# MISSOURI PUBLIC SERVICE COMMISSION

## STAFF'S GAS INCIDENT REPORT

# Appendix E

**Credentials and Case Participation** 

Spire Missouri Inc. d/b/a Spire Missouri West

Case No. GS-2021-0019

Commission Staff Division Safety Engineering Department June 30, 2021 - Jefferson City, Missouri

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# Spire Missouri Inc. d/b/a Spire Missouri West CASE NO. GS-2021-0019

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#### **Educational and Employment Background and Credentials**

#### <u>of</u>

#### Clinton L. Foster

I earned a Bachelor of Science in Civil Engineering degree from the University of Missouri – Columbia. I am registered as an Engineer Intern in Missouri.

I am currently employed as an Associate Engineer in the Safety Engineering Department in the Industry Analysis Division of the Missouri Public Service Commission ("Commission"). The Safety Engineering Department performs inspections of natural gas pipeline operators jurisdictional to Missouri for enforcement of Missouri pipeline safety regulations, and performs investigations of pipeline related incidents. Training of Staff in the Safety Engineering Department to perform inspections and investigations is provided by the Pipeline and Hazardous Materials Administration (PHMSA)'s Inspector Training and Qualifications Division (TQ). The following is a listing of the PHMSA TQ training requirements that I have completed:

Course Title from PHMSA TQ Learner Transcript
PHMSA-PL1297 Gas Integrity Management (IM) Protocol Course
PHMSA-PL3SCCDA Stress Corrosion Cracking Direct Assessment
PHMSA-PL1ICDA Internal Corrosion Direct Assessment
PHMSA-PL3306 External Corrosion Direct Assessment (ECDA) Field Course
PHMSA-PL3292 Safety Evaluation of Inline Inspection (ILI)/Pigging Programs Course
PHMSA-PL3PIG Fundamentals of Launching and Receiving Maintenance Pigs
PHMSA-PL3HIP The History of Intelligent Pigging
PHMSA-PL3355 Safety Evaluation of Control Room Management Programs
PHMSA-PL3267 Fundamentals of Integrity Management Course
PHMSA-PL1IPROC Integrity Management Processes
PHMSA-PL3ECDA External Corrosion Direct Assessment
PHMSA-PL1RA Introduction to Risk Assessment Methods
PHMSA-PL3PAP Public Awareness Programs for Pipeline Operators
PHMSA-PL3291 Fundamentals of (SCADA) System Technology and Operation Course
PHMSA-PL3DA Drug and Alcohol Testing for the Pipeline Industry
PHMSA-PL3SCADA Fundamentals of SCADA Systems
PHMSA-PL1245 Safety Evaluation of Distribution Integrity Management Programs (DIMP)
Course
PHMSA-PL3600 Root Cause/Incident Investigation Course
PHMSA-PL3322 Evaluation of Operator Qualification (OQ) Programs Course
PHMSA-PL3OQ Operator Qualification

PHMSA-PL1255 Gas Pressure Regulation and Overpressure Protection Course			
PHMSA-PL1PRESS Fundamentals of Gas Pressure Regulators			
PHMSA-PL3293 Corrosion Control of Pipeline Systems Course			
PHMSA-PL3IC - Investigating and Managing Internal Corrosion of Pipelines			
PHMSA-PL3CP Fundamentals of Pipeline Corrosion and Cathodic Protection			
PHMSA-PL1310 Plastic and Composite Materials Course			
PHMSA-PL3242 Welding and Welding Inspection of Pipeline Materials Course			
PHMSA-PL3ELEC Fundamentals of Basic DC Electricity			
PHMSA-PL1HCA High Consequence Areas			
PHMSA-PL3PP Fundamentals of Plastic Pipe			
PHMSA-PL3257 Pipeline Safety Regulation Application and Compliance Procedures Course			
PHMSA-PL3WELD Introduction to Pipeline Welding			
PHMSA-PL3256 Pipeline Failure Investigation Techniques Course			
PHMSA-PL1250 Safety Evaluation of Gas Pipeline Systems Course			
PHMSA-PL1GLAW Introduction to Gas Laws			
PHMSA-PL3REG Regulatory Overview			
PHMSA-PL1P192 - Introduction to Part 192			
PHMSA-PL1ODOR Natural Gas Odorization			
PHMSA-PL1DIMP Introduction of Distribution Integrity Management Program			

The following is a listing of cases before the Commission in which I have previously provided testimony or analysis through affidavits:

Company	Case Number	Filing Description	EFIS file date
Spire Missouri, Inc.	GC-2018-0159	Staff Report	5/17/2018
Spire Missouri, Inc.	GC-2020-0127	Complaint	11/6/2019
Spire Missouri, Inc.	GE-2020-0295	Staff Recommendation	7/31/2020
Spire Missouri, Inc.	GS-2019-0015	Staff's Gas Incident Report	7/31/2019

