

**BEFORE THE STATE CORPORATION COMMISSION  
OF THE STATE OF KANSAS**

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**DIRECT TESTIMONY  
OF  
JESSICA L. TUCKER  
EVERGY KANSAS CENTRAL**

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**DOCKET NO. 24-EKCE-XXX-ACA**

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1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Jessica L. Tucker. My business address is 1200 Main, Kansas  
3 City, Missouri 64105-2122.

4 **Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?**

5 A. I am employed by Evergy Metro, Inc. and serve as Senior Manager, Fuels  
6 and Emissions for Evergy Metro, Inc. d/b/a Evergy Kansas Metro (“Evergy  
7 Kansas Metro”), Evergy Kansas Central, Inc. and Evergy South, Inc.,  
8 collectively d/b/a as Evergy Kansas Central (“Evergy Kansas Central”),  
9 Evergy Metro, Inc. d/b/a as Evergy Missouri Metro (“Evergy Missouri  
10 Metro”), and Evergy Missouri West, Inc. d/b/a Evergy Missouri West  
11 (“Evergy Missouri West”). They are the operating utilities of Evergy, Inc.  
12 (“Evergy”).

13 **Q: WHAT ARE YOUR RESPONSIBILITIES?**

1 A: My primary responsibilities include management and oversight of fuel  
2 procurement and logistics (apart from natural gas) as well as fuel additive  
3 procurement and coal combustion residual product management and  
4 marketing for Evergy operated generating stations.

5 **Q: PLEASE DESCRIBE YOUR EDUCATION, EXPERIENCE, AND**  
6 **EMPLOYMENT HISTORY.**

7 A. I graduated Summa Cum Laude from Kansas State University in  
8 December 1999 with a Bachelor of Science degree in Agriculture. I began  
9 my career in the energy industry in January 2001 with Aquila as an  
10 Associate Hourly Trader. In this role, my efforts were focused on  
11 executing short term physical power transactions in the real time market  
12 across various North American Electric Reliability Corporation ("NERC")  
13 regions. My employment with Evergy Metro (f/k/a KCP&L) began in  
14 August of 2002 as an Hourly Trader on the real time desk. From August  
15 2002 to May 2006, my role focused on buying and selling power in the real  
16 time market. In June 2006, I was promoted to Interchange Marketer,  
17 which focused my trading activity on day ahead and monthly power  
18 transactions. I was also a part of the Company's RTO integration team  
19 that prepared the generation dispatching and trading area for participation  
20 in the Southwest Power Pool ("SPP") Energy Imbalance Service ("EIS")  
21 market, which launched on February 1, 2007. In November 2010, I was  
22 promoted to Manager, System Operations (Power). My primary  
23 responsibility was to oversee 24x7 Power Control Center functions, which

1 consisted of real time and day ahead power trading, power scheduling,  
2 and generation dispatching operations. This not only included overseeing  
3 our participation in the SPP market, but compliance with applicable NERC  
4 Reliability Standards. I was also responsible for preparing the dispatching  
5 and trading group for participation in the SPP Integrated Marketplace  
6 (“IM”), which launched on March 1, 2014. In April 2015, I was promoted to  
7 Senior Manager, Power System Operations. In July 2017, I moved into  
8 the role of Senior Manager, Fuels & Emissions within the Fuels group.

9 **Q: HAVE YOU PREVIOUSLY TESTIFIED IN A PROCEEDING AT THE**  
10 **KANSAS CORPORATION COMMISSION (“KCC” OR “COMMISSION”)**  
11 **OR BEFORE ANY OTHER UTILITY REGULATORY AGENCY?**

12 A: Yes. I have testified in several dockets before the Missouri Public Service  
13 Commission and/or KCC regarding certain topics associated with the  
14 Southwest Power Pool Integrated Marketplace or fuel-related subject  
15 matter.

