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Witness: *Melissa J. Reynolds*

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MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

WATER, SEWER, GAS, AND STEAM DEPARTMENT

REBUTTAL TESTIMONY

OF

MELISSA J. REYNOLDS

SPIRE MISSOURI INC., d/b/a Spire

CASE NO. GU-2026-0225

*Jefferson City, Missouri
July 2026*

**TABLE OF CONTENTS OF
REBUTTAL TESTIMONY OF
MELISSA J. REYNOLDS
SPIRE MISSOURI INC., d/b/a SPIRE
CASE NO. GU-2026-0225**

EXECUTIVE SUMMARY	1
ISSUES BROUGHT TO ATTENTION DURING RATE CASE NO. GR-2025-0107	3
WEATHER NORMALIZATION.....	14
SPIRE MISSOURI’S BILLING CYCLES	20
SPIRE MISSOURI’S RESIDENTIAL CUSTOMER LEVEL BILLING CYCLE DATA.....	26
METERS AND CAPABILITIES	31
CONCLUSION	33

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Rebuttal Testimony of
Melissa J. Reynolds

1 revenue requirement for a single month, January 2026. This rebuttal testimony also
2 addresses issues and concerns that were brought up during Spire Missouri's last rate
3 case, Case No. GR-2025-0107, and the Weather Normalization Adjustment Rider
4 ("WNAR") assumptions and intended function that directly impact revenues collected by
5 Spire Missouri.

6 Q. Mr. Yonce claims on page 6, line 20 to page 7, line 2 of his direct testimony
7 that Spire filed this case due to "an extraordinary event, which is the immediate,
8 unprecedented, and sustained collapse in customer usage relative to HDDs following a
9 rate case." Does Staff agree with that assertion?

10 A. No. Staff does not agree with Mr. Yonce's assertion that this is an
11 extraordinary event. Further discussion and reasoning is covered in this testimony and
12 the testimony of Jared Giaccone.

13 Q. Mr. Yonce claims on page 7, lines 5-6, of his direct testimony that the
14 "significant usage decline relative to HDDs is being driven by abnormal weather patterns
15 and historically unprecedented customer behavior." Does Staff agree with that
16 assertion?

17 A. No. Although Staff agrees that abnormal weather can have an impact on
18 usage, Staff questions the accuracy of Spire's data purporting to show usage decline.
19 Staff will further outline the many data issues brought up during the last rate case in
20 addition to Staff's data requests ("DR") and analyses conducted with this current case
21 filing. All in all, Spire utilizes billing data for usage calculations rather than actual daily
22 usage by customers, and Spire's billing and data issues will be discussed throughout this

1 testimony. Additionally, no other Missouri gas company has filed or voiced concerns to
2 Staff related to revenue loss in January 2026 due to “an extraordinary event” although all
3 gas companies in Missouri experienced similar weather as Spire Missouri.

4 Q. Is an Accounting Authority Order (“AAO”) the appropriate solution?

5 A. I defer to Staff’s Auditing Department on the appropriateness of an AAO
6 from an accounting standpoint. However, there appears to be a more appropriate
7 solution that requires improvements and changes be made by Spire Missouri prior to any
8 upcoming rate case. In order to understand the solution, one must understand issues
9 raised by Staff in Spire Missouri’s previous rate cases, Spire’s failure to associate usage
10 data correctly with weather, and proper utilization of the WNAR, as described below.

11 **ISSUES BROUGHT TO ATTENTION DURING RATE CASE NO. GR-2025-0107**

12 Q. When was Spire Missouri’s most recent rate case?

13 A. Spire Missouri filed a notice of intended rate case filing on September 20,
14 2024, and officially filed on November 25, 2024. An order approving a Full and Unanimous
15 Stipulation and Agreement was filed on September 3, 2025, with tariffs implementing new
16 rates becoming effective October 24, 2025.

17 Q. How and in what form was customer data, including energy use, provided
18 by Spire Missouri in the last rate case?

19 A. As stated in my direct testimony during the last rate case, Staff requested
20 data such as customer usage and number of customers via Data Requests (“DR”).²

² GR-2025-0107, Staff DR 109 and DR 169.

1 Please see Spire Missouri's response to Staff's DR 169 in GR-2025-0107 attached as
2 Schedule MJR-r2. These datasets were provided to Staff as monthly revenue summaries
3 of customer use and bill count including summaries of billing cycles separately for
4 Spire East and Spire West.³ Non-billing cycles ("NBC") and weekend billing cycle
5 summaries were also present each month in addition to the typical 18 billing cycles.

6 Q. What are NBCs and weekend billing cycles?

7 A. Spire Missouri explained that NBCs are due to more than 18 working days
8 being present each month and bills being generated every working day. Weekend billing
9 cycles were explained to be for accounts billed on the weekend as result of occasional
10 overtime work.⁴ Spire Missouri provided additional information regarding the weekend
11 billing cycle that can include bills from any weekend such as for corrections made by IT
12 or a customer experience employee.⁵

13 Q. Why are the billing cycles important in a rate case?

14 A. Methodology for weather normalization utilizes reported usage for
15 established billing cycle start and end meter read dates as provided by Spire Missouri
16 compared to actual and normal weather for the same period of time to calculate a
17 mathematical relationship. This methodology is discussed in greater detail later in
18 this testimony.

³ Spire Missouri refers to these files as Daily Revenue Summary files. These files are created monthly with each file providing a summary of a billing month.

⁴ Spire Missouri's response to Staff DR 109.3 in GR-2025-0107.

⁵ Spire Missouri's response to Staff DR 33.1 in GU-2026-0225.

1 Q. How did Staff address these additional billing cycles in Spire Missouri's last
2 rate case?

3 A. Staff requested individual customer meter data by month/billing cycle and
4 separated by class, and Staff was directed to the monthly revenue summary files
5 supplied in Spire Missouri's response to Staff DR 109 in GR-2025-0107 that contain
6 composite billing numbers and usage. In a meeting with Spire Missouri on
7 February 19, 2025, Staff asked if the "raw data" that is consolidated into the summary
8 revenue files could be provided by rate class. Staff was told that Spire Missouri does not
9 pull data in that way, so it would require a new query to be set up and a lot of time to
10 manage such an ask. Therefore, Staff consolidated all NBC and Weekend billing cycles
11 into the 18 billing cycles to account for all customers and usage reported based on
12 recommendations provided by Spire Missouri. Meter read dates are necessary for the
13 appropriate calculations, but meter read dates are not defined and were not available or
14 provided for these additional cycles.

15 Q. Were there indications that data supplied during the rate case may be
16 inaccurate?

17 A. Yes. Staff identified at least four (4) indicators for concern during the last
18 rate case, including reported usage and rates in the monthly revenue summary data
19 provided by Spire Missouri, Spire Missouri's reported delayed transfer issue (described
20 below), Spire Missouri's monthly reports of estimated bills, and the third-party
21 Continuing Plant Records ("CPR") Audit results that were part of the resolution of Docket
22 No. GR-2022-0179.

1 Q. What were the problems with Spire Missouri's monthly revenue
2 summary files?

3 A. Staff noticed the monthly revenue summary data showed gas usage billed
4 or credited at the summer rate during all winter-month billing cycles and gas usage billed
5 or credited at the winter rate during all summer-month billing cycles rather than just
6 during seasonal transition months, meaning the month directly after the seasonal rate
7 change. Without seeing customer level meter data, Staff and Spire Missouri were unable
8 to determine what usage actually occurred for the month in question and what usage was
9 from previous months.

10 Q. What is a delayed transfer?

11 A. "The delayed transfer process starts when a customer moving out of their
12 residence requests to stop their service. Rather than performing a hard disconnect,
13 where the Company (Spire Missouri) would physically turn the gas off entirely, in a
14 delayed transfer, the customer account is closed, and the gas is left on with the
15 expectation that a new customer will likely move in. This is also known as a soft
16 disconnect."⁶

17 Q. How did delayed transfers impact the rate case?

18 A. Meetings with Spire Missouri and a supplemental filing by Spire's
19 David A. Yonce on April 23, 2025, with attached Schedule DAY-SD-1 - Disconnection and
20 Reconnection Report, brought to Staff's attention that customer counts for the test year

⁶ GR-2025-0107, David A. Yonce Supplement Testimony Schedule DAY-SD-1.

1 were over reported in some months and under reported in others due to a backlog of
2 delayed transfers and subsequent back billing for up to twelve (12) months of usage in a
3 single month to customers during the test year starting around March 2024. This means
4 that a customer back-billed for twelve (12) months in the month of June 2024 would have
5 been reported as twelve (12) bills rather than one (1) bill for the month of June 2024 with
6 all usage also in that month, which would include winter month usage being reported in
7 June 2024. This would cause June 2024 to be over-reported, but the prior twelve (12)
8 months would all be under-reported. This is covered in more detail below, but inaccurate
9 customer counts will have an obvious impact on rate design and expected revenues in a
10 rate case.

11 Q. Did Spire Missouri provide data for the customers involved in the delayed
12 transfer issue during the rate case?

13 A. Yes. However, Spire Missouri was unable to provide billing cycle level data
14 detailing the extent of the delayed transfer backlog issue, and the data provided was not
15 consistent. First, Spire Missouri provided a monthly total customer and usage count by
16 email on April 16, 2025, that Staff requested be broken down into the reported billing
17 cycles for adjustments to be made to weather normalization. This data also only outlined
18 what was to be removed each month and did not include if and what prior month it
19 needed to be added back. Updated data emailed on June 10, 2025, not only lacked a
20 breakdown into billing cycles, but it was also drastically different from the previous
21 customer numbers and usage that Spire Missouri reported as being impacted by this
22 delayed transfer backlog issue (See Table 1). An incident of delayed transfers discovered

Rebuttal Testimony of
Melissa J. Reynolds

in March 2024 stated to have impacted approximately 9,700 meters combined across both regions and reported as being caught up in December 2025, turned into a much larger back-billing issue than anticipated by Staff. This incident went from impacting only nine (9) months to nineteen (19) months, 31,165 bills to 471,464 bills, and 2,240,056 hundred cubic feet (“ccf”) to 27,830,685 ccf of gas usage as shown in Table 1 below. Therefore, Staff’s adjustment to billing cycle data utilized for weather normalization was done to the best of Staff’s ability given the billing and data issues presented so late in the rate case (methodology covered later in this testimony).

