Exhibit No.:

Issue(s): MEEIA Demand Annualization,

Schedule SIL

Witness: J Luebbert Sponsoring Party: MoPSC Staff

Type of Exhibit: Surrebuttal and True-Up

Direct Testimony

Case Nos.: ER-2022-0129 and

ER-2022-0130

Date Testimony Prepared: August 16, 2022

MISSOURI PUBLIC SERVICE COMMISSION INDUSTRY ANALYSIS DIVISION TARIFF/RATE DESIGN DEPARTMENT

SURREBUTTAL / TRUE-UP DIRECT TESTIMONY

OF

J LUEBBERT

Evergy Metro, Inc., d/b/a Evergy Missouri Metro Case No. ER-2022-0129

Evergy Missouri West, Inc., d/b/a Evergy Missouri West Case No. ER-2022-0130

> Jefferson City, Missouri August 2022

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| 6 7 | | Evergy Missouri West, Inc., d/b/a Evergy Missouri West Case No. ER-2022-0130 | |
| 8 | Q. | Please state your name and business address. | |
| 9 | A. | My name is J Luebbert. My business address is P.O. Box 360, Suite 700, | |
| 10 | Jefferson City, MO 65102. | | |
| 11 | Q. | By whom are you employed and in what capacity? | |
| 12 | A. | I am the Tariff/Rate Design Department Manager for the Missouri Public | |
| 13 | Service Commission ("Commission"). | | |
| 14 | Q. | Are you the same J Luebbert that filed direct testimony in this case on June 8, | |
| 15 | 2022 and rebuttal testimony on July 13, 2022? | | |
| 16 | A. | Yes. | |
| 17 | EXECUTIV | TE SUMMARY | |
| 18 | Q. | What is the purpose of your surrebuttal testimony? | |
| 19 | A. | My surrebuttal testimony will respond to the rebuttal testimonies of Evergy | |
| 20 | witnesses John R. Carlson, Bradley D. Lutz, Linda J. Nunn, and Kimberly H. Winslow. | | |
| 21 | My surrebuttal testimony is separated into sections regarding the revenue requirement | | |
| 22 | adjustment related to the administration of Evergy Missouri West's Special Incremental Load | | |
| 23 | tariff, ("Schedule SIL"), and rate case Missouri Energy Efficiency Investment Act ("MEEIA") | | |
| 24 | annualization | 1. | |

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Q. Please provide a brief overview of your surrebuttal testimony.

A. Staff continues to recommend that the Commission rely on Staff's calculated revenues and billing determinants, which do not include demand annualization adjustments related to the respective Evergy Metro, Inc., d/b/a Evergy Missouri Metro ("EMM") and Evergy Missouri West, Inc., d/b/a Evergy Missouri West ("EMW") Missouri Energy Efficiency Investment Act programs, for purposes of setting rates in this case.

Staff is modifying the reporting requirement recommendation from its direct filed position to better reflect information needed to propose future adjustments related to Schedule SIL. Staff recommends that the Commission order EMW to:

- 1. Accurately account for the cost of capacity necessary to serve the entirety of Nucor's peak demand in all future Cost and Revenue tracking reports in accordance with Paragraph 7 of the Agreement;
- 2. Establish and maintain consistent communication with Nucor to understand what impacts the expected operations at the plant will have on Southwest Power Pool ("SPP") purchased power expenses in order to facilitate accurate records;
- 3. Keep records of the finite expected hourly load of Nucor's next day operations as reflected in the EMW day-ahead ("DA") commitments in the event an adjustment in accordance with Paragraph 7.d. of the Stipulation is necessary in a future case;¹
- 4. Identify additional SPP related costs resulting from unexpected operational events that meet the criteria set forth in paragraph 7.d. of the Stipulation;²

¹ This recommendation differs from Staff's direct testimony recommendation through the inclusion of specific reference to the expected load, which is reflected in the EMW DA commitments.

² This recommendation differs from Staff's direct testimony recommendation through the inclusion of specific reference to the criteria set forth in paragraph 7.d. of the Stipulation.

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- 5. Quantify the balancing relationship between the hourly and DA prices to identify the effect of unplanned load changes that are not included in EMW's SPP DA commitments to apportion any additional SPP balancing charges;³ and
- 6. Incorporate the effect of DA and real-time ("RT") imbalances attributed to differences between actual Nucor operations and expected Nucor operations included in EMW's SPP DA commitments into the tracking of Nucor costs.⁴
- Q. What is the purpose of your true-up direct testimony?
- A. My true-up direct testimony supports Staff's adjustments for the MEEIA annualization updated through the end of the true-up period, adjustments for the respective Large Power classes of EMW and EMM, adjustments for Schedule SIL revenue and usage,⁵ as well as an updated revenue requirement adjustment related to the administration of Schedule SIL.