16 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

17 A. I will address five topics:

- 18 • A summary of the information provided in the Company’s quarterly  
19 RECA submittals made on December 20, 2022, March 20, 2023, June  
20 20, 2023, and September 20, 2023,
- 21 • A comparison of 2023 fuel and purchased power costs to 2022 fuel and  
22 purchased power costs,
- 23 • A comparison of the projected 2023 RECA to its 2023 ACA,

- 1           • Fuel procurement planning and practices, and
- 2           • A discussion of how the Southwest Power Pool (“SPP”) Integrated
- 3           Marketplace (“IM”) provides value to Evergy Kansas Central (“EKC”) and
- 4           the impact it has on planning and operations.

5           **INFORMATION PROVIDED IN QUARTERLY RECA SUBMITTALS**

6           **Q.   WHAT INFORMATION DOES THE COMPANY SUBMIT WHEN IT**

7           **SUBMITS ITS RECA FACTORS EACH QUARTER?**

8           A.   Evergy Kansas Central’s RECA tariff identifies several items that go into

9           the calculation of the RECA factors.  Items included in the quarterly

10          projections are fuel and purchased power costs, transmission costs not

11          recovered through the Transmission Delivery Charge (“TDC”), emission

12          allowances and costs to achieve sales to non-requirements customers.

13          On or before the 20th day of the month preceding each calendar quarter,

14          the Company submits to the Commission a report containing projected

15          quarterly RECA factor on a dollars per kWh basis.  In this report, the

16          Company shows the total costs, revenues, and kWh used to calculate the

17          dollars per kWh factor.

18          **Q.   WERE THERE ANY CHANGES TO THIS QUARTERLY PROCESS IN**

19          **2023?**

20          A:   No, there were no changes in 2023.

21                                   **COMPARISON OF COSTS FOR 2023 and 2022**

22          **Q.   HOW DID REALIZED FUEL AND PURCHASED POWER COSTS FOR**

23          **2023 COMPARE WITH THOSE REALIZED DURING 2022?**

1       **A.**     As described in the exhibits provided with Ms. Herrington’s testimony, for  
2       2023, total fuel and purchased power costs less certain offsets to provide  
3       electric service to non-requirements customers and non-fuel delta,  
4       excluding the impacts of Winter Storm Uri, which are used to calculate the  
5       ACA factor were **\*\*[REDACTED]\*\***. In 2022, total fuel and purchased power costs  
6       less certain offsets to provide electric service to non-requirements  
7       customers and non-fuel delta, excluding the impacts of Winter Storm Uri,  
8       were **\*\*[REDACTED]\*\***.

9       **Q.     WHY DID FUEL AND PURCHASED POWER COSTS DECREASE FROM**  
10       **2022 TO 2023?**

11       **A.**     The key drivers for the decrease in Evergy Kansas Central’s actual fuel and  
12       purchased power costs in 2023 as compared to the costs in 2022 were  
13       changes in market commodity prices, energy demand, generation  
14       availability, and SPP Revenue Neutrality Uplift (“RNU”) charges. Combined  
15       with year-over-year decreased energy demand, EKC fuel and purchased  
16       power costs in 2023 were lower compared to 2022. Finally, the overall 2023  
17       SPP RNU charge amount was notably less than it was in 2022.

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**PROJECTED 2023 RECA VERSUS ACTUAL 2023 ACA**

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**Q.     WHAT TYPE OF MODELING IS USED TO DEVELOP THE QUARTERLY  
RECA FORECAST?**

1 A. In 2023, EKC RECA forecasts were generated using the PROMOD® IV  
2 (“PROMOD”) software, which is similar to other fundamental price  
3 forecasting models that are commonly used in the industry. PROMOD is  
4 provided by Hitachi Energy (formerly ABB). PROMOD incorporates details  
5 in generating unit characteristics, transmission grid topology and  
6 constraints, and market system operations to simulate power flows within  
7 and between various energy markets, including but not limited to,  
8 Independent System Operators (“ISO”), Regional Transmission  
9 Organizations (“RTO”), and other North American Electric Reliability  
10 Corporation regions. PROMOD performs a security constrained unit  
11 commitment and co-optimized economic dispatch to generate Locational  
12 Marginal Prices (“LMP”) at the nodal level, similar to how ISOs and RTOs  
13 set schedules and determine prices. PROMOD incorporates the latest  
14 forecasts or assumptions for commodity and market pricing, generating unit  
15 operations and load requirements to generate expected plant dispatch and  
16 resulting fuel and purchased power costs.