Table 1: Spire East Residential Delayed Transfer adjustments provided by Spire

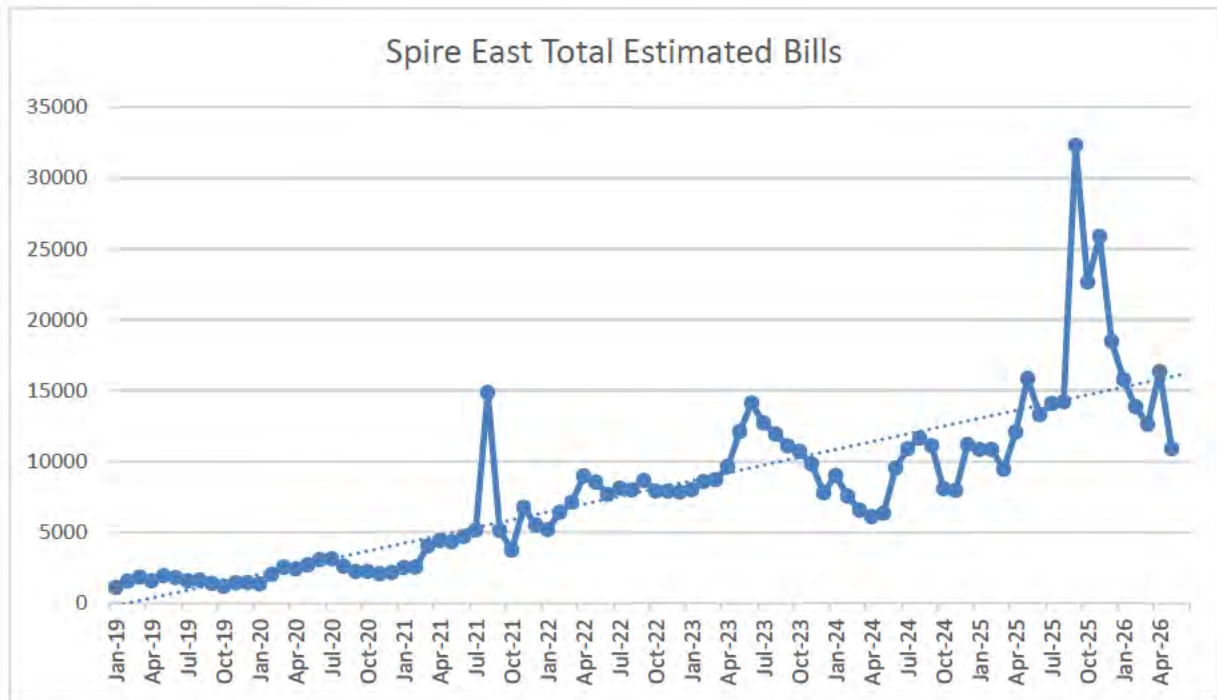
Month/Year	April 16, 2025 Back Bill Count	June 10, 2025 Back Bill Count	April 16, 2025 Usage CCF	June 10, 2025 Usage CCF
October 2023		20,150.0		183,146
November 2023		34,030.4		796,399
December 2023		30,440.3		1,845,535
January 2024	4,836.83	12,184.3	414,978	886,700
February 2024	3,666.09	37,271.2	508,345	5,104,049
March 2024	4,566.64	39,057.5	611,227	3,306,966
April 2024	2,148.48	28,810.2	137,157	1,622,271
May 2024	2,624.57	29,031.1	168,791	1,047,392
June 2024	2,095.64	14,318.4	81,979	255,315
July 2024	2,977.87	21,973.3	99,724	266,526
August 2024	4,233.02	33,518.6	73,018	388,631
September 2024	4,016.06	6,930.3	144,837	141,217
October 2024		16,657.3		290,098

Month/Year	April 16, 2025 Back Bill Count	June 10, 2025 Back Bill Count	April 16, 2025 Usage CCF	June 10, 2025 Usage CCF
November 2024		35,113.0		682,926
December 2024		6,657.1		273,373
January 2025		28,964.1		2,723,641
February 2025		26,402.6		3,583,498
March 2025		26,361.2		3,038,845
April 2025		23,593.2		1,394,157
TOTAL	31,165.2	471,464.10	2,240,056	27,830,685

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2 Q. Why were Spire Missouri's monthly reports of estimated bills of concern
3 to Staff?

4 A. Spire Missouri provides GM-2013-0254 monthly reports that include
5 monthly numbers for Spire East and Spire West of estimated bills, locked meters showing
6 consumption, and installed active meters. The number of estimated bills were of
7 concern during the last rate case. However, the number of estimated bills prior to and
8 surrounding the effective date of the most recent tariff is even more concerning given
9 that approximately 5 percent of Spire East bills were reported as estimated for
10 September 2025 (see Graph 1). Spire Missouri's estimated bills for consecutive months
11 in a row are also reported and summarized for more than three (3) months and more than
12 twelve (12) months in Schedule MJR-r3. Approximately 3% of the estimated bills in
13 January 2026 had been estimated for more than twelve (12) months.

Graph 1: Spire East estimated bills reported monthly



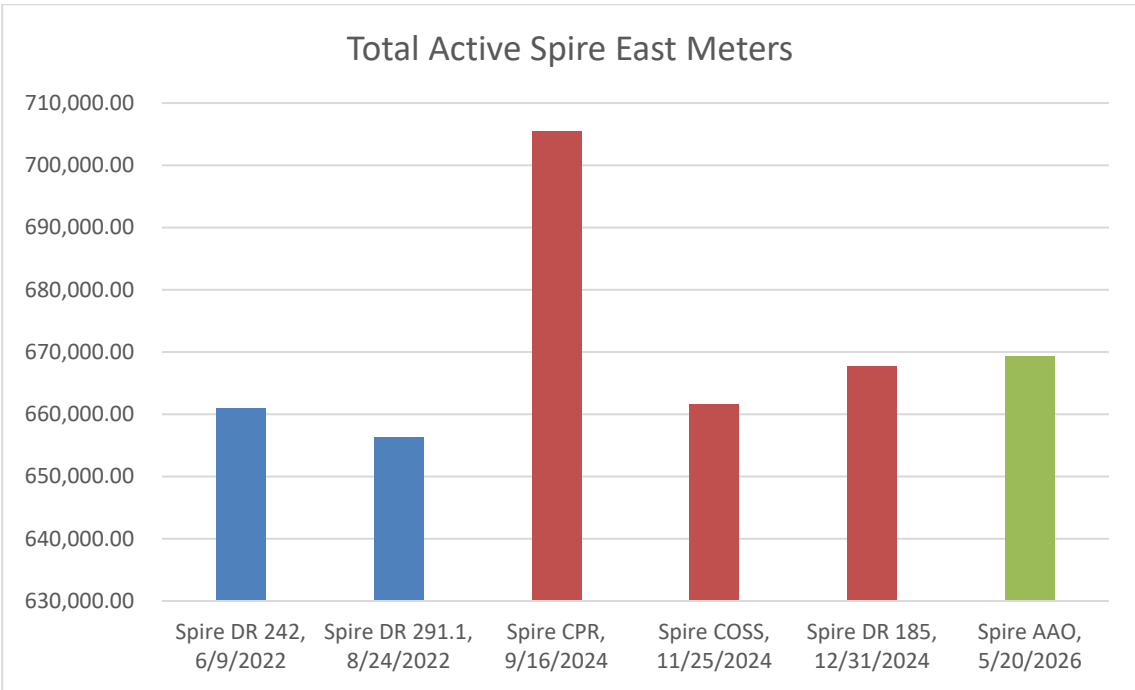
The high number of estimated bills is a concern in and of itself. Staff will further discuss the estimated bills' impact on weather normalization and revenue later in this testimony.

Q. Your final concern was Spire's Missouri's CPR Audit?

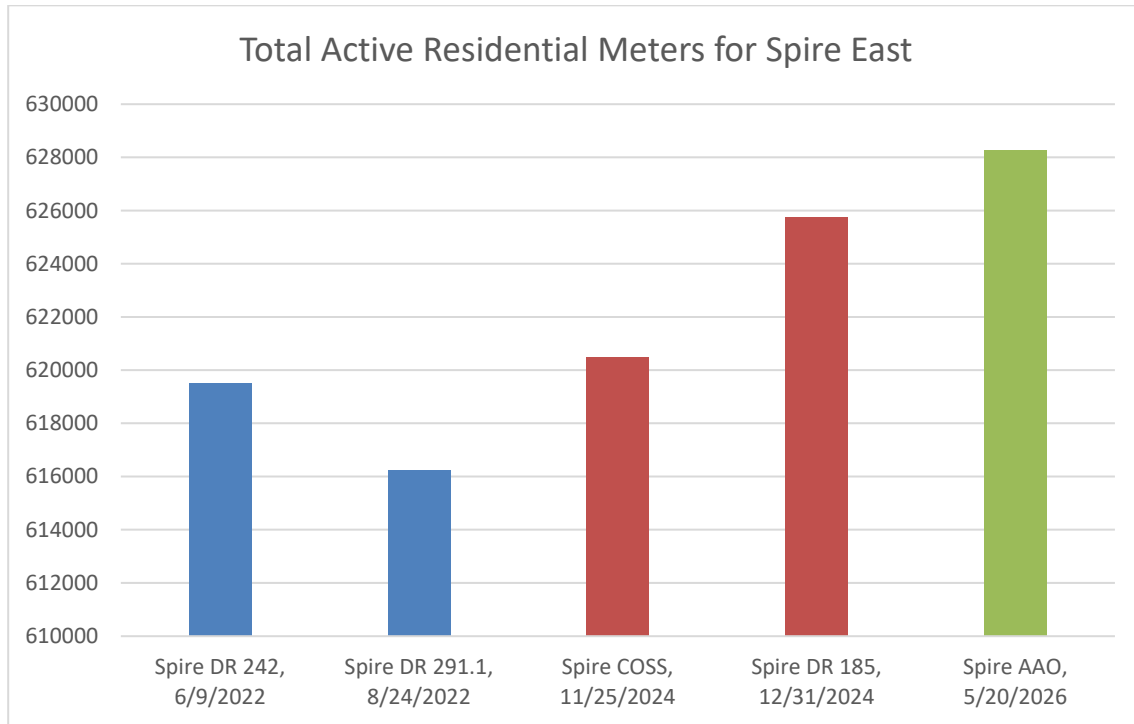
A. Yes. Spire Missouri's third-party CPR Audit that was finalized in February 2025 validated Staff's concerns related to meter tracking and counts. Spire Missouri summarized the CPR Audit findings, recommendations, and action plans, and the implementation of, or plan to implement, the recommendations and action plans in the most recent rate case initial filing on November 25, 2024. The Full and Unanimous Stipulation and Agreement filed on August 4, 2025, included a Stipulation related to implementation of the recommendations and actions provided by the

1 third-party auditor and Spire Missouri providing a detailed roadmap of its process
2 improvements. The results of this CPR Audit were not surprising to Staff given the
3 inconsistencies of meter types and counts provided by Spire Missouri over the years;
4 however, Staff was very surprised at the total number of active meters reported in the
5 CPR Audit compared to data provided to Staff by Spire Missouri (See Graph 2). Staff also
6 compared reported meter counts over the years for the Spire East Residential class (see
7 Graph 3).

