BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of Spire Missouri Inc. for a permanent waiver from the requirement to use a "device" for overpressure protection in 20 CSR 4240-40.030 (4), (12) and (13) for certain Spire East facilities	)))))	Case No. GE-2023-

VERIFIED APPLICATION FOR PERMANENT WAIVER OF COMPLIANCE FROM COMMISSION RULES PERTAINING TO OVERPRESSURE PROTECTION AND REQUEST FOR WAIVER FROM 60-DAY NOTICE RULE

COMES NOW Spire Missouri Inc. ("Spire Missouri" or "Company"), by and through its counsel, and pursuant to Commission Rules 20 CSR 4240-2.060(1) and (4), 20 CSR 4240-2.080, and 20 CSR 4240-2.205 and submits this Verified Application for Permanent Waiver of Compliance for certain Spire East Facilities from 20 CSR 4240-40.030 (4) (CC), 20 CSR 4240-40.030 (4)(EE) 9 and 20 CSR 4240-40.030 4(FF) 3, 20 CSR 4240-40.030 (12)(M)2 and 20 CSR 4240-40.030 (13)(R)1G of the Commission's Pipeline Safety Standards ("Safety Standards"). Pursuant to Commission Rule 20 CSR 4240-4.017(1)(D), the Company also requests a waiver from the notice provisions of Rule 20 CSR 4240-4.017(1). In support of this Application, Spire Missouri respectfully states as follows:

1. Spire Missouri is a public utility and gas corporation incorporated under the laws of the State of Missouri, with its principal office located at 700 Market Street, St. Louis, Missouri 63101. A Certificate of Good Standing evidencing Spire Missouri's standing to do business in Missouri is filed in Case No. GU-2020-0376 and incorporated herein by this reference. The information on such Certificate is currently applicable and correct.

2. Spire Missouri is primarily engaged in the business of distributing and transporting natural gas to customers in both the eastern and western portions of the State of

Missouri, subject to the jurisdiction of the Commission. Spire Missouri serves customers in the City of St. Louis and ten counties in Eastern Missouri through its Spire East operating unit. Spire Missouri serves customers in the City of Kansas City and thirty counties in Western Missouri through its Spire West operating unit.

3. Communications in regard to this Application should be addressed to undersigned counsel and the persons below:

Randy Wilson
Director, Pipeline Safety & Compliance
Spire Missouri Inc.
700 Market Street, 3rd Floor
St. Louis, Missouri 63101
(205) 326-2987
randy.wilson@spireenergy.com

4. Other than cases that have been docketed at the Commission, Spire Missouri has no final unsatisfied judgments or decisions against it from any state or federal agency or court which involve customer service or rates. Spire Missouri has two pending actions against it involving customer service, one in the Circuit Court of St. Louis County, docketed as 22SL-CC02193, and one in the Circuit Court of St. Louis City, docketed as 2222-SC00192.

5. Spire Missouri is current on its annual report and assessment fee obligations to the Commission, and no such report or assessment fee is overdue.

6. The affidavit of Randy Wilson is included with this application, stating that all information referenced herein is accurate and truthful.

BACKGROUND

7. Historically, the Company utilized district Reynolds regulator ("Reynolds") stations in its Low Pressure Overpressure Protection ("LPOP") Program for all of Spire East's integrated utilization system. These Reynolds stations work to reduce gas pressure from a higher

upstream pressure to a utilization system and to maintain this low-pressure despite fluctuations. Installation of the Reynolds stations began in the early 1900's with the last station being installed in the 1960's. These stations are designed to utilize a combination of regulators along with travel stops, shroud mechanisms, 1" relief valves, and gas control monitoring to prevent undesirable pressure build-up in the event of regulator failure. These measures are listed in detail in the Exhibit A, Spire LPOP Replacement/Remediation Plan, which is a revised version of the plan previously submitted to Staff on June 24, 2021.

8. As such, in addition to the enhanced monitoring, the Company has accelerated efforts over the years to phase out and retire the Reynolds stations, with these efforts increasing significantly as part of the Company's cast iron main replacement program. To date, Spire Missouri has reduced its Reynolds stations from 131 in-service in the year 2000 to now 35 in-service, and, with the current workforce and budget projections, anticipates completely eliminating the remaining Reynolds stations in less than five years.

9. In the process of replacement of the Reynolds stations and the low-pressure pipelines, some areas of the system are no longer completely integrated and have become isolated from the larger system. To address this issue, the Company provides additional monitoring to continue to ensure the safety of its system.