17 **Q. HOW DID ACTUAL COSTS REFLECTED IN THIS ACA FILING**  
18 **COMPARE TO PROJECTED RECA COSTS INCLUDED IN QUARTERLY**  
19 **FILINGS FOR 2023?**

20 A. As described in the exhibits provided with Ms. Herrington’s testimony, actual  
21 incurred costs, excluding the impacts of Winter Storm Uri, in 2023 were  
22 \*\* [REDACTED] \*\* and revenues collected based on EKC’s quarterly RECA  
23 forecasts were \*\* [REDACTED] \*\*, with a total under-collection of \*\* [REDACTED] \*\*.

1       **Q.     WHAT WERE THE DRIVERS OF THE VARIANCE BETWEEN ACTUAL**  
2       **FUEL AND PURCHASED POWER COSTS IN 2023 AS COMPARED TO**  
3       **THE RECA FORECAST?**

4       A.     Although various components of EKC's 2023 actual fuel and purchased  
5       power costs, such as cost of fuel, generation availability, and energy  
6       demand, deviated on a month-to-month basis from the RECA quarterly  
7       forecasts, those variances were not the major drivers of the 2023 overall  
8       result, which was a total under-collection of \*\* [REDACTED] \*\*. The majority of the  
9       variance that drove the under-collection was due to variables other than fuel  
10      and purchased power that are, by prior agreement, not included in the  
11      forecast, however, are a part of actuals.

12                   **FUEL PROCUREMENT PLANNING AND PROCESSES**

13      **Q:     PLEASE DESCRIBE HOW THE COMPANY BUYS NUCLEAR FUEL**

14      A:     Wolf Creek Nuclear Operating Corporation ("Wolf Creek") purchases  
15      uranium and has it processed for use as fuel in its reactor. This process  
16      involves conversion of uranium concentrates to uranium hexafluoride,  
17      enrichment of uranium hexafluoride and fabrication of nuclear fuel  
18      assemblies. As of December 31, 2023, Wolf Creek has on hand or under  
19      contract all of the uranium concentrates required for operation \*\* [REDACTED]  
20      [REDACTED] \*\*, and \*\* [REDACTED] \*\* of the uranium enrichment and conversion services  
21      required for operation through \*\* [REDACTED] \*\*. The station also has under  
22      contract all of the uranium fuel rod fabrication services required to operate  
23      Wolf Creek \*\* [REDACTED] \*\*.

1       **Q.     PLEASE DESCRIBE HOW EVERGY KANSAS CENTRAL ACQUIRES**  
2       **ITS NATURAL GAS REQUIREMENTS.**

3       A.     Eversys Kansas Central's natural gas-fired generation resources are located  
4       on the Southern Star Central Gas Pipeline ("SSCGP"), Kansas Gas Service  
5       intra-state pipeline ("KGS"), and ONEOK Gas Transportation, L.L.C.,  
6       pipeline ("OGT"). Eversys Kansas Central's firm capacity was renewed on  
7       March 30, 2022 to 131,425 MMBtu/day firm production zone capacity and  
8       85,580 MMBtu/day market zone capacity on SSCGP. Eversys Kansas  
9       Central currently has about 40,000 MMBtu/day capacity on OGT  
10      Interruptible Transport Storage. Eversys Kansas Central does not have firm  
11      transport on KGS or OGT. If Eversys Kansas Central had to run all its natural  
12      gas-fired capacity at once, its Maximum Daily Quantity ("MDQ") would be  
13      about 397,000 MMBtu/Day. In the event of a natural gas shortage or other  
14      emergency event, some of Eversys Kansas Central's simple cycle gas  
15      turbines can operate on #2 diesel. Eversys Kansas Central typically procures  
16      physical natural gas on a short-term basis (daily). These physical  
17      purchases are from suppliers such as ETC Gas Marketing, Enlink Gas  
18      Marketing, Southwest Energy, KOCH Energy Services, Williams Gas  
19      Marketing or Spire Marketing.

