



**In the
Missouri Court of Appeals
Western District**

IN THE MATTER OF THE)
APPLICATION OF SPIRE)
MISSOURI, INC. TO CHANGE ITS) **WD83475 Consolidated with**
INFRASTRUCTURE SYSTEM) **WD83476 and WD83477**
REPLACEMENT SURCHARGE IN)
ITS SPIRE MISSOURI EAST) **OPINION FILED: October 20, 2020**
SERVICE TERRITORY; IN THE)
MATTER OF THE APPLICATION)
OF SPIRE MISSOURI, INC. TO)
CHANGE ITS INFRASTRUCTURE)
SYSTEM REPLACEMENT)
SURCHARGE IN ITS SPIRE)
MISSOURI WEST SERVICE)
TERRITORY,)
)
 Respondent,)
)
PUBLIC SERVICE COMMISSION,)
)
 Respondent,)
v.)
)
OFFICE OF PUBLIC COUNSEL,)
)
 Appellant.)

Appeal from the Public Service Commission

Before Division Four: Cynthia L. Martin, Chief Judge, Presiding, Gary D. Witt, Judge
and Anthony Rex Gabbert, Judge

The Office of Public Counsel ("Public Counsel") appeals from the Public Service Commission's ("Commission") October 30, 2019 report and order ("Report and Order") addressing Spire Missouri Inc.'s ("Spire") applications to change its infrastructure system replacement surcharge ("ISRS") in Spire's East and West service territories to include costs incurred from October 1, 2017, through June 30, 2018, and costs incurred from February 1, 2019, through July 31, 2019.¹ Public Counsel's appeal challenges the Commission's decision to include the costs associated with the replacement of the cast iron and steel mains and service lines in the calculation of the awarded ISRS. We affirm.

Regulatory and Procedural Background

Spire is a "gas corporation" and a "public utility" as those terms are defined in section 386.020(18) and (43).² Spire is an investor-owned gas utility that provides gas services to two service areas, Spire East³ and Spire West.⁴ Spire is subject to the jurisdiction of the Commission as provided in section 386.250(1). The Commission is a creature of statute, created by the General Assembly to regulate public utilities, including gas corporations, in Missouri. *See* section 386.040; section 386.250(1). The Commission employs technical experts ("PSC Staff") who are responsible for representing the Commission and the State of Missouri in all Commission investigations,

¹Spire initially appealed from the Commission's Report and Order but dismissed its appeal prior to submission.

²All statutory references are to RSMo 2016, as supplemented through July 15, 2019, the date Spire filed its petitions to change its ISRS, unless otherwise indicated.

³Spire East provides gas service in eastern Missouri to customers in the City of St. Louis and the Counties of St. Louis, St. Charles, Crawford, Jefferson, Franklin, Iron, St. Genevieve, St. Francois, Madison, and Butler. Spire East was formerly known as Laclede Gas Company.

⁴Spire West provides gas service in western Missouri to customers in the counties of Barry, Barton, Bates, Buchanan, Carroll, Cass, Cedar, Christian, Clay, Clinton, Cooper, Dade, DeKalb, Greene, Henry, Howard, Jackson, Jasper, Johnson, Lafayette, Lawrence, McDonald, Moniteau, Newton, Pettis, Platte, Ray, Saline, Stone, and Vernon. Spire West was formerly known as Missouri Gas Energy.

contested cases, and other proceedings unless PSC Staff files a notice of its intention not to participate. Public Counsel is separate from the Commission and PSC Staff. Public Counsel has statutory authority that gives it discretion to represent and protect the interests of the public in any proceeding before or appeal from an order by the Commission. Section 386.710. Public Counsel participated in this matter.

This appeal is the latest in a series of appeals concerning the proper method for calculating Spire's ISRS, particularly with respect to Spire's program to replace cast iron and steel pipes in Spire's gas distribution service areas. The General Assembly created the ISRS mechanism in 2003 to permit gas corporations to recover costs associated with eligible infrastructure system replacements outside a general ratemaking case. *In Matter of Application of Laclede Gas Co. to Change its Infrastructure Sys. Replacement Surcharge in Its Laclede Gas Serv. Territory v. Office of Pub. Couns.*, 523 S.W.3d 27, 30 (Mo. App. W.D. 2017) (citing sections 393.1009, 393.1012, 393.1015). "Under the ISRS statutes, in order for a gas company's infrastructure replacement costs to be recovered via an ISRS, they must arise from an 'eligible infrastructure system replacement.'" *Id.* (quoting *In re Laclede Gas Co.*, 417 S.W.3d 815, 820-21 (Mo. App. W.D. 2014); citing sections 393.1009(1) and 393.1012.1). "Eligible infrastructure system replacements" are defined in section 393.1009(3) as "gas utility plant projects" that meet certain specified criteria. *Id.* Section 393.1009(5) defines "gas utility plant projects" so that only three categories of infrastructure replacements may be recovered by a gas corporation through an ISRS: "(1) those costs associated with replacements; (2) those costs associated with improvements and enhancements that defer replacements; and (3) those costs associated

with government-mandated relocations." *Id.* This appeal concerns costs associated with the first category of gas utility plant projects: "[m]ains, valves, service lines, regulator stations, vaults, and other pipeline system components installed to comply with state or federal safety requirements as replacements for existing facilities that have worn out or are in deteriorated condition." Section 393.1009(5)(a).

Historically, Spire used a piecemeal approach to replace its infrastructure, replacing pipes when they were leaking or exhibiting obvious conditions that made replacement or repair necessary. Spire abandoned that approach in approximately 2010 or 2011, implementing a systematic approach in which Spire replaces aging infrastructure by replacing entire neighborhood distribution systems at a time ("systematic replacement approach"). In doing so, Spire replaces aging cast iron and steel infrastructure by bypassing them. The process also includes bypassing some plastic mains and service lines, the replacement of which is generally not attributable to the age or condition of the plastic pipes. Spire has consistently taken the position that bypassing and replacing existing plastic infrastructure in this manner is the least costly approach to the replacement of the aging cast iron and steel pipes.