10. As further discussed below, the Company is seeking a permanent waiver from some of the Commission's gas safety rules on overpressure protection as to these facilities due to the Company's emphasis on retiring the facilities, the multiple measures currently in place to protect against overpressurization, and the overall cost-benefit analysis of investing in new pressure controls versus retirement of the LPOP system. Again, Spire Missouri has initiated additional efforts to monitor these facilities so that gas safety is enhanced and is not compromised as the station and system retirements are completed.

WAIVER REQUEST

11. Spire Missouri requests that the Commission issue a Permanent Waiver of Compliance ("Waiver") for the remaining Reynolds stations in the Company's Spire East operating division. The purpose of the Waiver is to exempt certain facilities from the technical requirements that a "device" be installed to achieve the overpressurization protection standards set forth at 20 CSR 4240-40.030(4)(EE)9 of the Commission's Safety Standards and that such "devices" be inspected and tested as set forth in 20 CSR 4240-40.030(13)(R)1. Additionally, Spire Missouri seeks Waiver of the Safety Standards and the requirement that relief valves or other pressure limiting devices must be installed at or near each regulator station in a low pressure (utilization pressure) distribution system, 20 CSR 4240-40.030(FF)3. As discussed below, such a Waiver is appropriate and will not compromise public safety because the facilities to which it would be applied are already designed and operated in a manner that achieves the overpressurization protection goals of these rule provisions

12. The settings of the Reynolds stations are calculated and reviewed using Spire Missouri's Low Pressure System Model at intervals not exceeding fifteen (15) months, and at least once each calendar year annually, in accordance with 20 CSR 4240-40.030(13)(T)1. If the Low Pressure System Model indicates potential issues with the pressure deliveries by the Reynolds stations, remedial action is taken to prevent or correct these conditions. See Exhibit D.

13. Spire Missouri's primary concern with the application of the existing requirements noted in paragraph 8 above is that it contemplates that a device will be installed to accomplish overpressure protection. However, Spire Missouri has successfully used the inherent design of the stations and pressure limiting measures to accomplish overpressure protection for decades. Given the Company's plans to replace all of its remaining Reynolds stations in the near future, installing a device on these facilities would add unnecessary expense given the current

mechanisms already in place to ensure the safety of its system. Without the requested Waiver, customers would bear an unnecessary cost in exchange for no net safety benefit. Accordingly, Spire Missouri does not believe that the Company should be required to design and install new overpressure protection on these legacy stations, which would create new stranded assets. Spire Missouri has sufficient overpressure protection through its system design which utilizes a combination of regulators along with travel stops, shroud mechanisms, 1" relief valves, and gas control monitoring to prevent undesirable pressure build-up in the event of regulator failure (See Exhibit A).

14. As of August 2022, Spire Missouri has thirty-five Reynolds stations still serving an integrated utilization pressure system containing approximately 250 miles of pipe that are being retired/replaced. As an additional safety measure, the Company analyzes annually which of the Reynolds stations it can safely shut down during the summer months. As a result of this evaluation, most of these stations are out of service during the warmer weather conditions between May and September.

15. Based on current workforce and budget projections, Spire Missouri anticipates completing the replacement of the entire utilization pressure system in Missouri East with the intermediate pressure system in less than five years. For the Reynolds stations, the Company anticipates either retiring the stations, or replacing them with temporary, modern worker-monitor style stations, by 2024 in the north section and by the end of 2026 in the south section (See Exhibit A for details on the projected replacement schedule and Exhibit B for a map identifying the north and south sections). These temporary worker-monitor style stations comply with the applicable requirements of 20 CSR 4240-40.030 and involve Mooney regulators with monitor configurations. Spire Missouri believes that focusing on its efforts on retirement of the system is

the most effective approach to take and this Waiver will allow Spire Missouri to more effectively achieve this goal.

16. Spire Missouri submits that the elimination of the requirements to install, inspect and test additional overpressure devices through the granting of its requested Waiver will not diminish public safety and will also benefit ratepayers. Commission Rule 20 CSR 4240-40.030(18) states as follows:

> Upon written request to the secretary of the commission, the commission, by authority order and under such terms and conditions as the commission deems appropriate, may waive in whole or part compliance with any of the requirements contained in this rule. Waivers will be granted only on a showing that gas safety is not compromised. If the waiver request would waive compliance with a federal requirement in 49 CFR part 192, additional actions shall be taken in accordance with 49 USC 60118 except when the provisions of subsection (17)(G) apply.