#### cont'd Clinton L. Foster

Company	Case Number	Filing Description	EFIS file date
City of New Florence	GS-2017-0324	Progress Report	12/29/2017, 6/29/2018, 12/28/2018, 3/29/2019, 6/28/2019, 9/30/2019, 12/27/2019, 3/31/2020, 6/30/2020, 12/15/2020
Laclede Gas Company	GS-2014-0226	Staff Gas Incident Report	12/18/2014

## **Educational and Employment Background and Credentials**

#### <u>of</u>

#### Kathleen A. McNelis, PE

I earned a Bachelor of Chemical Engineering degree from the Georgia Institute of Technology and a Master's of Science in Metallurgical Engineering from the University of Missouri in Rolla (now the Missouri University of Science and Technology). I am a registered Professional Engineer (PE) in Missouri. I am a member of the National Association of Pipeline Safety Representatives (NAPSR) and the National Association of Corrosion Engineers (NACE).

I am currently employed as the Engineering Manager of the Safety Engineering Department in the Commission Staff Division of the Missouri Public Service Commission ("Commission"). The Safety Engineering Department performs inspections of natural gas pipeline operators jurisdictional to Missouri for enforcement of Missouri pipeline safety regulations, and performs investigations of pipeline related incidents. Training of Staff in the Safety Engineering Department to perform inspections and investigations is provided by the Pipeline and Hazardous Materials Administration (PHMSA)'s Inspector Training and Qualifications Division (TQ). The following is a listing of the PHMSA TQ training requirements that I have completed:

Course Title from PHMSA TQ Learner Transcript
PHMSA-PL1245
Safety Evaluation of Distribution Integrity Management Programs (DIMP) Course
PHMSA-PL1250 Safety Evaluation of Gas Pipeline Systems Course
PHMSA-PL1255 Gas Pressure Regulation and Overpressure Protection Course
PHMSA-PL1297 Gas Integrity Management (IM) Protocol Course
PHMSA-PL1310 Plastic and Composite Materials Course
PHMSA-PL1DIMP Introduction of Distribution Integrity Management Program
PHMSA-PL1GLAW Introduction to Gas Laws
PHMSA-PL1HCA High Consequence Areas
PHMSA-PL1ICDA Internal Corrosion Direct Assessment
PHMSA-PL1IPROC Integrity Management Processes
PHMSA-PL1ODOR Natural Gas Odorization
PHMSA-PL1P192 - Introduction to Part 192
PHMSA-PL1PRESS Fundamentals of Gas Pressure Regulators

Course Title from PHMSA TQ Learner Transcript
PHMSA-PL1RA Introduction to Risk Assessment Methods
PHMSA-PL3242 Welding and Welding Inspection of Pipeline Materials Course
PHMSA-PL3254 Joining of Pipeline Materials Course
PHMSA-PL3256 Pipeline Failure Investigation Techniques Course
PHMSA-PL3257 Pipeline Safety Regulation Application and Compliance Procedures Course
PHMSA-PL3267 Fundamentals of Integrity Management Course
PHMSA-PL3291 Fundamentals of (SCADA) System Technology and Operation Course
PHMSA-PL3292 Safety Evaluation of Inline Inspection (ILI)/Pigging Programs Course
PHMSA-PL3293 Corrosion Control of Pipeline Systems Course
PHMSA-PL3306 External Corrosion Direct Assessment (ECDA) Field Course
PHMSA-PL3322 Evaluation of Operator Qualification (OQ) Programs Course
PHMSA-PL3355 Safety Evaluation of Control Room Management Programs
PHMSA-PL3365 Public Awareness Program Effectiveness Evaluation (PAPEE) Seminar
PHMSA-PL3600 Root Cause/Incident Investigation Course
PHMSA-PL3CP Fundamentals of Pipeline Corrosion and Cathodic Protection
PHMSA-PL3DA Drug and Alcohol Testing for the Pipeline Industry
PHMSA-PL3ECDA External Corrosion Direct Assessment
PHMSA-PL3ELEC Fundamentals of Basic DC Electricity
PHMSA-PL3IC - Investigating and Managing Internal Corrosion of Pipelines
PHMSA-PL3OQ Operator Qualification
PHMSA-PL3PAP Public Awareness Programs for Pipeline Operators
PHMSA-PL3PIG Fundamentals of Launching and Receiving Maintenance Pigs
PHMSA-PL3PP Fundamentals of Plastic Pipe
PHMSA-PL3REG Regulatory Overview
PHMSA-PL3SCADA Fundamentals of SCADA Systems
PHMSA-PL3SCCDA Stress Corrosion Cracking Direct Assessment
PHMSA-PL3WELD Introduction to Pipeline Welding
PHMSA-PL4LNG Fundamentals of Liquefied Natural Gas (LNG)
PHMSA-PL4253 Liquefied Natural Gas (LNG) Safety Technology and Inspection Course