We considered whether Spire could recover the cost of replacing plastic pipes in its ISRS in *In Matter of Application of Laclede Gas Co. to Change Its Infrastructure System Replacement Surcharge in Its Missouri Gas Energy Service Territory v. Office of Public Counsel*, 539 S.W.3d 835 (Mo. App. W.D. 2017) ("*Spire I*"). There, Public Counsel appealed from a report and order issued by the Commission that included the cost to replace plastic mains and service lines in its calculation of an approved ISRS,

concluding that "the plastic pipe . . . was an integral component of the worn out and deteriorated cast iron and steel pipe." *Id.* at 837.

We reversed the Commission's order to the extent that it allowed Spire to recover the cost to replace plastic infrastructure that was not worn out or in a deteriorated condition. *Id.* We remarked:

While Laclede's replacement strategy may laudably produce a safer system, the question squarely before us is not whether its chosen approach is prudent but rather whether the replacement of plastic components that were not in a worn out or deteriorated condition are ISRS-eligible. In analyzing that proposition, we cannot ignore the plain language of the statute for "convenience, expediency[,] or necessity" to conclude that the costs are eligible for recovery through the ISRS process.

Id. at 840 (quoting *In Matter of Verified Application & Petition of Laclede Gas Co. v. Off. of Pub. Counsel*, 504 S.W.3d 852, 859 (Mo. App. W.D. 2016)). We held that, under the plain language of 393.1009(5)(a), the costs incurred to replace plastic mains and service lines that were not worn out or deteriorated could not be included in the ISRS calculation. *Id.* at 839. We cautioned in a footnote:

We recognize that the replacement of worn out or deteriorated components will, at times, necessarily impact and require the replacement of nearby components that are not in a similar condition. Our conclusion here should not be construed to be a bar to ISRS eligibility for such replacement work that is truly incidental and specifically required to complete replacement of the worn out or deteriorated components. However, we do not believe that section 393.1009(5)(a) allows ISRS eligibility to be bootstrapped to components that are not worn out or deteriorated simply because [they] are interspersed within the same neighborhood system of such components being replaced or because a gas utility is using the need to replace worn out or deteriorated components as an opportunity to redesign a system (*i.e.*, by changing the depth of the components or system pressure) which necessitates the replacement of additional components.

Id. at 839-40 n.5. We also noted that the Commission's report and order failed to identify a "state or federal safety requirement" that either mandated the replacement of the plastic infrastructure or mandated the replacement of neighborhood systems as a whole in contravention of section 393.1009(5)(a). *Id.* at 840. We remanded the case to the Commission for further proceedings consistent with the opinion. *Id.* at 841.

The case returned to our Court in *In Matter of Application of Laclede Gas Co. to Change Its Infrastructure System Replacement Surcharge in Its Missouri Gas Energy Service Territory v. Missouri Public Service Commission*, 593 S.W.3d 582 (Mo. App. W.D. 2019) ("*Spire II*"). Before the Commission conducted any hearings on remand, it approved a new general rate for Spire so that the ISRS rate was reset to zero, and the new rate went into effect on April 19, 2018. *Id.* at 587-88. On remand, the question before the Commission was whether customers were entitled to a refund for the collection of the ISRS insofar as it included costs for the ineligible replacement of plastic infrastructure in light of our opinion in *Spire I*. *Id.* at 588. Spire argued that, based on review of ten replacement projects chosen by Public Counsel and Spire, use of the systematic replacement approach had saved customers millions of dollars in comparison to the piecemeal approach, and that as a result, customers were not entitled to a refund for ineligible cost to replace plastic mains and service lines included in the ISRS. *Id.* The Commission rejected Spire's position. *Id.* at 589-90. The Commission concluded that Spire failed to present evidence that the replacement of plastic pipe "was incidental to and required to be replaced in conjunction with the replacement of other worn out or deteriorated components," and that Spire's analysis of ten work orders was "far too few"

to support its position that all of the projects would have yielded the same result. *Id.* The Commission adopted a percentage calculation approach proposed by PSC Staff to determine the cost of the ineligible plastic pipe replacement, and determined the amount of \$3,110,787 had been improvidently collected from customers in the ISRS. *Id.* at 590. The percentage calculation approach to determining cost calculated the total length of service lines and pipes replaced and retired, determined the total length of replaced and retired plastic pipe, and then applied that percentage to the total cost of the project ("percentage methodology").⁵ *Id.* at 588.

Spire appealed the Commission's order, arguing that the Commission erred in using the percentage methodology proposed by PSC Staff to determine the portion of the collected ISRS attributable to the replacement of plastic components. *Id.* at 594. We affirmed the Commission's decision, emphasizing that Spire, as the party who filed the ISRS applications, bore the burden of proof. *Id.* at 595. We concluded that the Commission, as the finder of fact, was entitled to reject Spire's cost studies on the basis that the sample size was too small to extrapolate. *Id.* at 596. We then determined that we would not substitute our judgment for that of the Commission insofar as its decision to accept the percentage methodology proposed by PSC Staff. *Id.* at 597. We explained:

We again stress that it was Spire's burden to prove that some or all of its plastic replacements were eligible for ISRS recovery. Spire chose to rest on its theory that no ISRS collections should have been disallowed because its replacement of ineligible plastics did not increase ISRS costs. The

⁵The Commission concluded, however, that it did not have the authority to issue refunds to customers because we had not specifically instructed it to do so in *Spire I*. *Spire II*, 593 S.W.3d at 590. Public Counsel appealed this decision, and we concluded that the Commission erred in refusing to issue refunds because *Spire I* implicitly included an instruction to issue refunds in that it remanded the case for further proceedings consistent with the opinion. *Id.* at 592-93.

