

Spire Missouri
GR-2021-0108

Response to Staff Data Request 0443

Please refer to Mr. Rieske's rebuttal testimony in this case for the following questions and information requests. To respond, Spire has included the data request with subsequent response. We

1. Cite the exact rule language that supports the statement that "At the beginning of calendar year 2020, 337,000 meters are replacement eligible per Commission rules at Missouri West alone."
2. Define "replacement eligible."
3. Provide the documentation that supports the statement that "Only 84.6% of legacy meters in Missouri West are currently meeting the 19 accuracy testing—the worst performance of all Spire regions."
4. (1) Provide the number of diaphragm meters in each service territory in total, and also provide the number of diaphragm meters in each service territory that are (2) more than 30 years old, that are (3) between 15 and 30 years old, that are (4) between ten and 15 years old, that are between (5) five and ten years old, and (6) that are less than 5 years old.
5. Provide the documentation that supports the statement that "Of the 41,373 ultrasonic meters we have installed to date, 74% of replacements were meters that were already mandated for replacement by Commission rules."
6. Cite the exact rule language that supports the statement that "74% of replacements were meters that were already mandated for replacement by Commission rules."
7. Provide documentation that supports the statement that "Presently, across Missouri, more than 60% of all residential meters are more than 10 years old, and should be replaced pursuant to Commission rules."
8. What percentage and what total of meters removed during Spire's meter sampling process were replaced with new diaphragm meters prior to June 2020?
9. What percentage and what total of meters removed during Spire's meter sampling process were replaced with tested and repurposed diaphragm meters prior to June 2020?
10. Provide an estimated cost to test and refurbish sampled meters for redeployment. Provide supporting documentation for all assumptions relied upon within the estimate.
11. When did Mr. Rieske become aware that "the ultrasonic meter is already the standard technology in Europe and has been in use for nearly 20 years"?
12. Did Spire Missouri consider replacing existing meters with ultrasonic meters prior to 2020? If so, explain why Spire Missouri chose not to begin replacing the existing meters with ultrasonic meters.
13. Does Spire Missouri intend to request a change to the applicable variances it's been granted from 20 CSR 4240-10.030(19)? If so, describe the intended changes and an expected timeline for such request.

During the AMI / AMR RFP for Spire Gulf the vendors gave overviews of the product lines that were available for use. During this time we became aware of the ultrasonic meter being developed by multiple vendors. After the RFP process we began exploring future technologies in more detail. Meetings were held with meter vendors multiple times to understand what their technology capabilities were and what their development timelines were. In summer 2019 a vendor had us meet with representatives from their European division to go over the solution that had been deployed using ultrasonic meters and network meter reading in Western Europe. That vendor had deployed over 10 million ultrasonic meters and had developed many customer facing capabilities over a period of nearly 20 years.

12. Did Spire Missouri consider replacing existing meters with ultrasonic meters prior to 2020? If so, explain why Spire Missouri chose not to begin replacing the existing meters with ultrasonic meters.

The process of considering future meter technologies began in Fall of 2018. This was a very important decision and we entered into a very detailed and thoughtful process. Ultrasonic residential meters did not become commercially available until 2019 in the United States. The Company did not establish a new meter standard until we had completed a review of our current equipment, what our future capability needs may be and had completed a thorough review of equipment possibilities and their capabilities. In order to transition to ultrasonic meters the Company needed to test and validate capabilities, prepare new standards, modify software applications and processes, procure inventory, develop training and deliver it.

13. Does Spire Missouri intend to request a change to the applicable variances it's been granted from 20 CSR 4240-10.030(19)? If so, describe the intended changes and an expected timeline for such request.

20 CSR 4240-10.030 (18) and (19) are written specifically to address the inaccuracies that can exist and develop over time with the mechanical metrology of diaphragm meters that use gear driven indexes. The entire context of this rule has no application to ultrasonic measurement which does not rely on any moving parts and has no components that would be subject to deterioration over time, therefore we do not anticipate a waiver would be necessary. The basic premise of this rule applies when a meter has been in service for 120 months. Ultrasonic meters have been in service for no longer that 12 months. In Spire's opinion this rule needs to be reviewed and examined, including consideration of how it might be apply to the ultrasonic technology. Spire recognizes the need to discuss how to update this regulation with interested parties, but also recognizes we have time for a thorough and thoughtful discussion about modernizing this requirement.

14. Has Spire Missouri retired the existing diaphragm meters that were removed for testing within the meter sampling process which meet the accuracy standard? Explain and cite any adjustments Spire Missouri made within this case to account for the retirements.