Staff has updated its recommendations on the adjustments for MEEIA energy annualization, Schedule SIL usage and revenue, Staff's Schedule SIL revenue requirement adjustment, and Large Power classes to reflect data through the true-up period.

MEEIA ANNUALIZATION SURREBUTTAL

Q. Have you previously provided testimony on the subject of MEEIA annualization adjustments for this rate case?

³ This recommendation differs from Staff's direct testimony recommendation through the inclusion of specific reference to a quantification of unplanned load changes that are not included in EMW's SPP DA commitments.

⁴ This recommendation differs from Staff's direct testimony recommendation through the inclusion of specific reference to the expected load, which is reflected in the EMW DA commitments.

⁵ Which removes the effects of Winter Storm Uri in February 2021.

A. Yes. I provided testimony on the subject in my direct testimony⁶ and rebuttal testimony.⁷ In my rebuttal testimony, I explained that Staff continues to oppose the MEEIA demand annualization approach proposed by EMM and EMW in this case,⁸ provided several reasons why such an adjustment is not appropriate, and explained the potential outcome of relying on billing determinants and revenues that include the adjustments when setting rates in this case. My rebuttal testimony addresses most of the points raised by Ms. Winslow in her rebuttal testimony in this case.

Q. On page 32 of her rebuttal testimony, Evergy witness Kimberly H. Winslow indicated that Evergy provided end-use hourly load shapes for Staff to adjust for MEEIA demand savings in this case. Does the provision of the load shapes resolve the issues with making the MEEIA demand adjustments that you raised in your rebuttal testimony?

A. No. The load shapes utilized do not lead to accurately estimated annualized billing impacts of demand savings attributable to the EMM and EMW respective MEEIA portfolios. The methodology utilized by EMM and EMW to adjust the demand billing determinants based on the "annualized demand savings" is unreasonable and leads to inaccurate results that should not be relied upon when setting rates in this rate case, as discussed more thoroughly in my rebuttal testimony. Therefore, Staff continues to recommend that the Commission rely on Staff's calculated revenues and billing determinants for purposes of setting rates in this case.

⁶ Beginning on page 40 of my direct testimony in this case.

⁷ Beginning on page 7 of my rebuttal testimony in this case.

⁸ This is consistent with Staff positions in previous cases before the Commission.

SCHEDULE SIL ADJUSTMENT SURREBUTTAL

Q. Please provide a brief overview of the Schedule SIL adjustment and provide context for some of the terms that are used frequently throughout the remainder of your surrebuttal testimony.

A. Staff's adjustment to the recommended revenue requirement for EMW is based upon the terms of non-unanimous Stipulation and Agreement ("Stipulation") between EMW (formerly KCP&L Greater Missouri Operations Company), Staff, and Nucor Steel Sedalia, LLC ("Nucor"),⁹ as discussed more thoroughly beginning on page 4 of my direct testimony. Staff's recommended Schedule SIL adjustment is primarily driven by the inclusion of capacity costs and costs of Nucor load imbalances in the comparison of Schedule SIL revenues and costs. The determination of the precise cost impacts of Nucor load imbalances is difficult because EMW has evidently not kept records of the hourly expected load of Nucor included in the EMW SPP DA commitments.¹⁰ In addition to the Staff recommended revenue requirement adjustment associated with EMW's implementation of Schedule SIL, Staff is modifying the reporting requirement recommendation from its direct filed position to better reflect information needed to propose future adjustments related to Schedule SIL. Staff recommends that the Commission order EMW to:

 Accurately account for the cost of capacity necessary to serve the entirety of Nucor's peak demand in all future Cost and Revenue tracking reports in accordance with Paragraph 7 of the Agreement;

⁹ Non-Unanimous Stipulation and Agreement filed on September 19, 2019 in Case No. EO-2019-0244 and approved by the Missouri Public Service Commission on November 13, 2019. The Stipulation in included as Confidential Schedule JL-d2 for reference.

¹⁰ As I will discuss more thoroughly in this testimony, the workpaper provided in support of Evergy witness John R. Carlson's rebuttal testimony does not accurately reflect the next-day loads of Nucor included in the EMW SPP DA commitments.