Spire Missouri believes public safety would not be compromised with the existing LPOP Program, which ensures overprotection is achieved through the methods identified above and defined in Exhibit A. Further, in the event this Waiver is granted by the Commission, Spire Missouri commits that it will continue to utilize the LPOP Program, which was shared with Commission's Gas Safety Staff and is outlined in Exhibit D of this application. Spire Missouri would also note that the remaining thirty-five stations in operation have a consistent record of delivering appropriate gas pressure to the utilization pressure system.

17. Moreover, the removal of any requirement to install additional overpressure protection measures now with the Waiver would enhance public safety by providing Spire Missouri with additional resources to continue the focused replacement of its low pressure cast iron distribution system, as required by 20 CSR 4240-40.030(15)(D). Specifically, the expenditures otherwise required to further modify the stations could be much more productively used to replace Spire Missouri's cast iron main-based low pressure system, including the Reynolds stations. Conversely, if additional modifications are required, Spire Missouri would be

forced to allocate resources to that which would be otherwise dedicated to replacing its low pressure system and retiring the Reynolds stations.

18. Finally, ratepayers will also be benefited by the Waiver because Spire Missouri would avoid incurring unnecessary costs to purchase and install the additional devices, costs that would eventually be reflected in its rates. These unnecessary costs would be significant, since the installation of such "devices" would force Spire Missouri to either install add-on overpressure capacity relief devices or, in many cases, completely replace the existing district regulator stations with stations utilizing monitor regulators. Further, with the new intermediate system being built, any additional devices or new stations installed for the low pressure system would be made obsolete and need to be retired, resulting in stranded costs.

REQUEST FOR WAIVER OF 60-DAY NOTICE

19. Commission Rule 20 CSR 4240-4.017(1) provides, in part, as follows:

> Any person that intends to file a case shall file a notice with the secretary of the commission a minimum of sixty (60) days prior to filing such case. Such notice shall detail the type of case and issues likely to be before the commission and shall include a summary of all communication regarding substantive issues likely to be in the case between the filing party and the office of the commission that occurred in the ninety (90) days prior to filing the notice.

Rule 20 CSR 4240-4.017(1)(D) permits a party to request a waiver of the above cited rule for good cause. The rule provision specifically provides that good cause may be established by submitting a verified declaration that the filing party has had no communication with the office of the commission within the prior one hundred fifty (150) days regarding any substantive issue likely to be in the case. The Company interprets this to mean that good cause is established if the filing party has had no communication with a member of the office of the Commission outside of pleadings or other public communications. Subject to that understanding, the Company submits the verified declaration of Randy Wilson that neither the Company nor any person or entity

acting on behalf of the Company or its Missouri operating units, has had a communication with a member of the office of the Commission in the last 150 days regarding any substantive issues that are likely to arise in the case. For that reason, the Company requests that the Commission grant a waiver of the 60-day notice requirement for Spire Missouri's request for a Waiver from Commission Rules 20 CSR 4240-40.030 (4) (CC), 20 CSR 4240-40.030 (4)(EE) 9, 20 CSR 4240-40.030 4(FF) 3, 20 CSR 4240-40.030 (12)(M)2 and 20 CSR 4240-40.030 (13)(R)1G.

21. In view of all of these considerations, Spire Missouri respectfully submits that the Waiver requested herein is appropriate, beneficial and fully consistent with public safety and should therefore be granted.

WHEREFORE, for the foregoing reasons, Spire Missouri Inc. respectfully requests that the Commission grant it a Permanent Waiver of Compliance applicable to the Company's district regulator stations that utilize Reynolds regulators in its Spire East operating division, exempting it from the requirements to install, inspect and test an overpressurization protection "device" as set forth at 20 CSR 4240-40.030 (4) (CC), 20 CSR 4240-40.030 (4)(EE) 9, 20 CSR 4240-40.030 4(FF) 3, 20 CSR 4240-40.030 (12)(M)2 and 20 CSR 4240-40.030 (13)(R)1G.

Respectfully submitted,

/s/ J. Antonio Arias

Matthew Aplington MoBar #58565
General Counsel
Spire Missouri Inc.
700 Market Street, 6th Floor
St. Louis, MO 63101
(314) 342-0785 (Office)
Email: matt.aplington@spireenergy.com

J. Antonio Arias MoBar #74475
Regulatory Counsel
Spire Missouri, Inc.
700 Market Street, 6th Floor
St. Louis, MO 63101
(314) 342-0655 (Office)
Email: antonio.arias@spireenergy.com

ATTORNEYS FOR SPIRE MISSOURI INC

CERTIFICATE OF SERVICE

I hereby certify that the foregoing pleading has been duly served upon the General Counsel of the Staff and on the Office of the Public Counsel by hand delivery, email, fax, or United States mail, postage prepaid, on this 23rd day of September, 2022.

