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Witness: *Michael L. Stahlman*
Sponsoring Party: *MoPSC Staff*
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MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

TARIFF/RATE DESIGN DEPARTMENT

SURREBUTTAL TESTIMONY

OF

MICHAEL L. STAHLMAN

SPIRE MISSOURI INC., d/b/a SPIRE

**SPIRE EAST and SPIRE WEST
GENERAL RATE CASE**

CASE NO. GR-2021-0108

*Jefferson City, Missouri
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8 Q. Please state your name and business address.

9 A. My name is Michael L. Stahlman, and my business address is Missouri Public
10 Service Commission, P.O. Box 360, Jefferson City, Missouri, 65102.

11 Q. Are you the same Michael L. Stahlman that filed direct and rebuttal testimony in
12 this docket and authored portions of Staff's Cost of Service (COS) and Class Cost of Service
13 (CCOS) Reports?

14 A. Yes.

15 Q. What is the purpose of your surrebuttal testimony?

16 A. I will provide additional information concerning the new NOAA climatic normals
17 discussed in the rebuttal testimony of Spire's witness Alicia Mueller and respond to a few
18 questions and responses made in the rebuttal testimony of OPC witness Lena M. Mantle
19 concerning the Weather Normalization Adjustment Rider and Rate Normalization Adjustment.

20 **Surrebuttal of Alicia Mueller**

21 Q. Ms. Mueller provided some discussion on the new National Oceanic and
22 Atmospheric Administration "NOAA" climatic normals throughout her rebuttal testimony. Would
23 you like to provide some additional detail?

1 A. Yes. Generally I do not disagree with Ms. Mueller’s discussion, but want to
2 provide additional information so that the incorrect conclusions are not drawn. NOAA did release
3 its 1991-2020 climatic normals in May 2021. These published normals are not the same as the
4 normals used by Staff and Spire in this rate case for weather normalization. NOAA’s published
5 normals are a strict average of the weather on a given date; e.g. the normal high temperature of
6 January 1 is the average of all January 1 daily high temperatures from 1991 through 2020. This
7 results in the smoothing of the extreme temperatures since it is unlikely that the coldest days of
8 the year are consistently on the same calendar date. The rank method preserves these extremes by
9 averaging the coldest day of a given month irrespective of the calendar date. In order to develop
10 these normals Staff uses the serially-complete monthly temperature (“SCMT”) data series, which
11 is an intermediate product of NOAA’s process to develop new climatic normals.

12 Q. What was used as the 30-year period in this case?

13 A. Both Staff and the Company used the thirty-year period that began on
14 January 1, 1989 and ended on December 31, 2018.

15 Q. Ms. Mueller states, “Spire would like to work with Staff on this new data
16 set.”¹ How would using the new climatic normals information from NOAA impact this period for
17 this case?

18 A. Staff would not move the 30-year period forward since it is good academic practice
19 to keep the period under review (the test year, beginning October 1, 2019, and ending
20 September 30, 2020) separate from reference period (the 30-year period from January 1, 1989,
21 through December 31, 2018). However, NOAA would provide information about adjustments

¹ Rebuttal Testimony of Alicia Mueller, p. 4, l. 6.

1 that may have happened to the weather station since 2010. These adjustments, typically fractions
2 of a degree, are made to account for changes such as replacing the equipment or moving the
3 location of the weather station. Staff has not yet evaluated any adjustments to the stations in this
4 case. Additionally, the changes would likely affect both the historical period and the test period,
5 meaning that the actual impact on the resulting weather normalization process could largely cancel
6 out. However, Staff would be willing to have discussions with Spire.

7 **Surrebuttal of Lena M. Mantle**

8 Q. On page 13 of her rebuttal testimony, Ms. Mantle states that, “OPC is the only party
9 that has proposed a mechanism that accounts for weather and some conservation impacts on
10 revenues.” Do you agree?

11 A. No. Ms. Mantle makes this assertion without defining what OPC means by
12 “conservation,” and without providing any analysis justifying her claim that there are changes
13 other than weather or conservation within Staff’s alternative RNA defined rate blocks. At this
14 time, Staff is the only party that has adopted a definition of “conservation” in its testimony, which
15 was given in its CCoS Report. Furthermore, as discussed in my rebuttal testimony, it is not clear
16 whether continuing the WNAR would account for conservation or exacerbate the difference.
17 For instance, Ms. Mantle’s WNAR example provided in Figure 4, page 10 of her direct
18 testimony would actually exacerbate the impact of conservation if the direction of the weather
19 would reverse; i.e. the normal usage of 100 and 75 Ccf and actual usage of 120 and 90 Ccf on the
20 graph. In Ms. Mantle’s graph, the size of the WNAR adjustment is larger than the actual change
21 in usage under the conservation scenario. While this compensates the company for conservation
22 when the customer charged a positive WNAR charge, the company credits the customer with more
23 than the actual change in usage when the WNAR charge is negative.

1 Q. On page 22 of Ms. Mantle's Rebuttal Testimony, she says, "Computer programs
2 can be written that quickly do the matching of actual and normal heating degree days to each
3 billing cycle. This should have already been done with Spire's current WNAR." Has a computer
4 program been developed that does this?

5 A. Yes. During the course of GO-2019-0058 and GO-2019-0059, I developed and
6 provided Spire with an Excel program that does such. It requires the user to input the actual and
7 normal heating degree days, the meter read dates, and the number of customer charges, and will
8 provide the monthly adjustment both in terms of ccf/therms and in dollars.

9 Q. Does Spire utilize this program in its WNAR filings?

10 A. No. The typical excel files we receive from Spire are accounting entries that don't
11 show the daily weather or meter read dates. In order to check the weather, I look at the weather
12 values in the worksheets and see if I can come up with reasonable meter read dates for the bill
13 cycle and check that the actual and normal weather would have the same meter read dates.

14 Q. On page 23 of Ms. Mantle's Rebuttal Testimony, she states that the determination
15 of the ranked normal heating degree days is not a complicated process and a computer program
16 could perform this function once a year. Do you agree?

17 A. It depends. Spire has maintained that its accountants need to determine the WNAR
18 each month for booking purposes. However, the excel program that calculates the ranked normal
19 heating degree days is the same program that is used to rank normal heating degree days in the
20 course of a rate case. For the convenience of Spire, I have updated and provided this file to them
21 at the beginning of every month since the last rate case.

1 Q. Do you agree that it is unlikely for daily temperatures to not be recorded at St. Louis
2 Lambert International Airport and Kansas City International Airport Weather Stations?²

3 A. Yes. However, the Kirksville weather station was thought to be a fairly reliable
4 weather station that had recorded weather data for multiple decades³ until it recently stopped
5 recording daily temperatures.

6 Q. Does this conclude your testimony?

7 A. Yes it does.

² Rebuttal Testimony of Lena M. Mantle, page 28, ll. 13-17.

³ The temperature records for this station begin in 1893, but there are scattered throughout its historical record days and periods of missing data. The most recent long term period of not recording temperature occurred from March 1, 1915, through March 14, 1917. There have been other times where the station had been down for a complete month for maintenance or other issues, with 1973 being the most recent year with multiple months of missing data (January, February, April and September). Since that time, there have only been four months with completely missing data; August 1980, November 1982, July 1986, and March 1991.