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- Establish and maintain consistent communication with Nucor to understand what impacts the expected operations at the plant will have on Southwest Power Pool ("SPP") purchased power expenses in order to facilitate accurate records;
- 3. Keep records of the finite expected hourly load of Nucor's next day operations as reflected in the EMW day-ahead ("DA") commitments in the event an adjustment in accordance with Paragraph 7.d. of the Stipulation is necessary in a future case;¹¹
- 4. Identify additional SPP related costs resulting from unexpected operational events that meet the criteria set forth in paragraph 7.d. of the Stipulation;¹²
- 5. Quantify the balancing relationship between the hourly and DA prices to identify the effect of unplanned load changes that are not included in EMW's SPP DA commitments to apportion any additional SPP balancing charges;¹³ and
- 6. Incorporate the effect of DA and real-time ("RT") imbalances attributed to differences between actual Nucor operations and expected Nucor operations included in EMW's SPP DA commitments into the tracking of Nucor costs.¹⁴
- Q. Which Evergy witnesses filed rebuttal testimony on the subject of Staff's recommended revenue requirement adjustment related to the administration of Schedule SIL?
- A. Evergy witnesses John R. Carlson, Bradley D. Lutz, and Linda J. Nunn each discussed Staff's proposed adjustment in their respective rebuttal testimonies in this case.
- Q. What issues regarding Staff's Schedule SIL revenue requirement adjustment did each Evergy witness address in their respective rebuttal testimonies?

¹¹ This recommendation differs from Staff's direct testimony recommendation through the inclusion of specific reference to the expected load which is reflected in the EMW DA commitments.

¹² This recommendation differs from Staff's direct testimony recommendation through the inclusion of specific reference to the criteria set forth in paragraph 7.d. of the Stipulation.

¹³ This recommendation differs from Staff's direct testimony recommendation through the inclusion of specific reference to a quantification of unplanned load changes that are not included in EMW's SPP DA commitments.

¹⁴ This recommendation differs from Staff's direct testimony recommendation through the inclusion of specific reference to the expected load that is reflected in the EMW DA commitments.

A. Mr. Carlson discusses the Staff analyses of Nucor's ¹⁵ purchased power costs and customer event balancing. Mr. Lutz discusses EMW's expectations of Nucor operations and responds to the Staff Schedule SIL revenue requirement adjustment. Ms. Nunn discusses the Staff recommended Schedule SIL revenue requirement adjustment, the importance of excluding the impact of winter storm Uri, and recovery of capacity costs. The remainder of my surrebuttal testimony is organized by issue rather than by Evergy witness.

Customer Event Balancing

- Q. How might additional SPP related costs result from unexpected operational events of Nucor?
- A. As I stated in my direct testimony, variations in actual Nucor operational load from the expected Nucor operational load included in the EMW SPP DA commitments¹⁶ coupled with the differences in RT Locational Marginal Prices ("LMPs") and DA LMPs can result in additional costs. If RT SPP LMPs and RT Nucor load exceed the DA LMPs and expected Nucor load, additional costs will be incurred. Conversely, if RT LMPs and RT Nucor load are less than the DA LMPs and the expected load, additional costs will be incurred.
- Q. Are the aforementioned costs that occur due to Nucor load imbalances limited to periods that exceed four hours or points in time when the load imbalance is greater than 25% of load expectation?
- A. No. These costs are not limited to periods of time when Nucor loads deviate from expectation by more than 25% nor when the event lasts longer than four hours. However,

¹⁵ Nucor is the lone EMW customer served by Schedule SIL.

¹⁶ Throughout my testimony I may refer to the variations in actual Nucor operational load form the expected Nucor operational load included in the EMW SPP DA commitments as load imbalances.

Paragraph 7.d. of the Stipulation is the result of negotiations between the signatories and only requires EMW to quantify the cost impacts when "actual Nucor load experiences a 25% deviation from the expected Nucor load for more than 4 hours and that load change is not reflected in the GMO DA commitments."

Q. Has review of the rebuttal testimony EMW's witnesses caused Staff to change its position on the importance of Evergy's adherence to the requirements of paragraph 7. of the Stipulation?

A. No. In many instances, the EMW testimony further supports Staff's position and highlights the importance of this provision as a protection for non-Nucor ratepayers. Mr. Lutz explains that EMW "was not aware of the challenge associated with obtaining load projections suitable for our daily forecasting... Had we known of the forecast suitability concerns, our approach toward monitoring would have been defined in the SIL Stipulation accordingly." The terms of the Stipulation were not premised on the accessibility or ease of predicting the expected operational load of Nucor. Paragraph 7.d. of the Stipulation is designed to minimize the potential non-Nucor customer impacts of load imbalances of Nucor by requiring EMW to quantify and isolate the cost imbalances from FAC recovery. EMW has yet to provide Staff with the expected hourly Nucor loads as reflected in EMW's DA SPP commitments. EMW's lack of record keeping related to the load expectations of Nucor reflected in the DA commitments creates an additional barrier when attempting to determine the cost impacts of the load imbalance. EMW's criticisms of Staff's proposed Schedule SIL adjustment serve to highlight the inaction by EMW to properly account for Nucor's next day operations in

¹⁷ Page 4 of the rebuttal testimony of Bradley D. Lutz in this case.