8 Graph 2: Active meter counts for all Spire East customer classes



Graph 3: Active meter counts for Spire East Residential customers



Q. Could the estimated bills, delayed transfer or back-billing issues have impacted Revenue and Adjustment calculations during the GR-2025-0107 rate case?

A. Yes. Staff calculated revenues with the data provided to Staff from Spire Missouri in the form of monthly revenue summaries that are based on billing for the month that would have included all back-billed customer numbers and usage from prior months in the month that the bill was generated. Therefore, usage may have been over-stated or under-stated for each billing cycle and month during the test year. The relationship between customer usage and weather is only as accurate as the data recorded and provided as usage during the specified billing cycle dates each month. Staff recommended that Spire minimize and track back-billing/delayed transfers

1 at the billing cycle level so that data utilized for Weather Normalization is more accurate
2 in future cases.⁷

3 Q. Has Staff identified additional impacts to Revenue and Adjustment
4 calculations during this AAO case?

5 A. Yes. Spire Missouri's response to Staff DR 35 disclosed that it had
6 approximately 50,000 cycle changes in the summer of 2022 and 75,000 in the summer of
7 2024. Coincidentally, both of these large customer cycle changes occurred in the test
8 years of the past two (2) rate cases.

9 Q. Why is the accuracy of the data provided during a rate case important?

10 A. The monthly revenue summary files provided by Spire Missouri for
11 customer numbers and usage are based on the date the bill was generated for collection
12 of revenue, not necessarily when the gas was used by the customer. Due to reporting of
13 billing cycles based on day billed rather than a usage cycle with actual start and end
14 meter read dates, the monthly revenue summary data does not accurately reflect
15 customer usage during the reported billing cycle timeframes provided by Spire Missouri
16 because of back-billing, billing system errors, meter reading errors, estimated bills, and
17 any other potential issues causing delayed billing. Therefore, weather normalization,
18 billing determinants, and normalized revenue calculations utilized for setting factors
19 needed for the WNAR, as well as the WNAR itself, are only as accurate as the summarized
20 revenue data provided by Spire Missouri.

⁷ GR-2025-0107, Reynolds Direct Testimony.

1 Q. But wouldn't all utilities experience these issues to some extent?

2 A. Yes. All utilities have the potential to experience issues with data reporting.
3 However, Spire Missouri's issues are more pronounced and impactful because of the
4 large number of customers with multiple different billing issues resulting in less than
5 ten (10) percent of customers' actual billing cycles to match the reported start and
6 end meter read dates. Examples of this compounding effect will be discussed later in
7 this testimony.

8 Q. If Staff knew there were so many problems with Spire's data, why was
9 it used?

10 A. Staff cannot correct Spire's representation of their data. Staff can ask
11 questions for understanding and do the best that they can with what has been provided.
12 Only the utility possesses the means to present accurate data. Staff was unable to
13 complete a Class Cost of Service for Spire Missouri during rate case GR-2022-0179 due
14 to missing and inaccurate data, which was the reasoning for the third-party CPR Audit.

15 **WEATHER NORMALIZATION**

16 Q. Mr. Yonce addresses weather normalization at pages 9-11 of his direct
17 testimony. How is weather related to gas usage?

18 A. Although natural gas can be used by multiple home appliances, such as
19 ovens, clothes dryers, and water heaters, the primary use for natural gas in Missouri is
20 space heating. Space heating use is heavily dependent on weather conditions. In order
21 to establish base rates, a 30-year normal weather is used. Abnormal weather conditions,
22 such as winter storms or periods of warmer-than-usual temperatures, have predictable

1 and sometimes profound impacts on natural gas usage. Therefore, test year gas usage
2 and revenue need to be adjusted to “normal” weather so that rates will be designed on
3 the basis of normal weather rather than any anomalous weather that occurred during the
4 test year.

5 Q. What weather data is needed to calculate this adjustment?

6 A. Weather data consists of actual daily weather and calculated normal
7 weather, including heating degree days (“HDD”)⁸ that coincide with Spire Missouri’s test
8 year. Staff’s weather normalization adjustment relied on actual and 30-year normal
9 weather data from St. Louis Lambert International Airport (“STL”) and Kansas City
10 International Airport (“MCI”). These different regional weather data sets were utilized due
11 to their approximate location to Spire Missouri’s gas customer base and reliability of the
12 weather stations. Weather data from STL was used for the service territories of
13 Spire East, and MCI was used for the service territories of Spire West.

14 Q. What is weather normalization?

15 A. Weather normalization is the process of adjusting energy consumption to
16 account for the impact of weather during the test year of a rate case. This process
17 reduces the influence of abnormal weather from the test year in order to provide a more
18 accurate representation of “normal” energy usage, by evaluating weather over a period
19 of many years. Since the primary use of natural gas is for space heating, the level of
20 natural gas sales is dependent upon weather conditions. It is important to remove the

⁸ HDDs are based on the difference of the mean daily temperature (“MDT”) from a comfort level of 65°F. HDDs are calculated as the difference between 65°F and the MDT when the MDT is below 65°F and equal to zero when the MDT is above 65°F.

1 influence of abnormal weather from the test year in order to provide a more accurate
2 representation of “normal” natural gas usage. For example, if anticipated natural gas
3 sales are overstated because the weather in the test period was colder than normal, then
4 Spire Missouri may under-recover its revenue requirement. On the flip side, if anticipated
5 natural gas sales are understated because the weather in the test period was warmer
6 than normal, then Spire Missouri may over-recover its revenue requirement.

7 Q. Could Spire Missouri’s billing issues have an impact to weather
8 normalization like deviations in weather stated above?

9 A. Yes, this could cause several issues that would impact recovery of its
10 revenue requirement because billing determinants could be set too high or too low,
11 including:

- 12 • Overstatement or understatement of customer numbers;
- 13 • Overstatement or understatement of usage;
- 14 • A mismatch between actual HDDs and reported HDDs due to the
15 difference in actual billing cycles and billed dates, NBCs, and
16 billing delays.

17 Q. How did Staff calculate weather normalized sales in the last rate case?

18 A. Staff’s weather normalized adjustments of natural gas sales account for
19 deviations from what are considered normal weather conditions that occurred during the
20 test year. Normal weather conditions are at or near the average climatological value over
21 a certain period. Staff adjusted monthly natural gas volumes to normal by first
22 consolidating non-billing and weekend billing cycle data with the standard 18 billing cycle

1 data so that all energy use and customer counts were accounted for in its analyses.
2 Then, Staff adjusted the annual number of days for each billing cycle to 365, which
3 adjusts for the Leap Day within this test year. Staff then calculated the average use per
4 customer per day for each of the twelve months ending December 2024 based on the
5 number of customers, usage, and HDDs per billing cycle per month for Spire Missouri's
6 classes traditionally impacted by weather, Residential, Small General Service, and
7 Large General Service rate classes. After these adjustments, the difference between
8 normal and actual HDDs were calculated for each billing cycle with a specified start and
9 end date, and those differences were multiplied by the estimate rendered from a
10 regression analysis to determine the change in usage for each billing cycle due to
11 abnormal weather.

12 As stated by David A. Yonce on page 9, lines 8-9, of his direct testimony, the
13 methodology utilized by Spire Missouri, Staff, and intervenors during the last rate case
14 did not change from prior rate cases.

15 Q. Why does Staff utilize billing cycle data rather than monthly data?

16 A. The variation in weather from the beginning of a month to the end of a
17 month can be significant, especially in seasonal transition months. Therefore, Staff
18 prefers to utilize the shortest time period of data provided by a utility to complete weather
19 normalization. The shortest timeframe of data provided by Spire Missouri is billing cycles.

20 Q. What is a typical billing cycle?

21 A. For Spire Missouri, customers are divided up over 18 separate billing cycles
22 within a billing month. For example, a percentage of the Spire Missouri's customers are

1 billed on the 1st of the month, which is the 1st billing cycle, and another percentage of
2 customers are billed on another day of the month. Billing cycles are used to spread out
3 the number of meters read and bills issued on any specific day of the month. Ideally, the
4 same customers should be billed on the same billing cycle day each month. Each billing
5 cycle or normal usage period shall not be less than twenty-six (26) or more than thirty-five
6 (35) days of usage for each customer.⁹ Spire Missouri provides Staff the established
7 billing periods, start and stop meter read dates. Spire Missouri utilizes cyclical billing
8 which implies that customers receive bills on or about the same day of each billing
9 period. Any issues that result in a change of nine (9) or more days to a billing cycle
10 requires notice to the affected customer.¹⁰ The importance of consistent cyclical
11 customer billing and days of a billing cycle will be discussed in greater detail later in this
12 testimony.

13 Q. How is this related to the WNAR?

14 A. The WNAR utilizes the billing determinants set during the rate case and the
15 coefficient from the regression analysis representing the relationship between daily
16 usage per customer in gas per ccf to the daily HDDs. Therefore, the customer numbers
17 and usage reported for each billing cycle in a rate case determine the outcome of the
18 WNAR.

19 Q. Please describe the regression analysis for weather normalization.

⁹ 20 CSR 4240-13.015(1)(C).

¹⁰ 20 CSR 4240-13.020(6).

1 A. The regression equation develops quantitative measures that describe the
2 relationship between daily usage per customer in gas per ccf to the daily HDDs.
3 The regression equation estimates a change in the daily natural gas usage per customer
4 whenever the daily average weather changes by an HDD. These values can then be used
5 to adjust each class's monthly usage for normal weather conditions.

6 Q. How long has Spire Missouri had a WNAR?

7 A. The Commission first approved a Weather Normalization Adjustment
8 Rider ("WNAR") for Spire in Case Nos. GR-2018-0215 and GR-2018-0216, effective
9 April 19, 2018. Spire Missouri's current WNAR is described in its tariff on sheet nos. 13
10 through 13.8.