[Commission] found that this theory was not supported by sufficient data. Spire did not conduct a case-by-case review to determine exactly which of its plastic replacements involved components that were in fact worn out or deteriorated. The [Commission] was therefore precluded from taking a more nuanced approach to the disallowance issue than the percentage-based method advocated by [Public Counsel] and [PSC] Staff. We cannot conclude that the [Commission] erred in determining that the percentage model constituted "the best evidence of a methodology to calculate the costs of th[e] ineligible plastic pipe replacements." Given the lack of evidence adduced by Spire, the percentage-based model was the only method the [Commission] could employ to calculate the cost of ISRS-ineligible replacements, and thereby calculate a disallowance in accordance with our opinion and mandate in *Spire I*. The [Commission's] calculation of Spire's ISRS disallowance was supported by substantial competent evidence and is not arbitrary or unreasonable.

Id.

The next in the series of ISRS cases before us was *In Matter of Application of Spire Missouri Inc. to Change Its Infrastructure System Replacement Surcharge in Its Spire Missouri East Service Territory*, 593 S.W.3d 546 (Mo. App. W.D. 2019) ("*Spire III*").⁶ On June 7, 2018, Spire filed its first ISRS applications following Spire's latest general rate cases in which the ISRS rate was reset to zero. *Id.* at 548. These applications sought to recover costs incurred in connection with infrastructure system replacements made from October 1, 2017, through June 30, 2018. *Id.* The Commission again employed the percentage methodology to remove the cost to replace ineligible plastic mains and service lines from Spire's ISRS recovery. *Id.* at 549. Both Public Counsel and Spire appealed. *Id.*

Public Counsel argued on appeal that Spire failed to present sufficient evidence to prove that replaced cast iron and steel mains and service lines were "worn out or [were]

⁶We handed down the *Spire II* and *Spire III* decisions on the same day, but *Spire II* was filed in our Court prior to *Spire III*.

in a deteriorated condition" as required by the statutory definition of "gas utility plant projects" found in section 393.1009(5)(a). *Id.* at 550. Public Counsel asserted that the only evidence presented to the Commission was that "old pipes can become worn out or deteriorated and that many of the pipes at issue were old," without presenting evidence that "the pipes at issue actually were worn out or deteriorated." *Id.* The Commission's report and order found that "the cast iron and steel pipes were replaced to comply with state or federal safety requirements and were worn out or in a deteriorated condition, so they are eligible for recovery under ISRS." *Id.* at 554. The report and order also found, however, "that Spire's work order authorization sheets did not explain if a main or service line being replaced was worn out or deteriorated." *Id.*

Our review of the record revealed that "Spire's primary argument revolved around the age of the facilities and the assumption that old facilities must be worn out or deteriorated," but "[t]here was no evidence with respect to how long it takes cast iron and steel to become worn out or deteriorated." *Id.* Spire's position was that it did not need to present evidence of wear or deterioration if the pipe was subject to a state or federal replacement requirement, a position that *Spire I* had rejected. *Id.* (citing *Spire I*, 539 S.W.3d at 838). We also cited *Spire I* to reject Spire's position that it was "cheaper, faster, and more efficient to replace all the facilities at the same time in a neighborhood by neighborhood approach," recognizing that prudence of the chosen replacement strategy is not the relevant question in an ISRS proceeding. *Id.* at 554-55. Accordingly,

we granted Public Counsel's appeal,⁷ finding that the report and order was not supported by competent and substantial evidence, and reversed the Commission's report and order to the extent that it allowed ISRS recovery for infrastructure not shown to be worn out or deteriorated. *Id.* at 555. We remanded the case for the purpose of removing the costs incurred to replace cast iron and bare steel mains and service lines that were not shown to be worn out or deteriorated from the ISRS calculation. *Id.*

While the *Spire II* and *Spire III* appeals were pending, Spire filed additional ISRS petitions to recover costs incurred in two time periods: October 1, 2017, to June 30, 2018; and July 1, 2018, to January 31, 2019. *In Matter of Application of Spire Mo., Inc. to Change Its Infrastructure Sys. Replacement Surcharge in Its Spire Mo. E. Serv. Territory*, Nos. WD83159 & WD83162, 2020 WL 5171137, at *1 (Mo. App. W.D. Sept. 1, 2020) ("*Spire IV*"). The Commission dismissed Spire's applications insofar as they sought to recover costs from October 2017 through June 2018, reasoning that since its previous determination of costs for the same time period was pending on appeal in *Spire III*, it had no jurisdiction to hear new evidence and make a different decision concerning the costs. *Id.* at *3. The Commission then considered the costs incurred from July 2018 to January 2019. *Id.* To support its request for an adjustment to its ISRS, Spire provided the Commission with 509 cost studies, one for each project conducted pursuant to its systematic replacement approach. *Id.* at *2.

These project-specific cost studies compared the costs of retiring and replacing the plastic pipe as part of a neighborhood-wide project, with the

⁷Given our disposition of Public Counsel's point on appeal, we did not reach Spire's points on appeal. *Spire III*, 593 S.W.3d at 555.

cost of reusing the existing plastic pipe (while replacing only the worn out or deteriorated metal pipe). Where one of its cost studies showed that the cost of replacing plastic piping was *less than* the cost of replacing only the metal pipe, Spire sought to recover the entire cost of the specific project through its Infrastructure Surcharge. Spire justified the recovery of the entire project cost by arguing that replacing the plastic piping added no incremental cost to the particular project, and actually resulted in a cost *savings* for ratepayers compared to replacing the metal pipe alone. On the other hand, when its cost analysis showed that it was *more expensive* to replace the plastic pipe than to reuse the existing pipe on a particular project, Spire excluded the increased cost from its Infrastructure Surcharge request (on the theory that the increased incremental cost was attributable solely to the replacement of plastic components which were not eligible for inclusion in the surcharge).