20      **Q.     HOW ARE COAL REQUIREMENTS DETERMINED?**

21      A.     As discussed above, Eversys Kansas Central utilizes PROMOD modeling  
22      software. It is from PROMOD's generation and fuel burn forecast that  
23      Eversys Kansas Central determines the anticipated fuel requirements for its



1 generating units. This forecast is most relevant to determining coal  
2 procurement needs as natural gas purchases are typically made on a  
3 shorter-term basis based on more operational dispatch forecasts.  
4 Pertaining to fuel oil, usage for a given day or hour is typically unpredictable  
5 and as such, fuel oil is generally purchased on an as-required basis to  
6 replenish onsite oil inventory or to stock up in anticipation of an event such  
7 as extreme weather.

8 **Q. PLEASE DESCRIBE HOW EVERGY KANSAS CENTRAL BUYS COAL.**

9 A. Generally, Evergy Kansas Central follows a strategy of laddering into a  
10 portfolio of contracts for Powder River Basin (“PRB”) coal. Evergy Kansas  
11 Central’s “laddered” portfolio consists of coal supply contracts which were  
12 entered into at different times leading up to the operating year. The closer  
13 EKC is to a given operating year, the higher the coal commitment  
14 percentage will be as compared to expected requirements. When burn  
15 projections increase, actual burns prove to be higher than anticipated, or as  
16 otherwise needed, supplemental purchases of coal are made on the spot  
17 market.

18 **Q: WHAT DID EKC’S LADDERED PORTFOLIO LOOK LIKE FOR 2023?**

19 A: In January 2023, Evergy Kansas Central had contractual commitments for  
20 about \*\*■\*\* percent of its share of expected coal burn requirements at  
21 that time for 2023. It also had commitments for about \*\*■\*\* percent for  
22 2024, \*\*■\*\* percent for 2025, \*\*■\*\* percent for 2026 and \*\*■\*\* percent  
23 for 2027.

1       **Q.     PLEASE DESCRIBE THE ARRANGEMENTS THAT PROVIDE COAL**  
2       **AND ITS TRANSPORTATION TO YOUR FACILITIES.**

3       A.     For operating year 2023, Jeffrey Energy Center, Lawrence Energy Center,  
4       and La Cygne Generating Station coal was purchased in the manner  
5       discussed above. Each of the three stations received coal under multiple  
6       contracts and from multiple mine sources. All Evergy Kansas Central coal  
7       facilities burn low sulfur PRB coal that is produced in Wyoming. On  
8       occasion La Cygne Unit 1 may utilize bituminous coal to assist with various  
9       operational issues or coal pile management, but that bituminous coal is  
10      already onsite and in inventory from previous years prior to its transition to  
11      100% PRB coal. There are no plans at this time to purchase any bituminous  
12      coal for La Cygne in the future.

13      In 2023, coal for Jeffrey Energy Center originated at the Black/West  
14      Thunder, Cordero, and North Antelope Rochelle Mine ("NARM") in the  
15      Southern PRB ("SPRB") region of Wyoming. From the mines, the coal was  
16      transported to Jeffrey Energy Center by the Union Pacific Railroad ("UP")  
17      under a contract. Coal for Lawrence Energy Center originated at the  
18      Black/West Thunder and NARM mines in the SPRB region of Wyoming and  
19      was transported to the station by BNSF Railway Company ("BNSF") under  
20      tariff service. Finally, 2023 coal for La Cygne Generating Station originated  
21      at the Black/West Thunder, Cordero, Caballo, and NARM mines in the  
22      SPRB region of Wyoming. From the mines, the coal was transported to  
23      Kansas City by UP, where the trains were then interchanged to the

1 Canadian Pacific Kansas City (“CPKC”) railroad for delivery from Kansas  
2 City to the station. Both the originating and delivery movements to La  
3 Cygne were in contract service. Up until early 2023, the short haul from  
4 Kansas City to La Cygne Generating Station had been handled by the  
5 Kansas City Southern Railway Company (“KCS”), however Canadian  
6 Pacific Railway (“CP”) and KCS combined to form CPKC in April 2023.