11 Q. Has Spire Missouri provided monthly summary data based on billing for
12 customer numbers and usage to Staff for rate cases?

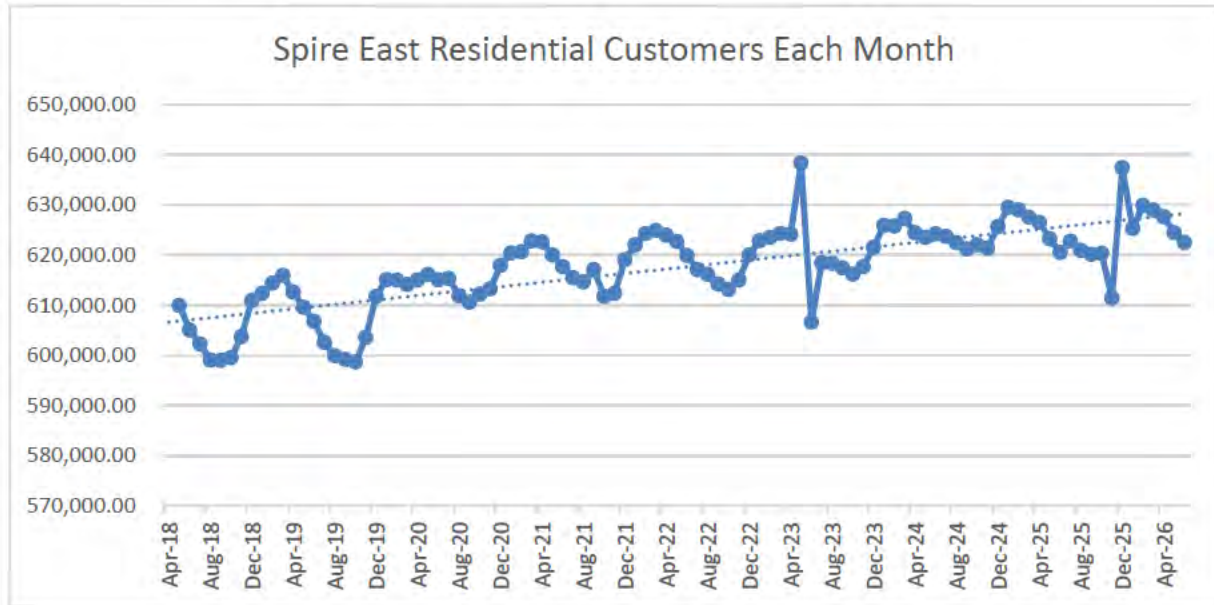
13 A. Yes, as far as I am aware. Looking back at past rate cases, Spire Missouri
14 has regularly provided the monthly summary data files.

15 Q. Has Staff noticed changes or inconsistencies in the monthly summary data
16 since the implementation of a WNAR?

17 A. Yes. Staff looked at monthly trends of customer numbers and usage during
18 the last rate case for annualization, and the change in customer numbers from month to
19 month. Graph 4 shows inconsistency with the expected gain or loss of customers based
20 on seasonal change. Inconsistencies due to potential billing issues were most
21 noticeable starting the summer of 2023 for Spire East, which happens to coincide with

the switch to AMI meters and van reading routes.¹¹ Staff also notes the inconsistencies for November 2025 through about February 2026, which suggests extensive billing issues during the timeframe in question that this case is referring to revenue losses.

Graph 4: Spire East Residential Customers Reported on Monthly Revenue Summaries



SPIRE MISSOURI'S BILLING CYCLES

Q. You previously raised concerns about Spire's billing cycles. Did Mr. Yonce address billing cycles in his direct testimony?

A. No.

Q. Can you provide more detail about these billing cycles?

A. Yes. Spire Missouri provides set billing cycle dates each year that consist of month to month start and end meter read dates for each of the 18 billing cycles

¹¹ Spire Missouri's response to Staff DR 291 in GR-2025-0107.

1 such as found in DR 168 in GR-2025-0107. However, NBC and weekend billing cycles, as
2 listed in the monthly revenue summary files, do not have set start and end meter read
3 dates provided.¹²

4 Customer level data provided for the first time during this case revealed actual
5 start and end meter read dates but also introduced Spire Missouri's use of Always Open
6 Billing Cycles ("ALOP") for inactive accounts, customer bills lacking a listed billing cycle
7 (blank) if manually issued due to a system error,¹³ and an A05 billing cycle, which was
8 explained to be a mistakenly used designation associated with Spire's customers in
9 Alabama,¹⁴ in addition to the typical 18 billing cycles reported by Spire Missouri.¹⁵
10 These files lacked the use of NBC and Weekend billing cycle designations. The total
11 customer numbers and usage in the different cycles did not match between these
12 customer level files and the monthly revenue summary files.

13 Q. What did Staff find in its analysis of the monthly revenue summary file
14 billing cycles?

15 A. Analyses of Spire Missouri's monthly revenue summary files for billing
16 cycle level data shows great fluctuation in the number of customers in each billing cycle
17 from month to month (See Graph 5 below and Schedule MJR-r4). For Spire East,
18 residential customer numbers were relatively consistent month to month until around
19 August 2021, with fluctuation until around February 2022. Spire Missouri began

¹² Spire Missouri's response to Staff DR 33 in GU-2026-0225.

¹³ Spire Missouri email on June 26, 2026.

¹⁴ Spire Missouri email on June 3, 2026.

¹⁵ Spire Missouri's response to Staff DR 60 in GU-2026-0225.

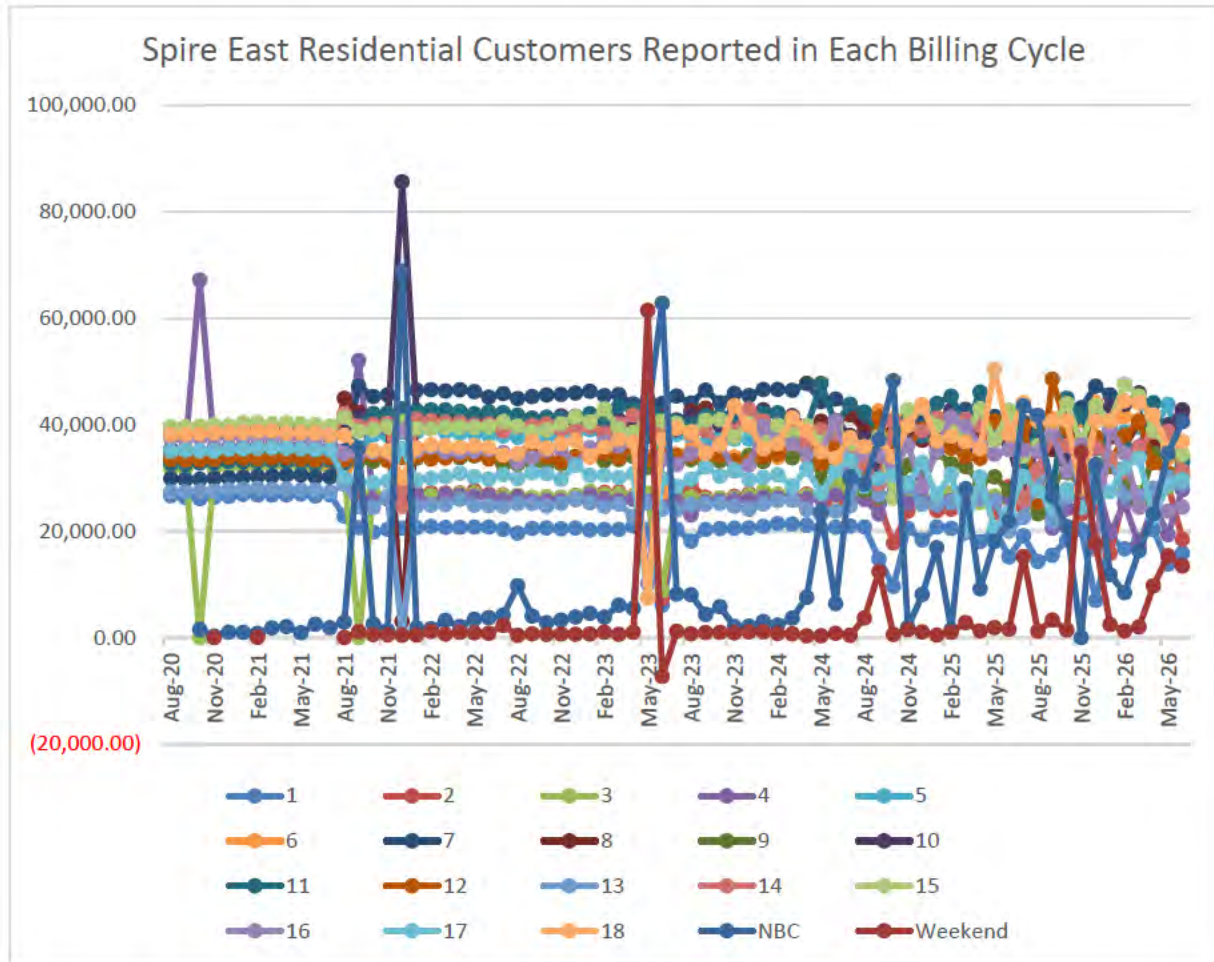
1 consistently utilizing weekend billing cycles beginning in August 2021. The timing of this
2 fluctuation in customers and usage per billing cycle consistent use of weekend billing
3 cycles is important because the test year for rate case GR-2022-0179 was June 2021
4 through May 2022. Therefore, inconsistent billing cycle data was utilized in weather
5 normalization and in determining the relationship between weather and gas usage for
6 WNAR filings.

7 Great fluctuation in customer numbers again occurs around May to June 2023
8 with month-to-month consistency becoming less predictable after this point. This was
9 around the time that Spire Missouri began replacing the ** [REDACTED]
10 [REDACTED] **¹⁶ which required the use of vans driving
11 to collect meter data and a change from the third-party software analyzing the meter
12 data. These routes are not set routes but are “dynamic” with new routes mapped and
13 provided daily to drivers.¹⁷ The test year for the GR-2025-0107 rate case was January 1,
14 2024 to December 31, 2024. Therefore, the billing cycle data utilized for the most
15 recent weather normalization and prediction of usage based on weather already
16 lacked consistency with an increased use of NBCs and weekend billing cycles.
17 The month-to-month billing cycles became even more variable around the October 2025
18 effective date of the current tariff.

¹⁶ Spire Missouri’s supplemental response to Staff DR 301 in GR-2022-0179.