Id. The Commission rejected the cost studies, finding that they "failed to properly allocate the costs of neighborhood-wide pipe replacement projects between the replacement of deteriorated metal piping, and the replacement of plastic piping." *Id.* at *3. Instead of using Spire's cost studies, the Commission adopted calculations prepared by PSC Staff that excluded costs related to the replacement of plastic infrastructure using the percentage methodology. *Id.* Spire appealed, and once again argued that the Commission erred in failing to include the costs incurred in connection with Spire's systematic replacement approach to replacing its infrastructure.⁸ *Id.* at *4.

In particular, Spire argued that, because it presented evidence that, on many of its projects, there was no incremental cost associated with the replacement of the plastic infrastructure ("incremental-cost analysis"), the Commission was statutorily required to include the entire cost of those projects in its calculation of the company's ISRS. *Id.* at *8. We disagreed, noting that the ISRS statutes' failure to include a definition of "costs,"

⁸Public Counsel also appealed, but the topic of its appeal was the inclusion of costs that were incurred under "blanket work orders," a topic not relevant to this appeal. *Spire IV*, 2020 WL 5171137, at **15-17.

or to specify how eligible "costs" should be determined, gave the Commission substantial discretion to determine the methodology that should be employed to calculate "costs" that can be included in the ISRS calculation. *Id.* at **8-9. The Commission's decision to use the percentage methodology to attribute a portion of the costs to the replacement of plastic infrastructure was well within its discretion. *Id.* at *10. We also rejected Spire's argument that the Commission's guidance in previous reports and orders obligated Spire to rely on its cost analyses. *Id.* at *13. And we found that once the Commission rejected Spire's incremental-cost analysis, the Commission was in the same position as *Spire II* so that its use of the percentage methodology was appropriate. *Id.* Finally, we found it unnecessary to consider Spire's argument that the Commission erred in concluding that it did not have jurisdiction to consider the applications' request to include costs from October 1, 2017, to June 30, 2018, because even if the Commission had jurisdiction to consider costs that were the subject of a pending appeal, the Commission did not err in using the percentage methodology in the instant proceeding, and that was the same methodology already applied by the Commission to those costs in the *Spire III* proceeding. *Id.* at *15.

Spire II and *Spire III* were also pending on appeal when, on July 15, 2019, Spire filed verified applications and petitions ("ISRS Petitions") in the instant case. Spire's ISRS Petitions sought to adjust its ISRS in its Spire East and Spire West service territories to reflect infrastructure replacement costs incurred during the period of February 1, 2019, through May 31, 2019, with *pro forma* infrastructure replacement costs updated for the months of June and July 2019. The ISRS Petitions also sought an

adjustment to its ISRS to recover infrastructure replacement costs incurred between October 1, 2017, and June 30, 2018, to the extent that those costs were not approved for recovery in previous ISRS cases after the Commission determined there was insufficient evidence demonstrating their eligibility ("old ISRS costs"). Spire attached ISRS revenue requirement calculations to its ISRS Petitions indicating a total annual revenue requirement of \$8,104,616 for Spire East and \$6,294,574 for Spire West. Those calculations included the old ISRS costs and estimates for June and July 2019. Spire later updated the calculations with actual cost information from June and July 2019 resulting in annual revenue requirements of \$7,640,218 for Spire East and \$6,424,114 for Spire West.

On September 13, 2019, PSC Staff filed its recommendation that the Commission reject Spire's ISRS revenue calculations and instead approve ISRS adjustments based on PSC Staff's determination of the appropriate amount of ISRS revenues for Spire East and Spire West ("the PSC Staff recommendation"). The PSC Staff recommendation asserted that the Commission did not have jurisdiction to consider Spire's request for an adjustment to its ISRS to recover infrastructure costs incurred between October 1, 2017, and June 30, 2018, because the case in which the Commission initially rejected those costs was pending before this Court in *Spire III*. The PSC Staff recommendation also proposed that the Commission exclude the cost of ISRS-ineligible plastic from the cost of the ISRS-eligible parts of the system, using the same percentage methodology employed by the Commission in *Spire II*, *Spire III*, and *Spire IV*.

The same day as the PSC Staff recommendation was filed, Public Counsel filed its objections to Spire's ISRS Petitions and requested that the Commission hold an evidentiary hearing. Public Counsel objected to the ISRS Petitions insofar as they requested an ISRS adjustment for cathodically protected⁹ steel mains and service lines. Public Counsel argued that there is no state or federal mandate to replace cathodically protected steel pipes as required by section 393.1009(5)(a). Public Counsel further objected to the ISRS Petitions arguing there was no evidence in the record to support a finding that the cast iron and steel mains and service lines Spire replaced were worn out or in deteriorated condition as required by section 393.1009(5)(a). Public Counsel finally argued that the ISRS Petitions sought recovery for the replacement of plastic mains and service lines that are ineligible for ISRS inclusion.

The Commission held an evidentiary hearing on the ISRS Petitions on October 2, 2019. The central issue before the Commission was whether all the costs included in Spire's ISRS Petitions were eligible for inclusion in the calculation of the company's ISRS.¹⁰ Spire had the same strategy for recovering all of the costs associated with its systematic replacement of infrastructure. Spire did not argue that replaced plastic infrastructure was worn out or in a deteriorated condition. Instead, Spire argued that it was less costly to replace plastic components than to reuse them so that there was no

⁹Spire's predecessor cathodically protected bare steel mains and service lines approximately thirty to forty years after they were installed pursuant to the Commission's gas pipeline replacement rules at 20 CSR 4240-40.030(15). Cathodic protection slows corrosion of steel infrastructure but does not repair or mitigate corrosion that has already occurred and does not eliminate corrosion.