The following is a listing of cases before the Commission in which I have previously provided testimony or analysis through affidavits:

Company	Case Number	Filing Description	EFIS file date
Grain Belt Express	EA-2016-0358	Staff Rebuttal Report	1/24/2017
Roeslein Alternative Energy Services, LLC- Investor(Gas)	GA-2016-0271	Staff Recommendation	6/28/2016
Summit Natural Gas of Missouri	GA-2020-0251	Staff Recommendation	4/24/2020
Spire Missouri	GC-2018-0159	Staff Report	5/17/2018
Summit Natural Gas of Missouri	GO-2018-0195	Staff Preliminary Report	3/21/2018
Spire Missouri	GE-2020-0373	Staff Response	6/5/2020
Ameren Missouri	GE-2021-0143	Staff Recommendation	12/11/2020
Liberty Utilities	GO-2019-0091	Staff Recommendation	1/9/2019
Ameren Missouri	GR-2014-0061	Staff Recommendation	12/18/2014
Summit Natural Gas of Missouri	GR-2014-0096	Staff Recommendation	10/10/2014
Summit Natural Gas of Missouri	GR-2014-0097	Staff Recommendation	10/10/2014
Empire District Gas	GR-2014-0108	Staff Recommendation	12/18/2014
Laclede Gas Company	GR-2014-0121	Staff Recommendation	12/19/2014
Laclede Gas Company	GR-2014-0231	Staff Recommendation	12/18/2015
Ameren Missouri	GR-2014-0238	Staff Recommendation	6/16/2015
Summit Natural Gas	GR-2015-0101	Staff Recommendation	12/14/2015
Empire District Gas	GR-2015-0109	Staff Recommendation	12/16/2015
Laclede Gas Company	GR-2017-0215 and GR-2017-0216	Staff Report - Class Cost of Service Report	9/22/2017
Liberty Utilities	GR-2018-0013	Staff Report – Class Cost of Service	3/16/2018
City Utilities of Springfield	GS-2004-0257	Status Reports	04/5/2016, 01/6/2017
Laclede Gas Company	GS-2009-0270	Staff Gas Incident Report	7/15/2009
Missouri Gas Energy	GS-2011-0248	Staff Gas Incident Report	12/9/2011
Ameren Missouri	GS-2016-0159	Staff Gas Incident Report	5/31/2017

#### cont'd Kathleen A. McNelis, PE

Company	Case Number	Filing Description	EFIS file date
Laclede Gas Company	GS-2016-0160	Staff Gas Incident Report	10/21/2016
City of New Florence	GS-2017-0324	Progress Reports	Various
Spire Missouri Inc.	GS-2019-0015	Staff Gas Incident Report	07/31/2019

# Educational and Employment Background and Credentials of Greg A. Williams

I earned a Bachelor of Science in Mechanical Engineering degree from the University of Missouri – Rolla (now the Missouri University of Science and Technology). I have an Engineer-in-Training certificate in Missouri. I am a member of the National Association of Corrosion Engineers (NACE), the National Association of Fire Investigators (NAFI), and the Professional Fire and Fraud Investigators Association (PFFIA).

I am currently employed as an Associate Engineer in the Safety Engineering Department in the Industry Analysis Division of the Missouri Public Service Commission ("Commission"). The Safety Engineering Department performs inspections of natural gas pipeline operators jurisdictional to Missouri for enforcement of Missouri pipeline safety regulations, and performs investigations of pipeline related incidents. Training of Staff in the Safety Engineering Department to perform inspections and investigations is provided by the Pipeline and Hazardous Materials Administration (PHMSA)'s Inspector Training and Qualifications Division (TQ). The following is a listing of the PHMSA TQ training requirements that I have completed:

Course Title from PHMSA TQ Learner Transcript
PHMSA-PL1297 Gas Integrity Management (IM) Protocol Course
PHMSA-PL3SCCDA Stress Corrosion Cracking Direct Assessment
PHMSA-PL1ICDA Internal Corrosion Direct Assessment
PHMSA-PL3292 Safety Evaluation of Inline Inspection (ILI)/Pigging Programs Course
PHMSA-PL3PIG Fundamentals of Launching and Receiving Maintenance Pigs
PHMSA-PL3HIP The History of Intelligent Pigging
PHMSA-PL3306 External Corrosion Direct Assessment (ECDA) Field Course
PHMSA-PL4253 Liquefied Natural Gas (LNG) Safety Technology and Inspection Course
PHMSA-PL4LNG Fundamentals of Liquefied Natural Gas (LNG)
PHMSA-PL3267 Fundamentals of Integrity Management Course
PHMSA-PL1IPROC Integrity Management Processes
PHMSA-PL1RA Introduction to Risk Assessment Methods
PHMSA-PL3ECDA External Corrosion Direct Assessment
PHMSA-PL3DA Drug and Alcohol Testing for the Pipeline Industry