¹⁷ Spire Missouri’s response to Staff DR 149 in GR-2025-0107.

Graph 5: Spire East Residential Customers Reported on Monthly Revenue
Summary Files per Billing Cycle



Q. Has Spire Missouri provided some explanation for the inconsistencies?

A. Yes. Staff had a call with Spire Missouri on May 18, 2026, to discuss daily gas use files that Spire was working on to provide to Staff in preparation for Spire Missouri's next rate case. The daily use file shared and discussed during this call was for Spire West for the months of January 2026 through mid-March and was separated by rate class. Staff followed up this meeting with DR 63 requesting daily use files for Spire East. Despite Spire Missouri presenting a graph of daily use compared to daily HDDs for Spire East during the technical conference on May 12, 2026, Spire Missouri responded to

1 this DR on June 10, 2026, that it is still working on the process and validation but will
2 provide the data when available. Spire Missouri has not provided this requested data
3 prior to the submission of this testimony.

4 During the May 18, 2026 call, discussion moved to the monthly revenue summary
5 files and billing cycles. The billing cycles on the monthly revenue summaries are based
6 solely on the day that the bill is generated, which may or may not be based on the dates
7 of actual gas usage matching the cycle period.¹⁸ Staff was aware of this for back-billing,
8 as was discussed in the most recent rate case. However, Staff was informed that any bill
9 flagged or requiring manual review, such as, but not limited to, estimated bills, rebills, or
10 corrected bills, would be included in a later billing cycle based on the day that the bill is
11 generated, which could be several billing cycles later or fall into an NBC or weekend
12 billing cycle.¹⁹

13 Q. Why is the use of Spire Missouri's monthly revenue summary files with
14 delayed billing having such an impact on the WNAR?

15 A. Again, weather normalization during a rate case and WNAR filings are only
16 as accurate as the monthly summarized revenue data provided by Spire Missouri.
17 Weather normalization and the WNAR were not meant to correct for billing issues and
18 cannot overcome data inaccuracy problems.

19 Q. In his direct testimony in this case, on page 9, lines 8-9, Mr. Yonce stated
20 the methodology utilized by Spire Missouri, Staff, and intervenors during the last rate case

¹⁸ Spire Missouri's response to Staff DR 39 in GU-2026-0225.

¹⁹ Spire Missouri's responses to Staff DR 33.1, DR 39, and DR 61 in GU-2026-0225.

1 did not change from prior rate cases. He goes on to claim on page 9, lines 13-14, that
2 these methodologies failed due to the use of historical weather and usage patterns with
3 greater emphasis on page 10, line 8, on increased climate variability and extreme
4 temperature events deviating from historical weather trends. Are there other variables
5 that have impacted the methodologies?

6 A. As has been described throughout this testimony and is shown in Graph 5,
7 Spire Missouri's overall billing process has changed resulting in a number of issues.
8 These issues have created an end result of fluctuations in customer numbers and usage
9 in each billing cycle month to month. All in all, Spire Missouri's monthly revenue
10 summary files do not reflect historic usage patterns in relation to weather.

11 Q. Did Staff consider climate variability and extreme temperature events
12 during January 2026?

13 A. Yes. Staff looked at the percentage change in HDDs from actual ("AHDD")
14 and normal ("NHDD") for each billing cycle in the billing months November 2025 through
15 February 2026 (See Confidential Schedule MJR-r5). Of the four (4) months reviewed,
16 November 2025 had the largest percentage change in all billing cycles, yet November
17 revenue is not the month shown to have been impacted the greatest.

18 Q. On page 8, line 6 of his direct testimony Mr. Yonce claims that this
19 "extraordinary" event with such under recovery "could not be reasonably expected to
20 recur." Does Staff agree with this assertion?

21 A. No. If Spire Missouri believes that this under-recovery is caused by extreme
22 weather and weather patterns are becoming more variable with more extreme weather,

1 then extreme weather can occur again at any time and impact revenue with or without the
2 presence of a weather normalization mechanism.

3 Q. If Staff knew the monthly revenue summaries of data and erratic billing
4 cycles could cause such problems with the function of the WNAR, why did Staff not raise
5 these concerns sooner?

6 A. As stated above, Staff has been raising concerns with Spire Missouri's data
7 since at least 2022. However, Staff was not fully aware of the extent or impact of Spire's
8 billing issues until this case was filed. Because of the issue presented by Spire, Staff has
9 spent many hours reviewing and analyzing billing cycle level data and customer level data
10 provided by Spire Missouri for the first time during this case. As discussed throughout
11 this testimony, the extent of Spire Missouri's data issues, how they could compound
12 upon each other, and how some were masked by how Spire has previously presented its
13 data, was not identified until recently. Staff could not have reasonably anticipated that
14 the WNAR would fail to function properly without this deep forensic investigation.

15 **SPIRE MISSOURI'S RESIDENTIAL CUSTOMER LEVEL BILLING CYCLE DATA**

16 Q. What did Staff find in its analyses of the customer level billing cycle data
17 provided by Spire Missouri for November 2025, December 2025, January 2026, and
18 February 2026?

19 A. Due to time constraints, Staff only analyzed Spire East customer level files
20 for this testimony. Staff looked at many metrics such as meter types and numbers, meter
21 read dates, billing cycle metrics, comparison to monthly revenue summary files, etc.
22 Details of each finding are shared below.

1 Q. What were Staff's findings related to meters in the customer level data?

2 A. According to DRs and other communication with Spire Missouri,
3 Itron ultrasonic meters have become the standard meter of use for residential
4 customers.²⁰ However, the majority of meters listed for Spire East residential customers
5 in the customer level data provided in response to DR 60 and DR 60.1 are listed as
6 ** [REDACTED] **, and the number of other meter types are increasing rather than
7 decreasing as expected with replacement, as shown below in Table 2. According to
8 Spire Missouri's response to Staff's DR 31.1 in GU-2026-0225, the only meters used are
9 ** [REDACTED] ** meters.

10 Table 2: Spire East Residential Meters reported on customer level data

11 **



12 **

13 Q. What were Staff's findings related to meter read start dates in the customer
14 level data?

²⁰ Spire Missouri's response to Staff DR 301 in GR-2022-0179.

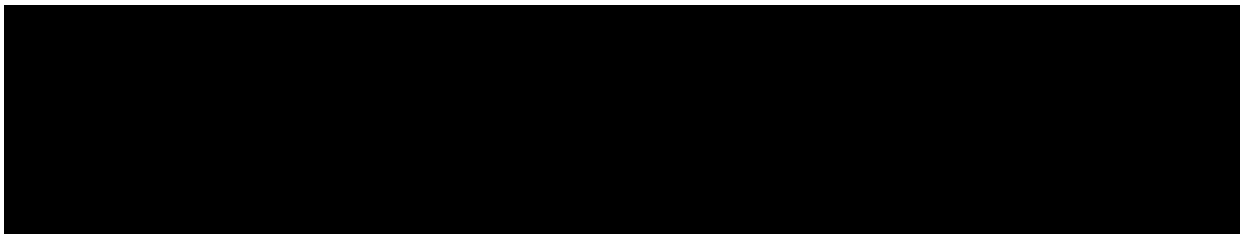
1 A. The customer level data also revealed that billing in all months reviewed
2 included meter read start dates with usage from multiple prior years and months as
3 far back as 2019 for November 2025 billing, 2021 for December 2025 billing, 2014 for
4 January 2026 billing and 2022 for February 2026 billing as shown in Table 1 of Confidential
5 Schedule MJR-r6. Such presence of customers and usage from prior months and years
6 being billed in each of these months suggests that back-billing, rebilling, or delayed billing
7 is still an issue of concern regardless of reasoning provided by Spire Missouri.

8 Q. What were Staff's findings related to billing cycles in the customer level
9 data?

10 A. The customer level data also provided insight into how many bills fall
11 outside of the typical billing cycles, how many bills match the provided start and end
12 meter read dates provided for each billing cycle, and how many customer billing cycles
13 are shorter, less than 26 days, or longer, more than 35 days, than specified in regulations
14 as discussed above and as shown below in Confidential Tables 4 and 5.²¹

15 Table 4: Number of Bills Reported for Spire East Residential (DR 60 and DR 60.1)

16 **



17 **

²¹ 20 CSR 4240-13.015(1)(C).

Table 5: Spire East Residential Billing Cycle Analysis (DR 60 and DR 60.1)

**



**

Q. What were Staff's findings in comparing the monthly customer level data provided in DRs 60 and 60.1 to the monthly revenue summary files?

A. Staff compared the customer level monthly data to the monthly revenue summary data and determined that the number of bills and usage did not match. Please see Confidential Schedule MJR-r7 for a comparison of customer level data from DRs 60 and 60.1 and the monthly revenue summary files. Staff expected the bill numbers each month to be lower in the monthly revenue summary data than the customer level data due to prorating the customer charge for customers leaving in the middle of a bill cycle,²² but that was not the case for November 2025, which gained approximately 25,200 bills. Staff expected the monthly usage to remain the same across both datasets, but that was also not the case for any month reviewed. November 2025 and December 2025 had much higher usage reported in the monthly summary files than in the customer level data. However, January 2026 and February 2026 both had lower

²² Spire Missouri's response to Staff DR 36 in GU-2026-0225.

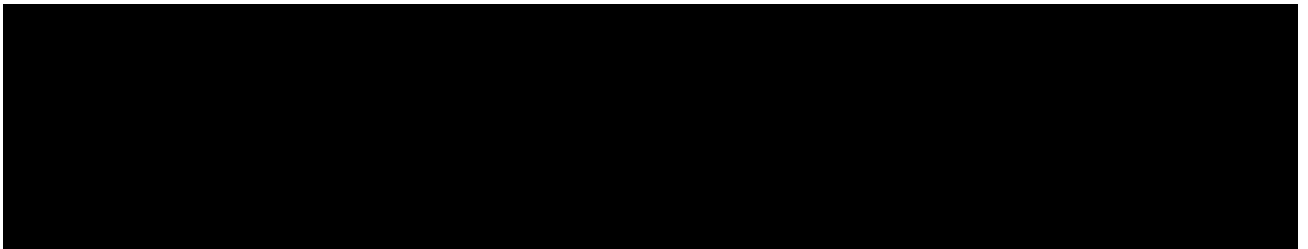
1 usage in the monthly revenue summary files. Of the months reviewed, January 2026 had
2 the largest difference in number of bills and usage in the comparison.