- 1 the DA commitments. In my direct testimony I explained that Evergy's approach of an assumed
- 2 ** subjects non-Nucor ratepayers to potential cost increases through
- 3 the fuel adjustment clause (FAC), which are not transparent nor aligned with the intent of the
- 4 hold harmless provisions of the Agreement and Schedule SIL.
 - Q. Have you reviewed the workpaper provided in support of Mr. Carlson's rebuttal testimony?
 - A. Yes.

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- Q. In his criticism of Staff utilizing a static load to determine the impacts of customer event balancing, Mr. Carlson indicates that utilization of load forecasting is needed to more accurately calculate the impacts of potential operational events. Does Mr. Carlson's discussion regarding the load forecasting of EMW load by Tesla Forecasting Solutions ("Tesla") align with the assumptions utilized in his workpaper?
- A. No. Mr. Carlson explains that the forecasting utilized by EMW for SPP DA commitments utilizes 11 years of historical load data with a weighting formula that makes the most recent data more impactful to the forecast. He also states that the forecasting service accounts for "weather forecasts and many other variables." However, Mr. Carlson's workpaper includes the previous year's hourly load of Nucor, which is labeled "DA Forecast Load" to compare against RT load of Nucor. The column title of "DA Forecast Load" is misleading because the values do not account for the historical load weighting described by Mr. Carlson nor the "many other variables" that affect the forecasted load included in EMW's SPP DA commitments. Based on the weighting formula provided in Mr. Carlson's testimony,

¹⁸ Page 6 of the rebuttal testimony of John R. Carlson.

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a majority of the load weighting utilized by Tesla for the forecasting service does not account for Nucor operational load. Furthermore, the Nucor load from the previous year should not be relied upon as the expected day-ahead load of Nucor as EMW witnesses have testified that EMW expects that the loads are variable, ¹⁹ it may take time for the facility to achieve operational stability, ²⁰ load was lower relative to current operations, ²¹ Nucor continues to modify operations, ²² and Nucor respond to demands for their product. ²³

Q. Was the set-point²⁴ utilized by Staff to quantify the cost impacts of customer event balancing "arbitrary" as Mr. Carlson suggests?

A. No. Staff requested the hourly expected Nucor loads from EMW and sent follow-up requests because the answers repeatedly relied upon the assumption that **

different set-point levels and selected ** _____** because it indicated the fewest hours of load imbalance. Based on the workpaper provided in support of Mr. Carlson's rebuttal testimony, ²⁶ utilizing the 2020 hourly Nucor load as the "forecasted" load results in greater than 95% of the hours in 2021 having greater than 25% variance from actual Nucor loads. While I recognized in my direct testimony that the cost estimation required some less than ideal

²¹ Page 7 of the rebuttal testimony of John R. Carlson.

¹⁹ Page 3 of the rebuttal testimony of Bradley D. Lutz.

²⁰ Ibid

²² Page 4 of the rebuttal testimony of Bradley D. Lutz.

²³ Ibid

 $^{^{24}}$ The setpoints reviewed to estimate the financial impact of the DA and RT imbalances can be considered a proxy for the expected load of Nucor.

²⁵ EMW response to Staff Data Request Nos. 0249, 0249.1, and 0249.3.

²⁶ File named 20220715 Nucor RR adj workpaper – Corrected.xlsx.

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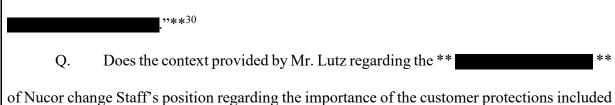
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assumptions due to EMW's lack of expected Nucor load record keeping, the solution offered by Mr. Carlson does not provide a reasonable estimation of the financial impact of variations in Nucor operational load from expectation.

Q. What additional context does Mr. Lutz provide for EMW's decision to

** based on availability of Nucor load information?

A. Mr. Lutz briefly describes the difficulty of producing load projections for Nucor during early interactions with Nucor operations staff.²⁷ He explains that projections would "change reacting to start-up conditions" and that the "pace of possible load change from hour to hour was problematic." He also asserts that there was **



of Nucor change Staff's position regarding the importance of the customer protections included in the Stipulation and Schedule SIL?

A. No. The difficulty of forecasting the next-day load of Nucor and the pace of changes in load expectation are reasons that the customer protections that EMW agreed to, and subsequently failed to implement are important. EMW found that accurately forecasting the next-day load of Nucor was difficult. Instead of refining the process to forecast the next-day

²⁷ Page 5 of the rebuttal testimony of Bradley D. Lutz.

²⁸ Ibid.

²⁹ Ibid.

³⁰ Ibid.

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load as accurately as possible, EMW evidently continued to forecast DA load for all customers with a business-as-usual approach.

The terms of the Stipulation were not reliant on an expectation that EMW would perfectly forecast the next-day operations of Nucor. One of the reasons to implement the terms of the Stipulation was an inherent assumption that actual operations would differ from expected operational loads and that EMW would need to quantify the effects of those events in order to remove the resulting costs from the FAC to protect non-Nucor customers from any financial impact.