All regulatory references are to the version in effect at the time the ISRS Petitions were filed, July 15, 2019.

¹⁰Also before the Commission was the issue of how income taxes should be calculated for the purpose of determining Spire's ISRS revenue requirement. The parties filed a stipulation regarding the issue on the day of the evidentiary hearing.

incremental cost incurred in replacing the plastic. To support its position, Spire introduced project analyses for twelve randomly selected projects from the hundreds of projects for which it was seeking ISRS recovery. Those twelve project analyses compared the costs to replace the facilities under Spire's systematic replacement approach with the estimated costs of a piecemeal approach, where it would have only replaced cast iron or steel components. The twelve project analyses showed that the piecemeal approach would be 11 to 198 percent more expensive than the systematic replacement approach. Spire thus argued that the cost comparisons should be extrapolated to over the entire ISRS request entitling Spire to all costs incurred in its systematic replacement approach.

The Commission issued its report and order on October 30, 2019 ("Report and Order"). The Report and Order dismissed the ISRS Petitions insofar as they requested old ISRS costs, reasoning that the Commission did not have jurisdiction to reconsider costs already determined and that were pending on appeal in *Spire III*. The Report and Order then concluded that the costs associated with Spire's replacement of plastic infrastructure were not eligible for inclusion in the ISRS calculation and employed the percentage methodology previously used by the Commission to reduce the ISRS by ineligible costs for plastic replacement. In reaching this decision, the Commission concluded that the twelve project analyses that Spire presented to the Commission were "too few . . . for the Commission to reasonably conclude that there was . . . no cost associated with the retirement of the plastic facilities." With respect to the cast iron and cathodically protected steel mains and service lines, the Commission concluded that both

types of metal infrastructure were replaced to comply with state or federal safety requirements and that the evidence established that the replaced pipes were worn out or in a deteriorated condition. The Report and Order then authorized Spire to establish an ISRS sufficient to recover \$4,763,180 for the Spire East territory and an ISRS sufficient to recover \$3,996,543 for the Spire West territory.

Public Counsel filed a timely application for rehearing, which the Commission denied. Public Counsel appeals. Additional facts are discussed in the analysis portion of the Opinion as necessary.

Standard of Review

Section 386.510 governs appellate review of the Commission's Report and Order. The statute limits our review to determining whether the Commission's Report and Order is lawful and reasonable. Section 386.510. We presume that the Commission's Report and Order is valid, and Public Counsel, as appellant, bears the burden to prove by clear and satisfactory evidence that the Report and Order is either unlawful or unreasonable. *Mo.-Am. Water Co. v. Mo. Pub. Serv. Comm'n*, 602 S.W.3d 252, 257 (Mo. App. W.D. 2020). The lawfulness of the Commission's Report and Order concerns whether statutory authority existed for its issuance, a legal issue that we review *de novo*. *Id.* The reasonableness of the Report and Order, on the other hand, "concerns whether it is 'supported by substantial, competent evidence on the whole record and is not arbitrary, capricious, or an abuse of discretion.'" *Id.* (quoting *Mo. Am. Water Co. v. Pub. Serv. Comm'n of Mo.*, 591 S.W.3d 465, 469 (Mo. App. W.D. 2019)). We view the evidence

and any reasonable inferences drawn therefrom in the light most favorable to the Commission's Report and Order. *Id.*

Analysis

Public Counsel presents three points on appeal, all of which concern the Commission's conclusion that the expenditures made by Spire to replace cast iron and steel mains and service lines were eligible for inclusion in the calculation of the adjustments to the ISRS for Spire East and to the ISRS for Spire West.

Section 393.1009(5)(a) describes two requirements for infrastructure replacement to be eligible for cost recovery through an adjustment to an ISRS: "(1) the replaced components must be installed to comply with state or federal safety requirements and (2) the existing facilities being replaced must be worn out or in a deteriorated condition." *Spire I*, 539 S.W.3d at 839. Public Counsel challenges the Commission's conclusion that there was a state or federal safety mandate for Spire to replace cathodically protected steel mains in its first point on appeal. Public Counsel's second and third points on appeal concern whether the cast iron and steel mains and service lines replaced by Spire were worn out or in a deteriorated condition.

Point One: State or Federal Safety Requirement to Replace Cathodically Protected Steel Mains

Public Counsel's first point on appeal challenges the Report and Order's conclusion that Spire was required by state law to replace cathodically protected steel mains. The Commission recognized in its Report and Order that, because the steel mains had been previously cathodically protected, 20 CSR 4240-40.030(15), which requires gas

corporations to "cathodically protect or replace" "unprotected steel transmission lines, feeder lines, [and] mains," could not serve as the state or federal mandate for replacement. Nevertheless, the Commission concluded that a state or federal mandate for replacement of the cathodically protected bare steel pipes existed:

Spire Missouri installed the new pipeline components replacing cathodically protected steel components in order to comply with the state requirements of [s]ection 393.130, RSMo (requiring Spire Missouri to provide safe and adequate service), 20 CSR 4240-40.030(17) (requiring Spire Missouri to identify and implement measures to address risks), and 20 CSR 4240-40.030(13)(B) (requiring Spire Missouri to repair, replace, or remove unsafe segments of pipeline from service).

In reaching that conclusion, the Report and Order cited Spire's distribution integrity management plans ("DIMP") from December 2016 and May 2019, both of which identified corrosion of cathodically protected steel mains as a risk to be addressed.