3 Q. What were Staff's findings related to HDDs in the customer level data?

4 A. The customer level data with start and end meter read dates also allowed
5 Staff to look at and compare actual HDDs to calculated HDDs utilized in WNAR filings.
6 Because the ALOP and (blank) billing cycles had start dates from multiple past years
7 requiring weather data files approved in different rate cases, Staff only calculated
8 HDDs for the bills listed in the 18 billing cycles (See Confidential Table 6 below and
9 Confidential Schedule MJR-r5 showing billing cycle calculations). Out of the four (4)
10 months reviewed, January 2026 had the closest actual-to-calculated HDD count.
11 However, January also had the largest number, over five (5) percent of bills, of ALOP
12 billing cycles for inactive accounts, and (blank) billing cycles due to billing errors requiring
13 manual entry, that were not accounted for in the HDD counts due to spanning many prior
14 years and not being assigned to a specific billing cycle in order to do a calculated HDD.

15 Table 6: Actual HDDs Compared to Calculated HDDs for Customer Level Data

16 **



17 **

18 Q. Can you please explain the significance of the difference between the
19 actual and calculated HDDs?

1 A. HDDs are calculated using the HDDs for the days specific to the billing
2 cycle dates provided by Spire Missouri and multiplied by the number of customers or
3 bills in that billing cycle. The assumption in using this calculation is that majority of bills
4 would fit the start and end billing cycle exactly. This same methodology is utilized during
5 a rate case for weather normalization and for the WNAR. However, as shown in
6 Confidential Table 5 above, less than approximately ten (10) percent of bills match the
7 billing cycle exactly in the months reviewed. Of all the months reviewed, January 2026
8 had the lowest percentage of bills matching the cycles exactly at less than five (5)
9 percent. Such a low percentage of bills matching the bill cycles and such a high number
10 of customers can have a compounding effect. For example, if ninety-five (95) percent of
11 625,100 bills are off by one (1) HDD because the actual cycle was a day longer than the
12 reported billing cycle, that is 593,845 HDD not accounted for in calculations for every
13 HDD difference.

14 **METERS AND CAPABILITIES**

15 Q. Spire Missouri chose Itron ultrasonic meters as the standard meter of use
16 for residential customers for reasons such as being more accurate and having
17 capabilities such as continuous monitoring of usage, on demand reads, and remote
18 disconnect, to name a few.²³ Is it Staff's opinion that benefits described have been
19 utilized by Spire Missouri to the best of the capabilities of the updated meters?

²³ Spire Missouri's response to Staff DR 301 in GR-2022-0179.

1 A. No. The meter and measuring equipment capabilities, as described by
2 Spire Missouri in its response to Staff's DR 31.1 in GU-2026-0225, are not being utilized
3 to their full extent for billing purposes. All meter types are described by Spire Missouri as
4 collecting hourly usage data and storing this data for a minimum of ** [REDACTED]
5 [REDACTED] **. Except for ** [REDACTED] ** meters, Spire collects and stores daily usage
6 data, not hourly, from all meters. Although Spire Missouri collects and stores daily usage,
7 only monthly usage is shared with the billing system on the day that a meter is read²⁴
8 with usage calculated utilizing the current read and prior read²⁵ and meters are only read
9 eighteen (18) days a month.²⁶

10 Q. If Spire Missouri collects and stores daily usage, why are less than ten (10)
11 percent of all monthly bills listed in the customer level data provided by Spire in
12 response to Staff's DR 60 and DR 60.1 matching the start and end meter read dates of a
13 billing cycle?

14 A. That is a very good question that Staff is not able to answer given Staff's
15 understanding of the capabilities of Spire Missouri's meters and measurement devices.
16 Meters and measuring devices used by Spire Missouri have capabilities of storing,
17 at minimum, ** [REDACTED] ** worth of hourly and daily usage data being pulled and
18 stored by Spire Missouri once per month. It is Staff's opinion that a majority of meter read
19 dates for bills should match the billing cycles.

²⁴ Spire Missouri's response to Staff DR 33 in GU-2026-0225.

²⁵ Spire Missouri's response to Staff DR 30 in GU-2026-0225.

²⁶ Spire Missouri's response to Staff DR 30.1 in GU-2026-0225.

1 **CONCLUSION**

2 Q. Can you summarize Staff's position as it relates to Spire's stated failure to
3 collect adequate revenues?

4 A. Spire's choice to use erratic billing cycles, to rely on summarized billing
5 data rather than actual daily usage data from meters, its expansive use of estimated bills,
6 inaccurate customer counts, and other choices that result in inaccurate data in
7 presentation of its rate case and WNAR filings creates a situation where the normal tools
8 for revenue recovery are significantly impacted. Staff's position is that Spire should
9 reform its data management efforts and file a rate case.

10 Q. Is it Staff's position that Spire will collect its authorized level of revenues if
11 it enacts reforms to ensure data quality in its next rate case?

12 A. No, as there are too many variables involved. However, if utilized correctly
13 the WNAR should provide for the correct adjustment to address the weather and revenue
14 concerns brought by Spire Missouri in this case.

15 Q. It appears that Staff has invested a great deal of time and effort in trying to
16 determine why Spire's use of the WNAR is not working as intended. Can Spire Missouri
17 report data correctly in its next WNAR filing and get back on track?

18 A. No. This issue is much deeper than a WNAR filing and starts with Spire
19 Missouri improving meter inventory, meter tracking, meter reading, and data processing
20 procedures in order to improve overall efficiency and accuracy of billing prior to the next
21 rate case.²⁷

²⁷ Spire is required by item 26 of the *Full and Unanimous Stipulation and Agreement* approved by the Commission in GR-2025-0107 to continue implementation of the action plans from the third party auditor

1 Q. What is Staff's conclusion regarding Spire Missouri's January 2026 usage in
2 particular?

3 A. It is Staff's opinion given the many billing issues discussed previously in
4 my testimony and the use of Spire Missouri's monthly billing summary files for reasons
5 mentioned throughout this testimony that the January 2026 usage reported by Spire
6 Missouri does not accurately reflect actual usage during the January 2026 billing period.

7 Q. On page 6, lines 1-3 of his direct testimony, Mr. Yonce claims that Staff did
8 not conduct a thorough review and investigation of Spire Missouri's application and
9 request in making its initial recommendation. Do you agree with that assertion?

10 A. No. As discussed in Staff's Initial Recommendation, Spire's request for an
11 AAO is not appropriate from an accounting perspective, which does not require
12 significant analysis.

13 Q. On page 6, beginning on line 8 of his direct testimony, Mr. Yonce claims that
14 Staff "...demonstrate[s] a continued unwillingness to meaningfully examine the
15 circumstances and issue that lead to the request in this case." Do you agree with that
16 statement?

17 A. No. I believe I have cited multiple instances in this testimony that
18 demonstrate this assertion to be untrue. As I have discussed in this testimony, Staff has
19 invested an inordinate amount of time in trying to determine how revenue collection has
20 gone awry for Spire. Staff has raised concerns related to Spire Missouri's data for at least

regarding meter inventory and tracking. However, meter reading and data processing was not addressed
in this *Agreement*.

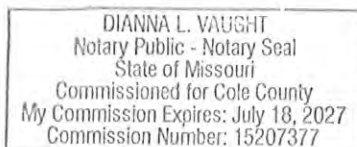
Rebuttal Testimony of
Melissa J. Reynolds

1 the past two rate cases, has spent many hours reviewing and analyzing data provided by
2 Spire Missouri for the first time during this case, and tried to work with Spire Missouri to
3 find solutions. Therefore, I would argue that Staff has conducted a very thorough
4 investigation.

5 Q. Does this conclude your rebuttal testimony?

6 A. Yes it does.

OF THE STATE OF MISSOURI



Melissa J. Reynolds

I serve as a Senior Research/Data Analyst for the Water, Sewer, Gas, & Steam Department, in the Industry Analysis Division of the Missouri Public Service Commission. I have been employed by the State of Missouri since 2011 and with the Commission since October 1, 2024. My duties as Senior Research/Data Analyst involve multiple aspects of the Commission's regulation of water, sewer, gas, and steam industries including case management, customer complaints, drafting and reviewing testimony, and working with the utilities to promote best practices in their provision of safe and adequate service at just and reasonable rates.

Educational Background and Work Experience

I have a Master of Science degree in Biology from Missouri State University in Springfield, Missouri. Prior to joining the Public Service Commission, I was employed by the Missouri Department of Health and Senior Services (DHSS) – Bureau of Environmental Epidemiology (BEE) from 2015 to 2024 as an Environmental Specialist, Senior Epidemiologist, and Program Manager over the Wastewater Surveillance Program, as well as being a member of the Radiological Emergency Response team. I started my state employment at the State Public Health Laboratory (SPHL) in 2011 as a Scientist where I continued to work part-time in the Newborn Screening Unit until January 2025. I also teach Human Anatomy and Physiology courses at State Fair Community College in Sedalia, MO. I have competence in environmental testing of drinking water, environmental inspections, and installation of on-site wastewater systems. I also have vast experience with grant writing and management.