O. Do Evergy Missouri West's SPP day-ahead commitments allow for actual operational bands that insulate the Company, or its ratepayers, from costs associated with deviations within specified bands?

** The variation of Nucor load **

." ** Absent adjustments to remove the costs of the unexpected operational events the ** ** is provided to EMW by the non-Nucor ratepayers of EMW through the FAC. EMW did not identify unexpected operational events so long as Nucor load remained within the ** ** and therefore found it unnecessary to quantify the financial impact of events.

O. To summarize, what is the outcome if EMW is allowed to side step the Stipulation requirement to identify, quantify, and remove the financial impact of load imbalances from unexpected operational events?

³¹ EMW response to Staff Data Request No. 0249.3.

| 1 | A. Any increased costs will be borne by non-Nucor ratepayers, which directly | | |
|----|---|--|--|
| 2 | conflicts with the intent of the hold-harmless provisions of the Stipulation and Schedule SIL. | | |
| 3 | Q. In his rebuttal testimony Mr. Lutz states, ** | | |
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| 5 | 32** Has EMW quantified this | | |
| 6 | relationship to support this claim? | | |
| 7 | A. I do not believe so. EMW's responses to Staff data requests in this case indicate | | |
| 8 | that the Company has not identified any unexpected operational events so long as Nucor | | |
| 9 | continued to operate ** **, and therefore has not quantified | | |
| 10 | the cost impacts. ³³ Furthermore, EMW has not identified ** | | |
| 11 | 34 | | |
| 12 | . ** ³⁵ Even if the Commission determines that | | |
| 13 | an adjustment for customer event balancing is not necessary in this case, Staff recommends that | | |
| 14 | the Commission order EMW to comply with the record keeping requirements recommended on | | |
| 15 | pages 5 and 6 of this testimony on a going-forward basis. This will increase transparency into | | |
| 16 | such determination in future cases. | | |
| 17 | Q. Does the ** | | |
| 18 | ** ensure that non-Nucor ratepayers are held | | |
| 19 | harmless from the effects of imbalances? | | |
| | | | |
| | | | |
| | Page 5 of the rebuttal testimony of Bradley D. Lutz. EMW response to Staff Data Request Nos. 0249, 0249.1, 0249.3, 0249.4. | | |
| | EMW response to Staff Data Request No. 0249.5. EMW response to Staff Data Request No. 0249.4 | | |

- A. No. Absent identification, mitigation, isolation, and removal of the effects of these load imbalances, non-Nucor ratepayers will not be held-harmless. EMW witnesses have explained that the Company has continued to forecast the EMW load for purposes of SPP DA commitments utilizing a business-as-usual approach, which does not account for specific expectations of Nucor's next-day operations, and only includes the load of Nucor as a small portion of the weighted historical load.³⁶
- Q. Based upon responses to discovery in this case, is EMW's record keeping of expected Nucor next-day load is sufficient to precisely identify, isolate, and remove the effects of load imbalances from the FAC.
- A. No. The responses to Staff data requests provided by EMW to date have not included the expected hourly loads of Nucor for the review period and indicate that Evergy has not established expected Nucor loads.³⁷ EMW's assumption that **

 ** should be rejected.
- Q. Is it reasonable to assume that that the level of costs attributed to Nucor load imbalances will be consistent?
- A. No. Given the level of volatility of the factors that impact the costs of load imbalances,³⁸ it is important to consider the specifics of a given review period to determine the cost impacts. This is highlighted by the difference in Staff's estimated cost of unexpected operational events between the update period in this case and the true-up period in this case. It is also important to note that the cost impact estimates that Staff included in this case include

³⁶ Pages 5-7 of the rebuttal testimony of John R. Carlson.

³⁷ EMW response to Staff Data Request Nos. 0249, 0249.1, and 0249.3.

³⁸ Nucor load (expected and actual) and SPP LMPs (DA and RT).

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off-setting cost savings. The inclusion of those periods of costs savings are included due to the uncertainty of the hourly expected Nucor loads to quantify a conservative estimate of the cost impacts. The order of magnitude of an appropriate adjustment in this case and future cases is likely to change depending on the differences in the SPP LMPs (DA and RT) and the amount of load included in EMW's SPP DA commitments for Nucor load compared to the actual operations of Nucor. Q. Mr. Lutz alludes to ** **³⁹ do you think that Evergy would have taken the same approach to "forecasting" Nucor load? I do not. Absent the ** A. ** provided to EMW through the FAC, the financial impacts of these events would be borne by EMW. ** . ** I expect that the potential for EMW financial losses would have provided a greater incentive to refine the forecasting process in order to minimize those impacts. ** the process of determining costs necessary to serve Nucor would also be more transparent and avoid many of the EMW perceived barriers to cost identification.