7 **Q. DO EVERGY KANSAS CENTRAL’S COAL FIRED FACILITIES HAVE**  
8 **COMPETITIVE OPTIONS FOR COAL DELIVERY?**

9 A. Competition for coal transportation service to Jeffrey is very limited. Prior  
10 to 2021, the principal coal source for Jeffrey Energy Center was the Eagle  
11 Butte mine, which is captive to the BNSF. As a result, transportation to  
12 Jeffrey previously required both BNSF and UP movements. Beginning in  
13 2021, coal for Jeffrey Energy Center could be sourced at mines located on  
14 the BNSF-UP joint line, such that the coal could be transported via more  
15 efficient single line service on UP. Jeffrey Energy Center is served only by  
16 UP, however, so at this juncture, there are no further competitive options  
17 for the station. Lawrence Energy Center is served only by the BNSF. The  
18 rail infrastructure that would have to be installed for either generating facility  
19 to provide competitive access to both railroads would be complex to  
20 complete and very expensive, with uncertain results.

21 For La Cygne Generating Station, as explained above, there are two  
22 separate rail movements involved in the transportation of coal from  
23 Wyoming to the station. The origination portion of the movement (Wyoming

1 to Kansas City) is competitive, as it can be served by either BNSF or UP.  
2 The delivery portion of the movement, however, can only be handled by  
3 CPKC. Therefore, a portion of La Cygne coal transportation service is  
4 competitive, and a portion is not.

5 **Q. PLEASE DESCRIBE EVERGY KANSAS CENTRAL'S FLEET OF**  
6 **RAILCARS USED TO DELIVER COAL.**

7 A. Currently, Evergy Kansas Central has enough equipment to operate as  
8 many as eleven train sets to serve Jeffrey and Lawrence, plus spare  
9 railcars. As many as eight train sets are available to serve Jeffrey Energy  
10 Center and three sets for Lawrence Energy Center.

11 **Q. DOES EVERGY KANSAS CENTRAL LEASE ALL OF ITS TRAIN SETS?**

12 A. No. Evergy Kansas Central both owns and leases railcars. For those  
13 leased railcars, the next lease expiration dates are in the last half of 2024.  
14 EKC owns a total of 261 railcars or roughly two train sets.

15 **Q. DOES THE COMPANY UPDATE ITS FUEL PROCUREMENT AND**  
16 **PLANNING PROCESS TO ADJUST FOR CHANGES IN THE**  
17 **MARKETPLACE?**

18 A. Yes. EKC routinely reviews fuel market conditions and market drivers. We  
19 monitor market data, industry publications and consultant reports in an effort  
20 to avoid high prices and to take advantage of lower prices.

21 **Q. DID THE COMPANY MAKE ANY CHANGES TO ITS COAL AND**  
22 **NATURAL GAS PROCUREMENT AND PLANNING PROCESS FOR**  
23 **2023?**

1 A. Although EKC transitioned to a ladder strategy beginning in 2021, there  
2 were some further refinements to the ladder strategy made for 2023 coal  
3 procurement. As shared with KCC Staff in an August 19, 2022 Coal  
4 Procurement Strategy Update discussion, these refinements included,  
5 among others, \*\* [REDACTED]  
6 [REDACTED]  
7 [REDACTED]  
8 [REDACTED] \*\*.

9 While there was significant volatility in the natural gas market, no change  
10 was made to Evergy's gas procurement and planning process as a result.  
11 Natural gas is purchased on a short-term (daily) basis and thus the process  
12 already enables ongoing adjustments to market conditions each day and no  
13 adjustment was required.