/s/ Lew Keathley

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VERIFICATION

State of Missouri)
) SS
County of St. Louis)

I, Randy Wilson, being of lawful age and first duly sworn, state that I am the Director of Pipeline Safety and Compliance for Spire Missouri, Inc. My business address is 700 Market St., St. Louis, Missouri 63101. I am authorized to make this verification and have knowledge of the matters stated herein. Under penalty of perjury, I hereby swear and affirm that I have read the foregoing request for waiver of 20 CSR 4240-24.017(1), and hereby declare that, other than pleadings or other public communications, Spire Missouri, Inc. has had no communication with the office of the Commission within the prior one hundred and fifty (150) days regarding any substantive issue likely to be in the above referenced case.

Randy Wilson

September 23, 2022

Dated

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Spire Missouri Inc. for a permanent waiver from the requirement to use a "device" for overpressure protection in 20 CSR 4240-40.030 (4), (12) and (13) for certain Spire East facilities	)))))	Case No. GE-2023-

AFFIDAVIT

State of Missouri)
) SS
County of St. Louis)

I, Randy Wilson, being of lawful age and first duly sworn, deposes and states:

1. I am the Director of Pipeline Safety and Safety for Spire Missouri, Inc. My business address is 700 Market St., St. Louis, Missouri, 63101.

2. I am authorized to make the following declarations on behalf of Spire Missouri, Inc. and have knowledge of the matters stated herein.

3. As required by Commission Rule 20 CSR 4240-2.060(1)(M) and under penalty of perjury, I hereby declare that the matters and things stated in the foregoing Application are true and correct to the best of my knowledge and belief.

Randy Wilson

September 23, 2022

Dated

Exhibit A

Spire LPOP Replacement/Remediation Plan

On March 23, 2021, Spire management met with Missouri PSC Staff to review the Low Pressure Overpressure Protection ("LPOP") Program and the Reynolds regulator ("Reynolds") stations that operate and provide overpressure protection in the Missouri East service area. During the review, Spire discussed the regulator station configuration and demonstrated the station's operational methods. In the discussion, Spire reviewed the following:

- How the three regulators in the station control the flow and pressure
- The function of the 3rd regulator as an overpressure protection device
- The shroud mechanism
- The travel stop setup that limits the flow and pressure delivered by the primary regulator
- The 1" relief valves installed downstream of stations to support the existing overpressure control methods
- Low Pressure System Alarm monitoring in Gas Control.

Spire also reviewed the Quick Hit Testing maintenance program and discussed that many of the Reynolds stations are out of service in the summer due to reduced capacity needs.

With all of these methods currently in place, Spire continues to focus on replacement of the utilization pressure system served by the Reynolds stations and conversion to a separate intermediate pressure system. In turn, the number of Reynolds stations in operation is reduced as the system is replaced. In addition to these measures, Spire has also added temporary modern worker-monitor regulator stations where feasible to advance retirement of a portion of the Reynolds stations. The locations where temporary stations can be used are limited due to site and construction conditions; therefore, this is not a primary option at most locations.

At the time of the March review, Spire had 50 Reynolds regulator stations still connected and in service. Spire communicated that retirement of the utilization pressure system and the Reynolds stations was projected to be completed in 8 years. Since that time, the amount of Reynolds stations to be retired has been reduced to 35. Spire has also reevaluated the plan and has determined that, based on current budget and workforce capacity projections, the amount of time to replace the utilization pressure system could now be reduced to 5 years. This considerable acceleration of the replacement is an additional effort to reduce the service time of the remaining Reynolds stations and further mitigate any concerns over their continued operation. Spire believes that focusing the construction efforts on retirement of the system is the most effective approach to take. The following paragraphs supplies more details on the projected retirement plan.

As noted, Spire currently has 35 Reynolds stations remaining in the system. Most of these are out of service during the warmer weather conditions between May and September. These stations are serving the integrated utilization pressure system containing approximately 250 miles of main. Spire has sectionalized the system into north and south districts. The north district contains approximately 64.69 miles and the south district has about 182.06 miles of main

remaining to be replaced with intermediate pressure piping. A map of the districts is attached as Exhibit B.