(Cont.) Course Title from PHMSA TQ Learner Transcript	
PHMSA-PL3291 Fundamentals of (SCADA) System Technology and Operation Course	
PHMSA-PL3SCADA Fundamentals of SCADA Systems	
PHMSA-PL3322 Evaluation of Operator Qualification (OQ) Programs Course	
PHMSA-PL3OQ Operator Qualification	
PHMSA-PL1245 Safety Evaluation of Distribution Integrity Management Programs (DIMP) Course	
PHMSA-PL1DIMP Introduction of Distribution Integrity Management Program	
PHMSA-PL3365 Public Awareness Program Effectiveness Evaluation (PAPEE) Seminar	
PHMSA-PL3PAP Public Awareness Programs for Pipeline Operators	
PHMSA-PL-WB1103 Risk Assessment for Pipeline Integrity Management Program Webinar	
PHMSA-PL-WB1100 Distribution Integrity Management Program Webinar	
PHMSA-PL3291 Fundamentals of (SCADA) System Technology and Operation Course	
PHMSA-PL3SCADA Fundamentals of SCADA Systems	
PHMSA-PL3322 Evaluation of Operator Qualification (OQ) Programs Course	
PHMSA-PL3OQ Operator Qualification	_
PHMSA-PL1245 Safety Evaluation of Distribution Integrity Management Programs (DIMP) Course	
PHMSA-PL1DIMP Introduction of Distribution Integrity Management Program	
PHMSA-PL3365 Public Awareness Program Effectiveness Evaluation (PAPEE) Seminar	
PHMSA-PL3PAP Public Awareness Programs for Pipeline Operators	
PHMSA-PL-WB1103 Risk Assessment for Pipeline Integrity Management Program Webinar	
PHMSA-PL-WB1100 Distribution Integrity Management Program Webinar	
PHMSA-PL3600 Root Cause/Incident Investigation Course	
PHMSA-PL3OQ Operator Qualification	
PHMSA-PL3257 Pipeline Safety Regulation Application and Compliance Procedures Course	_
PHMSA-PL3252 Safety Evaluation of Pipeline Corrosion Control Systems II	_
PHMSA-PL3293 Corrosion Control of Pipeline Systems Course	
PHMSA-PL3251 Safety Evaluation of Pipeline Corrosion Control Systems I	_
PHMSA-PL3254 Joining of Pipeline Materials Course	_
PHMSA-PL1310 Plastic and Composite Materials Course	_
PHMSA-PL3242 Welding and Welding Inspection of Pipeline Materials Course	_
PHMSA-PL1255 Gas Pressure Regulation and Overpressure Protection Course	_
PHMSA-PL3256 Pipeline Failure Investigation Techniques Course	_
PHMSA-PL1250 Safety Evaluation of Gas Pipeline Systems Course	_
PHMSA-PL3257 Pipeline Safety Regulation Application and Compliance Procedures Course	_

The following is a listing of cases before the Commission in which I have previously provided testimony or analysis through affidavits:

Company	Case Number	Filing Description	EFIS file date
Summit Natural Gas of Missouri, Inc.	GA-2020-0251	Staff Recommendation	4/24/2020
Spire Missouri, Inc.	GC-2018-0159	Staff Report	5/17/2018
Spire Missouri, Inc.	GC-2020-0057	Staff Report	12/5/2019
Roeslein Alternative Energy Services, LLC	GE-2020-0238	Staff Recommendation	4/7/2020
Roeslein Alternative Energy Services, LLC	GE-2021-0049	Staff Recommendation	12/8/2020
Spire Missouri, Inc.	GM-2020-0292	Staff Recommendation	6/22/2020
Union Electric Company d/b/a Ameren UE	GR-2003-0517	Direct Testimony	10/24/2003
City Utilities of Springfield, Missouri	GS-2004-0040	Staff's Gas Incident Report	12/16/2003
Missouri Gas Energy	GS-2008-0002	Staff's Gas Incident Report	12/14/2007
Laclede Gas Company	GS-2009-0270	Staff's Gas Incident Report	7/15/2009
West Central Energy	GS-2005-0246	Staff's Gas Incident Report	6/17/2005
City Utilities of Springfield, Missouri	GS-2003-0129	Staff's Gas Incident Report	2/21/2003