Public Counsel quarrels with the Commission's conclusion that these statutory and regulatory provisions afford a legal mandate for replacement. Public Counsel asserts that 20 CSR 4240-40.030(17) merely requires Spire to develop and implement a distribution integrity management program ("DIMP") that identifies the risk of failure of cathodically protected steel mains and that reports how Spire manages the integrity of its infrastructure, but Public Counsel argues that the regulation does not mandate replacement of infrastructure. Public Counsel further argues that an examination of Spire's May 2019 DIMP reveals that the DIMP did not include a replacement program for cathodically protected steel mains. Public Counsel also dismisses section 393.130 and 20 CSR 4240-40.030(13)(B) as mandating replacement. Public Counsel argues that there was no evidence presented that the cathodically protected bare steel mains were unsafe,

relying on testimony from Craig Hoeflerlin ("Hoeflerlin"), Spire's vice-president of operations services, that the company's cathodically protected mains were safe to transport natural gas. We disagree with Public Counsel's positions.

"The purpose of an ISRS surcharge is to allow a utility to 'timely recover its costs for certain government-mandated infrastructure projects without the time and expense required to prepare and file a general rate case.'" *Spire I*, 539 S.W.3d at 840 (quoting *In re Laclede Gas Co.*, 417 S.W.3d 815, 821 (Mo. App. W.D. 2014)) (emphasis omitted). "ISRS-eligibility under section 393.1009(5)(a) is dependent on a project being imposed on a gas utility by a government-mandated safety requirement" *Id.* In other words, the ISRS mechanism incentivizes a gas utility to comply with government-mandated safety requirements in order to maintain a safe distribution system for natural gas proactively. That goal is precisely what section 393.130, 20 CSR 4240-40.030(13)(B), and 20 CSR 4240-40.030(17), when considered together, mandate.

Section 393.130.1 provides that "[e]very gas corporation . . . shall furnish and provide such service instrumentalities and facilities as shall be safe and adequate and in all respects just and reasonable." Similarly, 20 CSR 4240-40.030(13)(B) mandates that "[e]ach segment of pipeline that becomes unsafe must be replaced, repaired, or removed from service." Related to the obligation to provide a safe distribution system for natural gas is the gas utility's obligation to "develop and implement an integrity management program that includes a written integrity management plan," or a DIMP. 20 CSR 4240-40.030(17)(C). A DIMP must identify potential threats to the gas utility's distribution pipeline, including corrosion and natural forces; must evaluate and rank the risks

associated with the gas distribution pipeline, including the likelihood of failure associated with each potential threat; and must determine and implement measures to address those risks. 20 CSR 4240-40.030(17)(D).

The Commission considered Spire's December 2016 DIMP and May 2019 DIMP. In each DIMP, Spire identified corrosion of cathodically protected steel mains as a risk to be addressed. The May 2019 DIMP ranked corrosion of cathodically protected steel mains in the suburban Spire East territory as the 16th greatest risk and corrosion of cathodically protected steel mains in the suburban Spire West territory as the 52nd greatest risk. The May 2019 DIMP also ranked the risk of corrosion of cathodically protected steel mains in urban and rural environments. The December 2016 DIMP also included the risk of corrosion of cathodically protected steel mains but ranked the risk lower than the May 2019 DIMP.

Public Counsel acknowledges that each DIMP noted cathodically protected steel mains as a risk to be addressed. Nevertheless, Public Counsel argues that, because Spire's DIMPs did not include the replacement of cathodically protected steel mains as one of its replacement programs, 20 CSR 4240-40.030(17) cannot serve as the state mandate for replacement. This argument overlooks that the obligation to evaluate and rank risks to infrastructure found in 20 CSR 4240-40.030(17) must be read in conjunction with the statutory mandate found in section 393.130 for gas utilities to ensure that their natural gas distribution systems are safe and adequate, and the regulatory mandate found in 20 CSR 4240-40.030(13)(B) to replace pipeline that has become unsafe.

Spire's evaluation of the risk posed by corrosion of cathodically protected steel mains in its December 2016 DIMP and May 2019 DIMP was not the only evidence relevant to the Commission's determination that Spire replaced the cathodically protected steel mains pursuant to state safety mandates. The Commission also considered evidence that the cathodically protected steel mains had become unsafe, and thus required replacement. Hoeflerlin testified that, prior to Spire's replacement efforts, the leakage rate of cathodically protected steel facilities was thirty to forty times higher than the leakage rate for plastic facilities. Hoeflerlin explained that, due to Spire's accelerated efforts to replace its cathodically protected steel pipes, the leakage rate of cathodically protected steel pipes dropped to ten times the leakage rate for plastic pipes. Hoeflerlin further testified that hazardous leaks on cathodically protected steel pipes results can be catastrophic, as natural gas escaping into homes, businesses, and sewers, which can easily explode, resulting in injuries and fatalities. Hoeflerlin testified that, because of the risks posed by cathodically protected steel infrastructure, natural gas distributors and industry professionals have advocated for the accelerated replacement of these pipes based on a recognition that cathodic protection was merely a stopgap solution to the problems associated with the corrosion of bare steel pipes.

The testimony of Robert Leonberger ("Leonberger"), an engineer and natural gas expert who works for a consulting firm, underscored the need to replace all of the cathodically protected steel mains. Leonberger, referencing his experience working on pipeline safety for PSC Staff, testified that, at the time he was involved in drafting the regulations thirty years ago, PSC Staff initially believed that steel mains should be

replaced but, in recognition of the enormity of the problem posed by steel and cast iron infrastructure, the regulations were drafted to allow for cathodic protection of steel infrastructure as an interim measure. Leonberger testified that he believed thirty years ago, and still believes, that these cathodically protected steel mains should be replaced.