Previous Testimony Before the Public Service Commission

Case Number	Company	Type of Testimony	Issue
GR-2024-0369	Ameren Missouri	Rebuttal, Surrebuttal/True-Up Direct	Revenue, Weather Normalization
GR-2025-0107	Spire Missouri	Direct, Rebuttal, Surrebuttal	Revenue, Billing Determinants, Weather Normalization, Growth

Recommendation/Memorandum

Case Number	Company	Issue
HT-2024-0296	Evergy Missouri West	Quarterly Cost Adjustment (QCA) 4 th quarter
HT-2025-0234	Vicinity Energy Kansas City	Adjustment to its PACC Tariff Rate
GO-2026-0001	Spire Missouri	Update Weather Normalization Adjustment Rider (WNAR) for Spire East and Spire West
GT-2026--0052	Liberty Utilities: Midstates Natural Gas	Weather Normalization Adjustment Rider (WNAR)
GT-2026-0053	Liberty Utilities: Empire District Gas	Weather Normalization Adjustment Rider (WNAR)

GT-2026-0055	Ameren Missouri	Weather Normalization Adjustment Rider (WNAR)
SA-2026-0125	Confluence Rivers Utility Operating Co., Inc. (Sewer)	Application for Certificate of Convenience and Necessity
SR-2026-0093	Timber Creek Sewer Co.	Small Rate Case

Case Management

Case Number	Company	Issue
GA-2026-0121	Spire Missouri	Application for Certificate of Convenience and Necessity
GO-2026-0122	Spire Missouri	Application for a Renewable Natural Gas Program

Spire Missouri
GR-2025-0107

Response to Data Request 0169

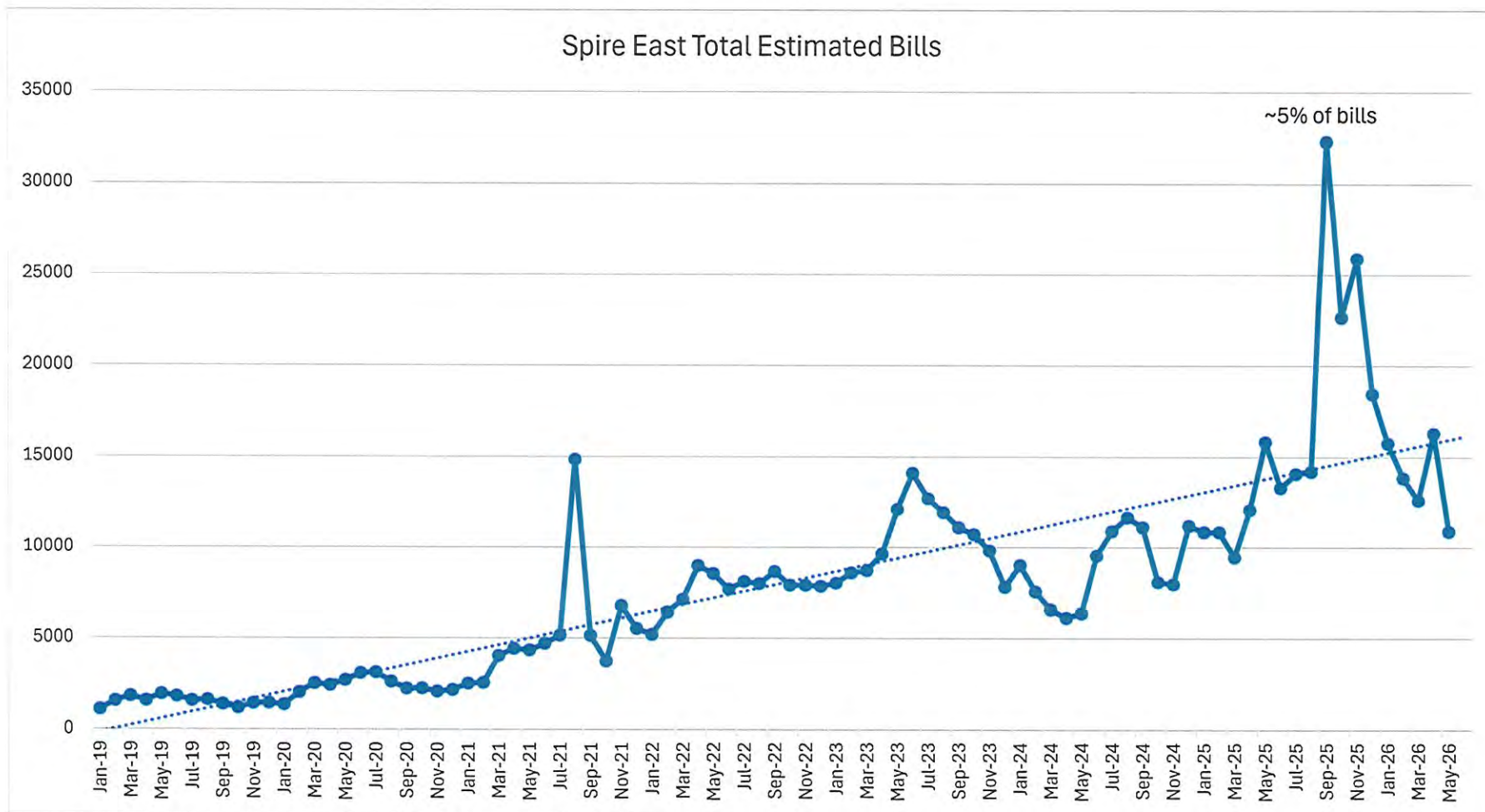
Question:

For Spire East, please provide all billed usage (ccf), customer charge counts, and customer numbers by rate schedule and billing cycle for thirteen months ending September 30, 2024, and update as billing information by billing cycle becomes available on a monthly basis by the first of each month. Please organize the data in Excel as follows: billing year and month (202401), billing cycle, number of customers, customer charge, total billed gas usage (ccf), first block and second block billed usage (ccf), rate schedule: Residential General Service (RG), Small General Service (SGS) and Large General Service (LGS). For Spire West, please provide all billed usage (ccf), customer charge counts, and customer numbers by rate schedule and billing cycle number for the thirteen months ending September 30, 2024, and update as billing information by billing cycle becomes available on a monthly basis by the first of each month. Please organize the data in Excel as follows: billing year and month (202401), billing cycle, number of customers, customer charge, total billed gas (ccf), rate schedule: Residential General Service (RG), Small General Service (SGS), Large General Service (LGS). Requested by: Michael Irwin (michael.irwin@psc.mo.gov)

Response:

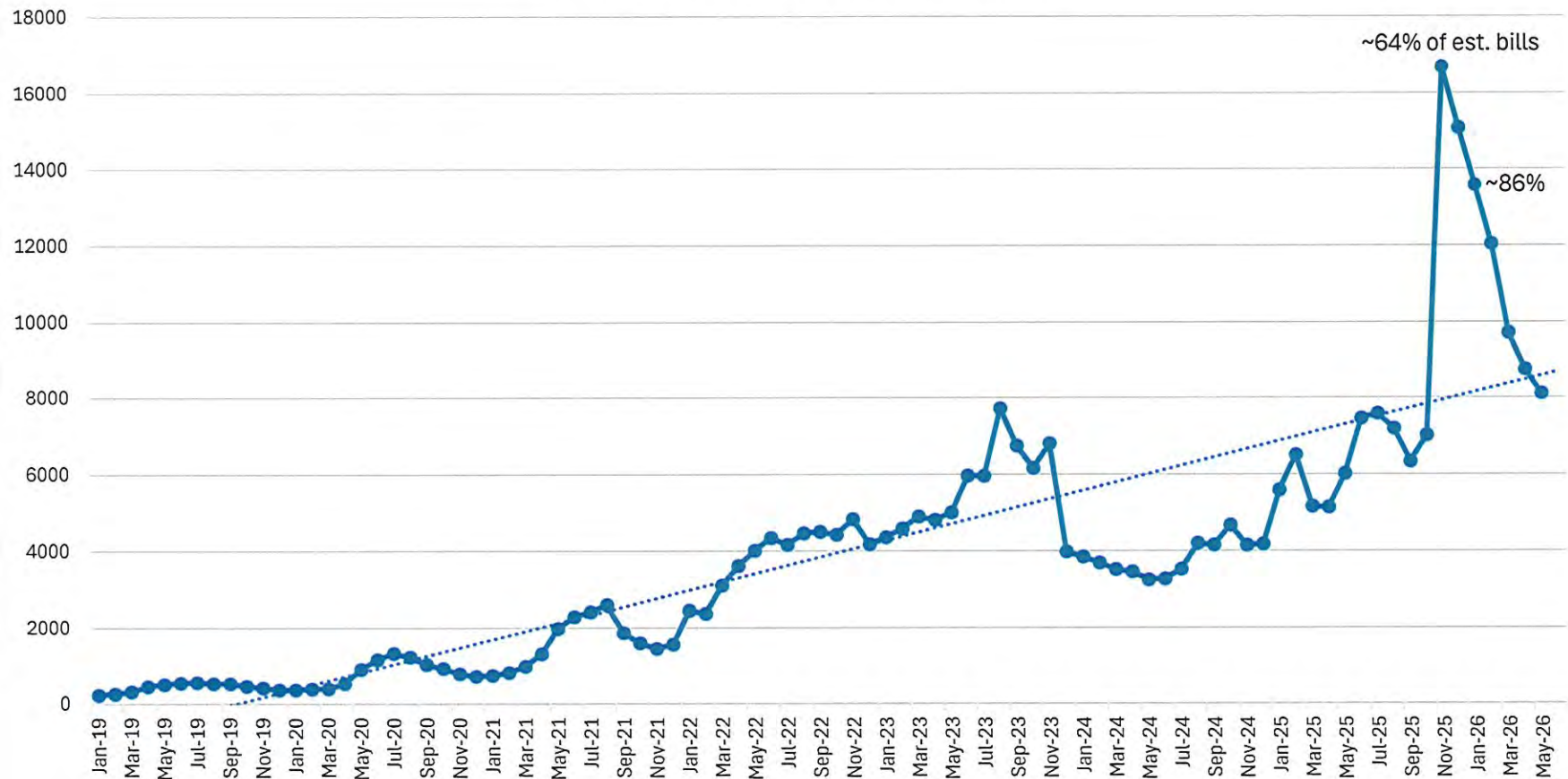
Please refer to the DR 0109 response for the Daily Revenue files for MO East and MO West. The Daily Revenue files are updated monthly and will be submitted as a supplemental response.