Spire has revised the projected plan for 1) replacing the remaining utilization pressure system and 2) removing/retiring the Reynolds stations. Based on the workforce and capital spend projections, Spire anticipates having the Reynolds stations either retired or replaced with temporary, modern worker-monitor style stations by 2024 in the north section and by the end of 2026 in the south section. With that, the Reynolds stations would be out of service in 5 years with the utilization pressure system being replaced by an intermediate pressure system. This plan consists of continued prioritization of replacement of cast iron main in these areas, using the temporary modern style stations where possible, and maintaining the appropriate system connectivity so that an adequate amount of gas carry-away can be maintained to operate the system effectively. Also, as we near the end of completing replacements in these areas, Spire will continue remote electronic pressure monitoring and alarms and specific maintenance for these stations as reviewed in the prior meeting. Spire will also continue specific shutdown procedure involved in abandonment of low pressure mains and regulator stations, as described in SOP 170.A, Gas Interruption/Shutdown of Main Procedure, which is attached as Exhibit C. This procedure also applies to tie-ins associated with replacement, in addition to abandonments.

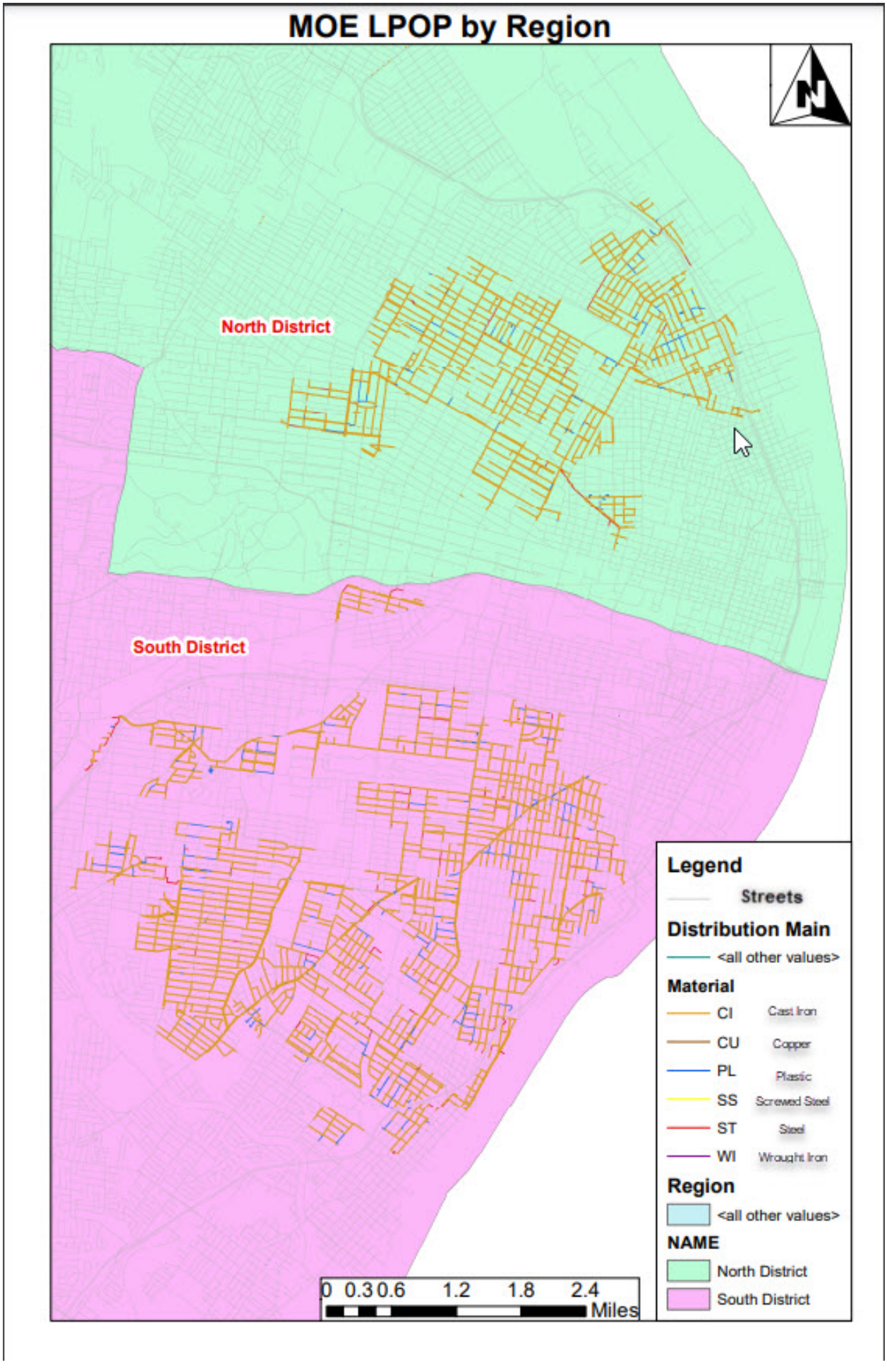
With the current workforce and budget projections, Spire anticipates the following replacement and retirement schedule.