Hoeflerlin's and Leonberger's testimony, along with Spire's December 2016 DIMP and May 2019 DIMP, substantially and competently explain the risks posed by cathodically protected steel mains. It is within the Commission's expertise, and therefore within its exercise of regulatory discretion to determine, as it did in the Report and Order, that the risks posed by cathodically protected steel mains necessitated their proactive replacement so that Spire has a safe and adequate system for distributing natural gas to its customers as mandated by section 393.130 and 20 CSR 4240-40.030(13)(B). *See In Matter of Verified Application & Petition of Laclede Gas Co.*, 504 S.W.3d at 859 (observing that "Missouri courts have long recognized that when the decision involves the exercise of regulatory discretion, the [Commission] is delegated a large amount of discretion, and many of its decisions necessarily rest largely in the exercise of sound judgment" so that we "will not substitute [our] judgment for that of the [Commission] on issues within the realm of the agency's expertise" (quoting *State ex rel. Sprint Mo., Inc. v. Pub. Serv. Comm'n*, 165 S.W.3d 160, 164 (Mo. banc 2005))).

Contrary to Public Counsel's suggestion, Hoeflerlin's testimony at the hearing that Spire is providing safe and adequate service when transporting gas through approximately 800 miles of its cathodically protected steel mains does not alter our conclusion. Public Counsel suggests that this testimony nullified the evidence suggesting

a need to immediately replace cathodically protected steel. The Commission rejected this argument, holding in its Report and Order that "Spire Missouri must not wait until its system is leaking and exploding in order to comply with the law." We agree.

Substantial and competent evidence supports the conclusion that replacement of Spire's cathodically protected steel mains was required by section 393.130, 20 CSR 4240-40.030(13)(B), and 20 CSR 4240-40.030(17).¹¹

Public Counsel's Point One is denied.

Points Two and Three: Cast Iron and Steel Mains and Service Lines as Worn Out or in a Deteriorated Condition

Public Counsel's second and third points on appeal are related as both concern the Commission's conclusion that the cast iron and steel mains and service lines replaced by Spire were in a worn out or deteriorated condition as required by section 393.1009(5)(a). Public Counsel's second point on appeal concerns the sufficiency of the evidence to support the conclusion that the cast iron and steel mains and service lines replaced were worn out or in a deteriorated condition. The third point on appeal asserts that the Commission gave Spire an unlawful presumption of deteriorated condition based on the type of material replaced, specifically cathodically protected steel.

Public Counsel made similar claims in *Spire III*. As discussed *supra*, in *Spire III*, we addressed whether substantial and competent evidence supported the Commission's conclusion that replaced cast iron and steel mains and service lines were "worn out or [] in [a] deteriorated condition" as required by section 393.1009(5)(a). 593 S.W.3d at 550.

¹¹These same statutes and regulations, along with 20 CSR 4240-40.030(15), provide the basis for concluding that cast iron pipes are subject to state or federal mandate requiring replacement--a conclusion Public Counsel does not challenge.

We concluded that Spire had not sustained its burden, and we reversed the Commission's ISRS award, and remanded for further proceedings. *Id.* at 555. Public Counsel contends that the evidence presented in this case on the issue of the deteriorated condition of replaced pipe was no different than that presented in *Spire III*, requiring an identical disposition. We disagree.

In *Spire III*, we noted that guidance has been provided by our Supreme Court with respect to the meaning of "in a deteriorated condition":

"The definition of 'deteriorate' is 'to make inferior in quality or value,' 'to grow worse,' and 'become impaired in quality, state, or condition.'" *In Matter of Verified Application & Petition of Liberty Energy (Midstates) Corp.*, 464 S.W.3d 520, 525 (Mo. banc 2015) (quoting WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY 616 (1993)). "Clearly, this definition indicates that deterioration is a gradual process that happens over a period of time rather than an immediate event." *Id.*

593 S.W.3d at 550. We then observed that Spire's approach to sustaining its burden to prove that replaced pipe was in a deteriorated condition emphasized almost exclusively "the age of the facilities and the assumption that old facilities must be worn out or deteriorated," without presenting evidence as to "how long it takes cast iron and steel to become worn out or deteriorated." *Id.* at 554. Further, "Spire seem[ed] to believe that it [did] not need to present evidence that the pipes it replace[d] are worn out or deteriorated because it consider[ed] any pipe subject to a state or federal replacement requirement to be by definition worn out or deteriorated." *Id.* We summarized the evidence presented, most of which involved blanket work orders used by Spire when there is a leak or some other problem necessitating infrastructure replacement. *Id.* at 550-51. Hoferlin testified that he believed all cast iron and steel pipe was worn out or deteriorated, because "any

time there is a leak in the structures that are bare steel and cast iron that by definition the structures are worn out and deteriorated." *Id.* at 551. We observed, however, that this categorical characterization had been rejected by our Supreme Court. *Id.* at 554 (citing *Liberty Energy*, 464 SW.3d at 525) (rejecting the position that a structure is worn out or deteriorated merely because there is a leak as leaks can be caused by other factors or events).

Hoeflerlin also testified in *Spire III* in general terms about the graphitization process that cast iron undergoes, making the cast iron easily susceptible to cracks, and about the corrosion process that bare and unprotected steel undergoes. *Id.* at 551. Spire's director of regulatory and finance generally testified that facilities included in blanket work orders were worn out or deteriorated because "it [was] no longer in the safe established condition to provide service." *Id.* However, a PSC Staff utility regulatory auditor testified that nothing was provided in the blanket work order authorization sheets to explain whether replaced mains or service lines were, in fact, worn out or deteriorated, and that Spire did not provide any testing regarding the replaced mains and service lines to show that they were worn out or deteriorated. *Id.* That PSC Staff utility regulatory auditor also testified that some of the mains at issue had not reached their average service life, and that PSC Staff does not agree that whether a facility is near the end of its useful life should be considered when determining whether it is worn out or in a deteriorated condition. *Id.* at 551-52.