Signed by: Julie Johnson



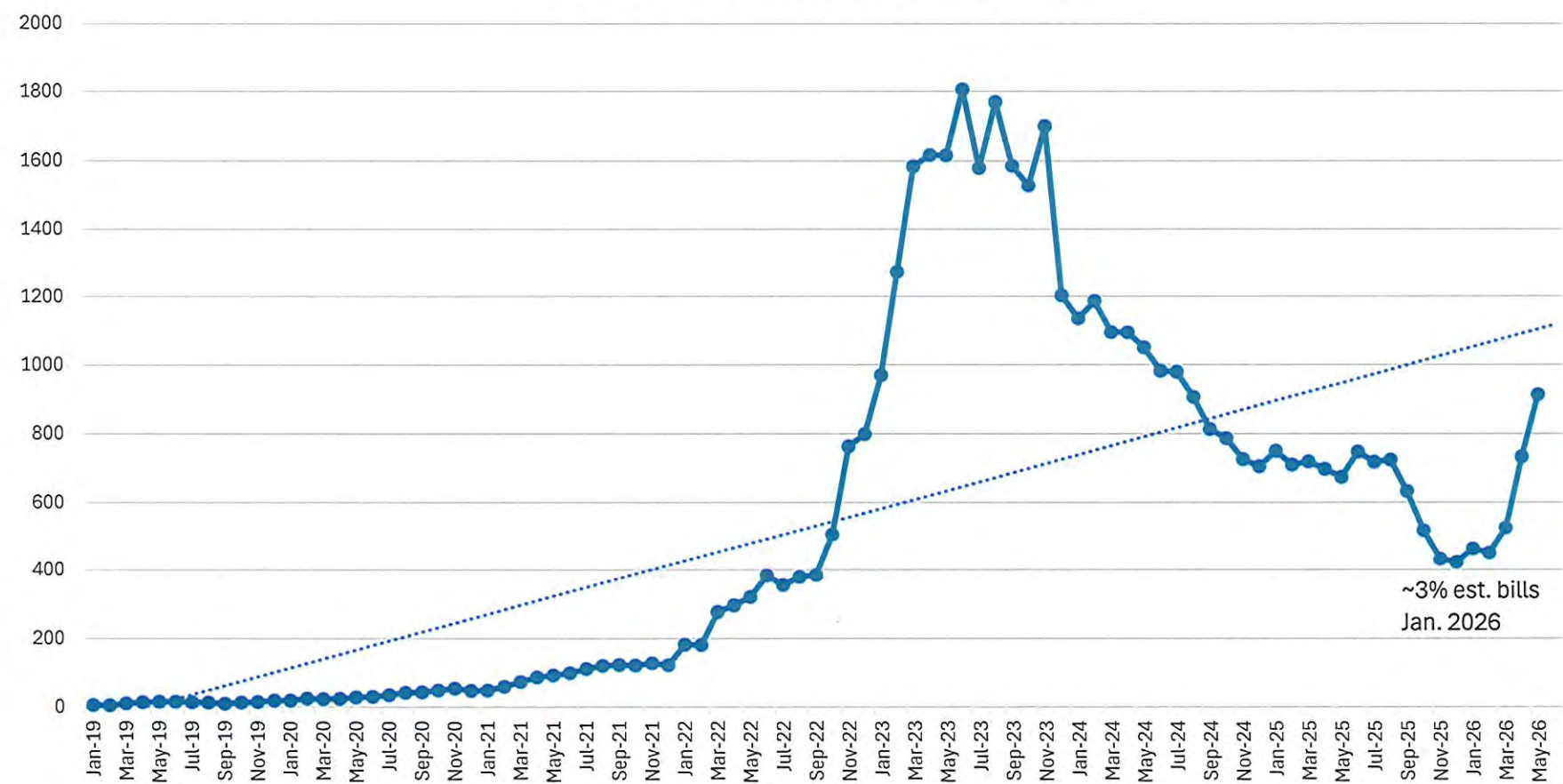
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Spire East >3 months of Estimated Bills



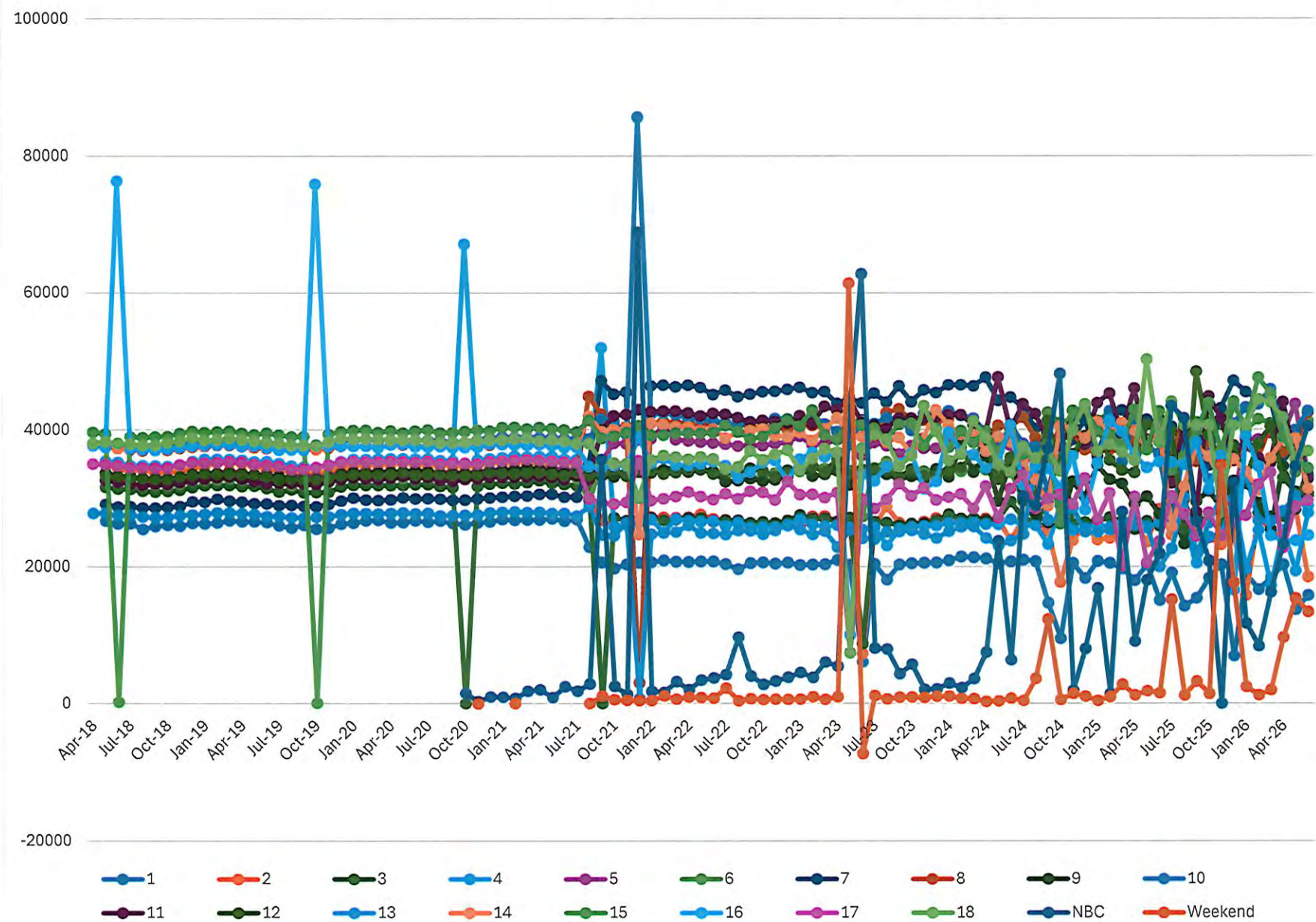
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Spire East >12 months of Estimated Bills

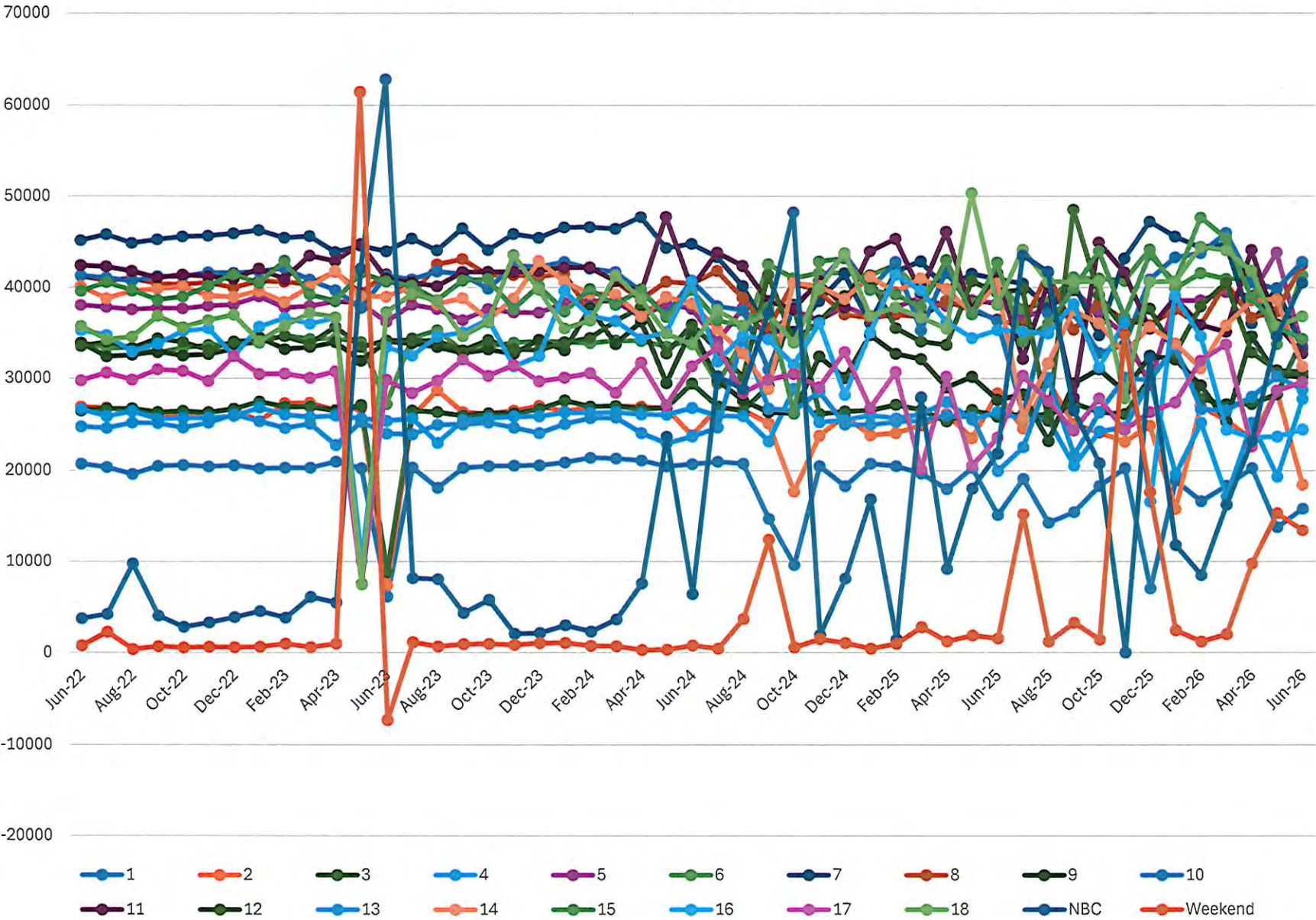


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Spire East Residential Customers Reported in Each Billing Cycle



Spire East Residential Customers Reported in Each Billing Cycle



Case No. GU-2026-0225

SCHEDULE MJR-r5

SCHEDULE MJR-r6

and

SCHEDULE MJR-r7

HAVE BEEN DEEMED

CONFIDENTIAL

IN ENTIRETY