North Division (projected)			
YEAR	Reynolds Stations Retired	Temporary Stations Installed	Total Miles of Main Replaced (Low Pressure System)
2021	5		35
2022	4	1	70
2023	7		105

South Division (projected)			
YEAR	Reynolds Stations Retired	Temporary Stations Installed	Total Miles of Main Replaced (Low Pressure System)
2021	3		35
2022	6	2	70
2023	5	2	105
2024	6	2	155
2025	6		195
2026	5		211

The status of the above replacement plan for the utilization pressure system and Reynolds stations will be reviewed annually by Spire and any changes to the proposed final completion date will be communicated to Staff.

Exhibit B


MOE LPOP by Region
North District
South District
Legend
Streets
Distribution Main
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Material
CI Cast Iron
CU Copper
PL Plastic
SS Screwed Steel
ST Steel
WI Wrought Iron
Region
<all other values>
NAME
North District
South District
0 0.3 0.6 1.2 1.8 2.4
Miles

Exhibit C

This Exhibit is confidential pursuant to 20 CSR 4240-2.135(2)(A)5 and 7.

Exhibit D

Low Pressure Overpressure Protection ("LPOP") Program

The actions for the LPOP Program are as follows:

a) Prior to each heating season, Spire Missouri will complete and implement annual travel stop calculations that ensure adequate capacity and overpressure protection for district regulator stations that are the subject of this application.

b) Each calendar year, prior to March 1st, Spire Missouri will complete Low Pressure System Model studies simulating failures at 5% system loading for each subject regulator station.

c) A field simulated failure test ("quick" test) will be conducted on each station identified in the Low Pressure System Model studies to have simulated failure pressures greater than 14.0" w.c. (overpressure characteristics). These tests will be conducted as promptly as practical considering the need to have favorable testing weather. For stations with overpressure characteristics (a test failure pressure greater than 14.0" w.c.) confirmed by the "quick" tests required in c) above, Spire Missouri will: 1) adjust station travel stop settings immediately (if possible) to eliminate the overpressure characteristic and re-test as soon as practical, or 2) eliminate, replace, or modify the station prior to the heating season following identification if travel stop adjustment is not possible or practical to remedy a possible overpressure.

d) For stations identified in the Low Pressure System Model studies to have simulated failure pressures equal to or greater than 11.5" w.c. and less than or equal to 14.0" w.c., "quick" tests will be performed on each station at a rate of one-third of the population per year with each station not to exceed three calendar years between tests. For those stations found to have overpressure characteristics (a test failure pressure greater than 14.0" w.c.) with the

"quick" tests, Spire Missouri will; 1) adjust station travel stop settings immediately (if possible) to eliminate the overpressure characteristic and re-test as soon as practical, or 2) eliminate, replace, or modify the stations prior to the heating season following identification if travel stop adjustment is not possible or practical to remedy a possible overpressure.

e) For stations identified in the Low Pressure System Model studies to have simulated failure pressures below 11.5" w.c., baseline "quick" tests will be performed on each station at a rate of one-fifth of the population (defined in the initial year after approval of this application) per year such that all stations will be tested within five calendar years after the approval of this application. For stations in which a baseline "quick" test has been completed and which have been confirmed to have failure pressures below 11.5" w.c., future "quick" tests will be schedule for only those stations that are identified by the conditions described in c) or d) above. For those stations found to have overpressure characteristics (a test failure pressure greater than 14.0" w.c.) with the baseline "quick" tests, Spire Missouri will: 1) adjust station travel stop settings immediately (if possible) to eliminate the overpressure characteristic and re-test as soon as practical, or 2) eliminate, replace, or modify the stations prior to the second heating season following identification if travel stop adjustment is not possible or practical to remedy a possible overpressure.