#### 14 **SPP INTEGRATED MARKETPLACE VALUE AND IMPLICATIONS**

15 **Q. HAS THE SPP IM CHANGED HOW YOU DETERMINE YOUR**  
16 **GENERATION AND FUEL REQUIREMENTS?**

17 A. Yes, as previously discussed, our short-term modeling processes attempt  
18 to simulate SPP IM operations and thereby produce a generation and fuel  
19 burn forecast for our generating facilities. This allows Evergy Kansas  
20 Central to estimate our fuel requirements to meet expected SPP generation  
21 dispatch.

1       **Q.    HAS THE SPP IM CHANGED HOW EVERGY KANSAS CENTRAL**  
2       **OPERATES AND MANAGES ITS GENERATION FLEET ON A DAY TO**  
3       **DAY BASIS?**

4       A.    Yes, the SPP IM requires Evergy Kansas Central to offer generating units  
5       into the daily market to be available to help meet total RTO demand and in  
6       turn, Evergy Kansas Central purchases energy from the RTO necessary to  
7       meet our customers' load requirements. Based on regional generation  
8       needs, the SPP IM may require Evergy Kansas Central to operate facilities  
9       we might not run on our own accord to meet our customers' load obligation  
10      or require EKC to reduce generation at facilities we might otherwise operate  
11      at higher capacities had they been dispatched by Evergy Kansas Central  
12      alone. These SPP operating and dispatching requirements are derived from  
13      a least cost generation modeling solution based on loads by area, available  
14      generation, transmission constraints, fuel prices, environmental constraints,  
15      wind generation availability and other power plant operating criteria.

16      **Q.    HOW DOES THE SPP IM IMPACT FUEL & PURCHASE POWER**  
17      **COSTS?**

18      A.    As the Consolidated Balancing Authority ("CBA"), SPP determines the  
19      generation that will be committed and dispatched for an operating day to  
20      serve the load of the market. Those commitments and dispatches for  
21      Evergy Kansas Central resources drive fuel costs. However, the revenue  
22      received from the market for that generation goes to offset the purchase  
23      power costs associated with serving the Evergy Kansas Central load.

1       **Q.    HOW DOES THE SPP IM DETERMINE HOW UNITS WILL BE**  
2       **COMMITTED AND DISPATCHED?**

3       A.    The SPP IM uses a sophisticated algorithm to determine the most  
4       economical mix of generation required to meet the combined SPP load  
5       requirement. This algorithm considers many factors beyond the fuel cost of  
6       individual generation units. The algorithm calculates the all-in unit costs  
7       that include start-up costs, minimum runtime, unit heat rates at various  
8       output levels, environmental constraints, transmission constraints, and  
9       many other factors. This calculation allows SPP to determine the optimal  
10      blend of generation resources to meet SPP members' load, regardless of  
11      the unit owner, and to best utilize the transmission system to meet the load  
12      requirements of all member utilities. The results achieved by the SPP's  
13      modeling and dispatching capabilities utilizing all the region's generating  
14      resources would not have been possible prior to the SPP IM.

15      **Q:    PLEASE DESCRIBE HOW THE SPP IM PROVIDES VALUE TO YOUR**  
16      **CUSTOMERS.**

17      A.    The SPP IM provides Everygy Kansas Central and other SPP member  
18      companies opportunities for either enhanced revenues or economic  
19      purchases such as energy and ancillary services. A benefit of the SPP IM  
20      is the enhanced ability of the SPP to dispatch energy and ancillary services  
21      from the most economical resources of all SPP members on a sub-hourly  
22      basis.

1       **Q.    ARE THESE REVENUE STREAMS AND COST SAVINGS PASSED ON**  
2       **TO EVERGY KANSAS CENTRAL’S CUSTOMERS?**

3       **A.**    Yes. Our customers receive the benefits of the SPP dispatch savings and  
4       generating revenue offsets through the RECA.