After summarizing the evidence presented, including Spire's belief that it did not have to prove that infrastructure replaced was, in fact, "worn out or [] in [a] deteriorated

condition" so long as the pipe was subject to a state or federal replacement requirement, we concluded that Spire had not sustained its burden to establish that the pipe it replaced was eligible for ISRS recovery because it was worn out or deteriorated. *Id.* at 554 (citing *Spire I*, 539 S.W.3d at 838). We noted, for example, that there was no evidence presented about how long it ordinarily takes cast iron and steel to become worn out or deteriorated condition, and that in any event, the evidence suggested that wear and deterioration differ by location. *Id.* Further, we rejected Spire's suggestion that the cost efficiencies involved in systematic replacement of all facilities in a neighborhood at the same time was sufficient to establish entitlement to an ISRS calculation. *Id.* at 555 (citing *Spire I*, 539 S.W.3d at 840). We thus reversed and remanded for removal of the costs incurred to replace cast iron and bare steel mains and service lines not shown to be worn out or deteriorated. *Id.*

Spire III effectively held that Spire could not rely on a presumption of pipe condition to support an ISRS based solely on the age of pipe, or on a statutory or regulatory obligation to replace pipe, or on generalized evidence about the process of pipe corrosion to establish that replaced pipe was worn or deteriorated. On the other end of the spectrum, however, we did not hold that every inch of pipe replaced had to be demonstratively proven to be deteriorated.

The line between these two evidentiary extremes is imprecise, which supports deferring to the factual findings of the Commission. The evidence presented to the Commission in this case went beyond that presented to the Commission in *Spire III*, and was sufficient to sustain Spire's burden. While some of the evidence presented to the

Commission in this case was similar to the evidence presented in *Spire III*, Spire appears to now recognize that it is insufficient for purposes of establishing ISRS eligibility to take the position that mains or service lines subject to a federal or state mandate for replacement are by definition worn out or in a deteriorated condition. Instead, Spire presented evidence in this case from which the Commission could reasonably conclude that the cast iron and steel mains and service lines replaced were in a worn out or deteriorated condition as required by section 393.1009(5)(a).

Hoeflerlin testified that he has never encountered a replaced cast iron or bare steel pipe that was not in a deteriorated condition. With respect to bare steel pipe, Hoeflerlin explained that the process of corrosion begins immediately upon installation of the pipe, and that cathodic protection is, at best, a stop gap to delay further deterioration. Though the rate of corrosion of steel pipe is not uniform, Hoeflerlin testified that 100 percent of Spire's cathodically protected steel pipe has reached the point where it is worn out or in a deteriorated condition because it is "capable of performing its duty, but not as well as it originally was when it was put in[;] it's becoming more and more deteriorated so it's not performing as well." And as earlier summarized in discussing the statutory or regulatory requirement to replace steel pipe, Hoeflerlin testified that prior to Spire's replacement efforts, the leakage rate of cathodically protected steel facilities was thirty to forty times higher than the leakage rate for plastic facilities. Hoeflerlin further testified that hazardous leaks on cathodically protected steel pipes results can be catastrophic. Hoeflerlin testified that, because of the risks posed by cathodically protected steel infrastructure, natural gas distributors and industry professionals have advocated for the

accelerated replacement of these pipes. Leonberger echoed this testimony, noting that industry standards recognized the urgency of replacing steel pipes, as cathodic protection had been intended, at best, as a stop gap measure to slow deterioration.

With respect to cast iron pipes, Spire submitted photographs that Hoeflerlin testified were consistent with the types of pipes that Spire is targeting with its replacement program. The photographs showed gaping holes in the cast iron pipes.

Hoeflerlin also brought two pipes as demonstrative exhibits to the hearing and testified that the pipes are typical of the condition of the pipes that were being removed and replaced by Spire. The first was a segment of a bare steel service line that was installed in 1952 in the Spire West territory and later cathodically protected. The second was a cast iron pipe that was installed in 1912 in the Spire East territory. The Commission found Hoeflerlin's testimony credible and persuasive, and specifically cited to the photographs and demonstrative exhibits, in its Report and Order.

The arguments made by Public Counsel on appeal concern the credibility of Spire's evidence. These are the same arguments Public Counsel made before the Commission, through the testimony of John Robinette ("Robinette"), a utility engineering specialist who works for Public Counsel, and who challenged the accuracy of Spire's witnesses' testimony. But Public Counsel's arguments go to the weight to be afforded to Spire's evidence, and not to its sufficiency to support the Commission's findings if believed. By finding Hoeflerlin's testimony credible and persuasive, the Commission effectively rejected the Public's Counsel's contrary evidence and arguments presented

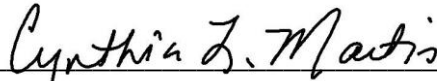
through Robinette. We defer to the Commission's determination of witness credibility. *Spire II*, 593 S.W.3d at 596.

The Commission's credibility determination guided its decision that the cast iron and steel mains and service lines Spire replaced were "worn out or in deteriorated condition." Given Hoeflerlin's testimony that 100 percent of cathodically protected steel pipe is deteriorated and that he has never encountered a replaced cast iron or steel main or service line that did not exhibit some sort of deterioration, and given the photographs and demonstrative exhibits represented as typical of the condition of the replaced pipes at issue, there was substantial evidence for the Commission to have reasonably concluded that the cast iron and steel mains and service lines had been made "inferior in quality or value," had "grow[n] worse," and had "become impaired in quality, state, or condition." *See Liberty Energy*, 464 S.W.3d at 525. In contrast to *Spire III*, the Commission in this case did not grant Spire an unlawful presumption of deterioration, and instead relied on evidence it deemed credible that replaced cast iron and steel pipe was worn out or in a deteriorated condition.

Public Counsel's Points Two and Three are denied.

Conclusion

The Commission's Report and Order is affirmed.



Cynthia L. Martin, Judge

All concur