³⁹ Page 6 of the rebuttal testimony of Bradley D. Lutz.

Page 15

Q. Does EMW's current treatment of the costs that are being excluded from the FAC resolve the issue of load imbalances resulting in additional costs to non-Nucor ratepayers through the FAC as alluded by Mr. Lutz and Ms. Nunn?

A. No. Ms. Nunn describes the calculation of a purchased power rate to determine an "all-in hourly rate." The calculation that Ms. Nunn describes results in an average hourly cost for all of EMW's load, multiplied by the hourly Nucor load. This "all-in hourly rate" accounts for the combined DA and RT costs resulting from the load of all EMW customers, but the EMW approach does not account for potential cost increases resulting from changes of actual Nucor load compared to the expected load. These variations in Nucor load can impact the purchased power costs that flow through the FAC. Absent a transparent method to determine the financial impacts of those load variations and removal of those costs from the FAC, non-Nucor ratepayers may have to bear those costs through higher fuel and purchased power expenses experienced by EMW to cover the load imbalance. In order to identify the correct costs, EMW needs to keep records of the expected hourly loads of Nucor included in the EMW SPP DA commitments.

Q. What is the main conclusion that should be drawn from Mr. Carlson's discussion regarding the load forecasting for SPP DA commitments, his statement that Nucor load was excluded from the forecast model prior to March 1, 2021, and his analysis that indicates that including Nucor's usage from the prior year as a proxy "expected" usage resulted in a benefit to non-Nucor ratepayers?

Page 16

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 $^{^{\}rm 40}$ Page 32 of the rebuttal testimony of Linda J. Nunn.

⁴¹ All else being equal.

- Q. Are DA and RT load imbalances independent of the DA LMP and RT LMP at the EMW load node?
 - A. Yes.
- Q. Mr. Carlson indicated in his rebuttal testimony that average RT LMPs were lower than DA LMPs for the EMW load node in calendar year 2021.⁴⁵ Are DA LMPs always higher than RT LMPs on an hourly basis?
- A. No. RT LMPs regularly exceed DA LMPs at the EMW load node. If RT LMPs exceed the DA LMPs and the expected Nucor load included in EMW's SPP DA commitments

⁴² I previously explained that this is not an accurate representation based upon the additional historically weighted EMW load as well as multiple other factors that Mr. Carlson mentions being included in the forecasting model.

⁴³ Pages 3 and 4 of the rebuttal testimony of Bradley D. Lutz and page 7 of the rebuttal testimony of John R. Carlson.

⁴⁴ EMW response to Staff Data Request No. 0249.

⁴⁵ Page 7 of the rebuttal testimony of John R. Carlson.

are unreasonable low, substantial costs would be incurred due to the load imbalance. Even if the average DA LMP exceeds the average RT LMP for a given period, load imbalances can cause large cost increases in a short time period.⁴⁶ Absent those events being identified and the costs removed from the FAC, non-Nucor ratepayers would be harmed.

- Q. What could occur if EMW is consistently underestimating the expected load of Nucor included in the SPP DA commitments while simultaneously operating under the assumption that EMW need not identify, quantify, and remove the cost impacts of load imbalances so long as Nucor operates within the "normal operating conditions?"
- A. EMW would be subjecting all non-Nucor ratepayers to potentially substantial risks. Staff recommends that the Commission require EMW to keep records of the Nucor load expectations being included the EMW DA commitments as envisioned by the Stipulation and Staff's recommended record keeping requirements.
- Q. Should EMW be allowed to continue to side-step the non-Nucor ratepayer protections of paragraph 7.d. of the Stipulation by avoiding identification and quantification of cost impacts of load imbalances so long as Nucor operations remain within the **
 - A. No.

Q. Why are the Staff recommended record-keeping requirements necessary on a going-forward basis?

⁴⁶ The workpaper provided in support of my direct testimony in this case indicated several cost increases greater than \$50,000 for a single hour of load imbalance.

A. Since EMW has failed to identify and quantify any unexpected operational events⁴⁷ to date due to unreasonable ** ** assumptions, other parties need additional information in order to precisely estimate the impacts of Nucor DA and RT load imbalances. Absent the Commission holding EMW accountable for the record keeping necessary to quantify the cost impact of load imbalances and allowing the Company to avoid identification and removal of costs incurred due to load imbalances will render the non-Nucor ratepayer protection provided by paragraph 7.d essentially useless. To increase transparency and enable other parties to reasonably estimate the impacts of DA and RT load imbalances in future cases, Staff recommends that the Commission order the reporting requirements provided in my testimony on pages 5 and 6.

Q. In his rebuttal testimony, Mr. Carlson asserts that Staff incorrectly applied the 4-hour threshold for determining whether EMW should quantify the effects of unplanned load changes. Do you agree?