5       **Q.    DO YOU HAVE ANY OTHER COMMENTS RELATED TO THE**  
6       **EFFICIENCY OF THE SPP MARKET?**

7       **A.**    Yes. An important point to consider is all SPP member utilities and  
8       generating companies are required to fully participate in the sale of  
9       generation and the purchase of load. Prior to the SPP IM, generation  
10      resources and utilities were not required to buy from or sell electricity to  
11      other SPP members. Under the SPP IM, all SPP member companies are  
12      now required to offer and sell electricity from their generating units into the  
13      SPP IM, ensuring the most economical blend of resources are available to  
14      the SPP member utilities. Again, this would not be possible without the SPP  
15      IM.

16      **Q:    HAS THE COMPANY PERFORMED ANY ANALYSIS OF THE SPP IM’S**  
17      **BENEFIT FOR EVERGY KANSAS CENTRAL CUSTOMERS?**

18      **A:**    Yes. A full, in-depth cost-benefit analysis is beyond the scope of the  
19      Company’s resources to produce. However, consistent with the approach  
20      utilized for the Evergy Metro analysis, a study that focuses on the single  
21      market benefit associated with the CBA in the SPP IM structure was  
22      conducted to provide a sense of the benefit that the SPP IM has provided.  
23      It should be noted that this study is not able to quantify the many other



1 benefits of the SPP IM such as increased transmission construction,  
2 improved settlements, and wind generation improvements etc. However,  
3 the study looked at the resulting Locational Marginal Pricing (“LMP”) for  
4 Evergy Kansas Central’s native load improvement as a proxy for the  
5 cost/benefit to serve native load by participating in the SPP IM.

6 **Q: PLEASE DESCRIBE HOW THE ANALYSIS WAS CONDUCTED.**

7 A: The analysis attempts to compare and quantify the effect of Evergy Kansas  
8 Central’s load and generation being balanced by the CBA as a member of  
9 the SPP IM as compared to existing outside of SPP as a stand-alone  
10 Balancing Authority (“BA”). Two PROMOD based simulations for calendar  
11 year 2023 were performed:

- 12 • Simulation 1: Assumes the SPP IM market with CBA for all of  
13 SPP for the entire year.
- 14 • Simulation 2: Assumes Evergy entities operate as a stand-  
15 alone BA outside of the SPP IM for the full year.

16 To calculate the benefit, the Evergy Kansas Central LMP in each  
17 simulation was compared and the change in the cost to serve native load  
18 for Evergy Kansas Central was valued.

19 The final results estimate a benefit of \*\* [REDACTED] \*\* for customers  
20 as shown in the Confidential Schedule JLT-1; however as discussed above,  
21 this is not inclusive of the many other benefits that the SPP IM provides.

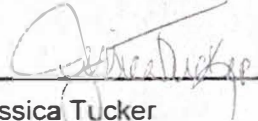
22 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

23 A. Yes, it does. Thank you.

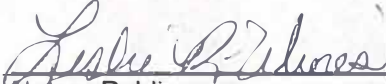
STATE OF KANSAS            )  
  ) ss:  
COUNTY OF SHAWNEE        )

**VERIFICATION**

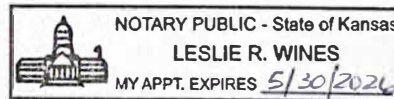
Jessica Tucker, being duly sworn upon her oath deposes and states that she is the Senior Manager, Fuels and Emissions, for Evergy, Inc., that she has read and is familiar with the foregoing Direct Testimony, and attests that the statements contained therein are true and correct to the best of her knowledge, information and belief.

  
\_\_\_\_\_  
Jessica Tucker

Subscribed and sworn to before me this 20<sup>th</sup> day of March, 2024.

  
\_\_\_\_\_  
Notary Public

My Appointment Expires May 30, 2026



**SCHEDULE JLT-1**

Public

WR 2023 Load Price

WR_WR LMP			
Month	BA	SPP CBA	Δ
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
Average			

WR LOAD	
Month	MWh
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
Total	

Benefit	
Month	MWh
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
Total	