years old and at the end of its useful life. It was at a point of being worn out, or at the very least deteriorated. As a result, the replacements are ISRS eligible under Section 393.1009(5)(a) RSMo.

Q. DID LACLEDE REPLACE THIS EQUIPMENT SIMPLY BECAUSE IT HAD BECOME OBSOLETE?

A. No. Had Laclede wanted to simply upgrade to newer technology, it would have replaced the telemetric equipment in 2007, after it received notice from the manufacturer that the existing Bristol Network equipment was on a path to retirement, and was being replaced by the Bristol ContolWave product line. Laclede did not do so; rather, we kept the existing telemetric equipment until a time that we perceived to be the end of its useful life, when it was both obsolete and worn out or deteriorated. So even if the Commission decides that the state of being obsolete does not necessarily equate to deterioration, then the age of this equipment would certainly demonstrate that it was in an inferior and deteriorated condition. As stated earlier, Laclede bought this equipment between 2000 and 2002. Laclede approved the purchase of replacement Bristol ControlWave RTUs and other telemetric equipment in December 2011, and placed such equipment in service in 2012, by which time the older equipment was 10-12 years old, a vintage in which Laclede expected to experience failures of the analog equipment. In summary, the equipment was not only obsolete; it had become inferior in quality and value, and was therefore in a deteriorated condition.

DOES THIS COMPLETE YOUR DIRECT TESTIMONY?

A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Verified Application and	)	
Petition of Laclede Gas Company to Change	)	File No. G0-2015-0178
Its Infrastructure System Replacement Surcharge	)	
In its Laclede Gas Service Territory	)	

AFFIDAVIT

STATE OF MISSOURI	)	
	)	SS.
CITY OF ST. LOUIS	)	

Patrick A. Seamands, of lawful age, being first duly sworn, deposes and states:

1. My name is Patrick A. Seamands. My business address is 700 Market Street, St. Louis, MO 63101 and I am the Director, Field Operations Standards for Laclede Gas Company.

2. Attached hereto and made a part hereof for all purposes is my direct testimony on behalf of Laclede Gas Company.

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 knowledge and belief.

Patrick A. Seamands

Patrick A. Seamands

Subscribed and sworn to before me this 9th day of April, 2015.

Katherine L Reardon

Notary Public

KATHERINE I. REARDEN
MY COMMISSION EXPIRES
May 10, 2015
NOTARY SEAL
#11047329
ST. LOUIS COUNTY
NOTARY PUBLIC, STATE OF MISSOURI