A. Partially. Mr. Carlson is correct that the workpaper that I utilized to determine the instances in which EMW should quantify the effects of load imbalances identified each instance that the assumed variance was 4 hours or more. However, Mr. Carlson went a step further by stating that the analysis "should have looked at those times when there was a valid variance for 5 hours or more (i.e. more than 4 hours)." This is incorrect. While the correct threshold according to the Stipulation is more than 4 hours, the variance need not occur for 5 hours to require EMW to quantify the effects of the imbalance. Any variance that exceeds 4 hours requires EMW to quantify the effects of the balancing relationship. This may seem like

⁴⁷ As required by paragraph 7.d. of the Stipulation.

⁴⁸ Page 4 of the rebuttal testimony of John R. Carlson.

a minor detail, but given the variability of Nucor operations and day-ahead and real-time LMPs, this difference in thresholds can cause large dollar impacts to the detriment of non-Nucor ratepayers if left unevaluated.

For example, when accounting for load imbalances that occurred in February of 2021, I identified five instances that the load imbalance was present for greater than four hours but less than five hours. Those five instances accounted for a difference in summation of load imbalance costs greater than ** ** **, with one instance accounting for a difference greater than ** **. For purposes of Staff's true-up adjustment recommendation in this case I have only quantified those instances that were at least five hours in length as I do not have the same level of granularity in the Nucor load data necessary to estimate the difference for the entire review period. However, I believe the example from February provides important context for consideration of load imbalance costs on a going forward basis.

Purchased Power Costs

- Q. Does Mr. Carlson provide an accurate portrayal of Staff's calculation of Nucor load costs?
- A. No. Mr. Carlson indicated that my workpapers "calculated a Nucor load cost by multiplying the average monthly locational marginal price ("LMP") for the Evergy Missouri West ("EMW") load node by the MWh of Nucor load for the month." The approach described by Mr. Carlson is an inaccurate portrayal of the calculation in my workpaper. Multiplying the average monthly LMP by the monthly Nucor load would not accurately reflect the costs to serve Nucor load. My workpaper for direct multiplied the hourly Nucor load by the RT LMP for EMW, in part due to EMW's lack of data surrounding the expected load of Nucor. While EMW likely incurs some costs associated with Nucor load in SPPs DA market, the level of Nucor load

1 actually included in EMW's SPP commitments has still not been identified by EMW. 2 Mr. Carlson describes a mistake that I made in calculating the revenue attributable to the Nucor 3 portion of Cimarron Bend III wind PPA. My calculation of the true-up period revenue 4 requirement adjustment for Schedule SIL corrects for that mistake by multiplying the Nucor 5 portion of the hourly generation from Cimarron Bend III by the corresponding real-time LMP 6 at the EMW load node. 7 **Corrections to direct testimony** 8 Q. Do you have any corrections to your direct testimony? 9 Yes. On page 5, lines 15-17 should be stricken entirely. On page 21, the A. 10 paragraph should end after footnote 43 and the remainder of lines 5 through 16 should be 11 stricken. On page 43, lines 9-11 should be stricken entirely. 12 Q. Does this conclude your surrebuttal testimony? 13 A. Yes it does. 14 TRUE-UP DIRECT TESTIMONY 15 **MEEIA** annualization adjustments 16 Q. Has Staff's position been updated to reflect changes to the MEEIA annualization 17 adjustments for EMM and EMW through the end of the true-up period? 18 A. Yes. Staff's position on the MEEIA annualization adjustments for energy usage 19 are aligned with EMM and EMW. Staff's positional differences compared to Evergy on this 20 issue are related to the EMM and EMW proposed MEEIA demand adjustments, and the 21 associated revenue impacts of those adjustments.

1 **Schedule SIL** 2 Has Staff updated its recommended revenue requirement adjustment for EMW's Q. 3 implementation of Schedule SIL? Yes. Based on the information provided through the end of the true-up period 4 A. 5 in this case, Staff recommends a negative revenue requirement adjustment equal to \$1,494,000 6 based on the revenue deficiency of Schedule SIL service. 7 Q. Are there any changes to the calculation methodology utilized in support of your 8 direct testimony recommendation? 9 Yes. I modified the calculation of customer event balancing to only include A. events that lasted 5 hours or more.⁴⁹ I reflected the revenues from Cimarron Bend III based 10 11 upon delivery to the EMW load node. I have also included capacity costs necessary to serve 12 Nucor based upon the capacity contract prices for June of 2021 through May of 2022 and the 13 highest hourly Nucor demand during that time period.⁵⁰ 14 Q. Has Staff included any other true-up adjustments related to Schedule SIL? 15 Yes. Staff has also included revenue and energy usage adjustments related to A. 16 Schedule SIL that include data through the true-up period ending May 31, 2022. 17 Q. Why is it appropriate to include true-up adjustments to the revenue and usage 18 associated with Schedule SIL in this case?

As I stated in my direct testimony in this case, Schedule SIL states in part,

⁵⁰ EMW response to Staff Data Request No. 0493 indicates that **

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⁴⁹ While the Stipulation requires quantification of events that last more than 4 hours, Staff currently does not have actual Nucor load data more granular than hourly for the entire review period.

If the Customer's rate revenues do not exceed the incremental cost to serve the Customer as reflected in the revenue requirement calculation, the Company shall make an additional revenue adjustment covering the shortfall to the revenue requirement calculation through the true-up period, to ensure that non-Schedule SIL customers will be held harmless from such effects from the service under Schedule SIL.

Paragraph 8 of the Stipulation states in part,

If Nucor's revenues do not exceed Nucor's costs as reflected in the revenue requirement calculation through the true-up period, GMO will make an additional revenue adjustment covering the shortfall to the revenue requirement calculation through the true-up period, to ensure that non-Nucor GMO customers will be held harmless from such effects from the Nucor service.

Furthermore, EMW has since requested securitization of the extraordinary fuel and purchased power costs for the month of February 2021. Due to this timing, including adjustments through the true-up period the Commission will be able to consider the positions advanced by Staff and EMW in this case and Case No. EF-2022-0155 independently without an added concern of double counting the effects of Nucor cost comparisons to revenue in the respective determinations.

Large Power adjustments

- Q. Have you previously provided testimony in this case on the topic of adjustments to the revenues and determinants of the respective Large Power classes of EMM and EMW?
- A. I have not. I am providing support for Staff's True-up Large Power class adjustments due to a recent personnel change within the Tariff/Rate Design Department of Staff. I am formally adopting the direct testimony of Staff witness Michelle A. Bocklage. One difficulty in calculating the adjustments for the Large Power classes as explained by Ms. Bocklage was the lack of customer specific information for the entire update period. EMW and EMM provided the previously requested customer specific information along with

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- the respective companies true-up models.⁵¹ The workpaper provided in support of this testimony and Staff's true-up Large Power class adjustments account for the additional customer specific information provided by EMM and EMW.
 - Q. At a high level, how does Staff's position on the appropriate adjustments to the respective Large Power classes of EMM and EMW differ from Evergy's position?
 - A. Staff has not included adjustments for COVID, weather normalization, and MEEIA demand annualization, but Evergy has included those adjustments. Staff has accepted the customer annualization adjustments of EMM and EMW⁵² for purposes of the true-up adjustments. Given the interaction of the EMM and EMW adjustments for COVID, weather normalization, and MEEIA demand annualization on the 365 days, rate switcher adjustments, Staff and Evergy's adjustments differ slightly but the method for determining the adjustment amounts are similar. The table on the final page of Staff witness Kim Cox's true-up testimony includes Staff's recommended rate revenue adjustments inclusive of the Large Power adjustments, which have been corrected, based in part on the customer specific information provided by EMM and EMW.
 - Q. Does this conclude your surrebuttal and true-up direct testimony?
 - A. Yes.

⁵¹ EMW's true-up model workpapers provided on July 25, 2022, as envisioned by the ordered procedural schedule in this case included the customer specific information. Staff had initially requested this information much earlier in the proceeding, in order to incorporate it into Staff's direct filed case.

⁵² As provided by EMM and EMW in the true-up models on July 25, 2022.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

| In the Matter of Evergy Metro, Inc. d/b/a Evergy Missouri Metro's Request for Authority to Implement a General Rate Increase for Electric Service | () Case No. ER-2022-0129) | | | | | |
|---|--|--|--|--|--|--|
| In the Matter of Evergy Missouri West, Inc. d/b/a Evergy Missouri West's Request for Authority to Implement a General Rate Increase for Electric Service |) Case No. ER-2022-0130) | | | | | |
| AFFIDAVIT OF J LUEBBERT | | | | | | |
| STATE OF MISSOURI)) ss. COUNTY OF COLE) | | | | | | |
| COMES NOW J LUEBBERT and on his oa | th declares that he is of sound mind and lawful age; | | | | | |
| that he contributed to the foregoing Surrebuttal / | True-Up Direct Testimony of J Luebbert; and that | | | | | |
| the same is true and correct according to his best | knowledge and belief. | | | | | |
| Further the Affiant sayeth not. $\overline{\mathbf{JLU}}$ | VEBBERT NO. | | | | | |
| | | | | | | |
| JUI | RAT | | | | | |
| Subscribed and sworn before me, a duly con | stituted and authorized Notary Public, in and for | | | | | |
| the County of Cole, State of Missouri, at my offi | ce in Jefferson City, on this day of | | | | | |
| August 2022. | | | | | | |
| D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: April 04, 2025 Commission Number: 12412070 | Oluzullankin Norary Public | | | | | |