

**Public Version**

Exhibit No.:  
Issue: Fuel, Purchased Power, Wholesale  
Sales, FAC Support  
Witness: Eric T. Peterson  
Type of Exhibit: Direct Testimony  
Sponsoring Party: Evergy Missouri Metro  
Case No.: ER-2022-0129  
Date Testimony Prepared: January 7, 2022

**MISSOURI PUBLIC SERVICE COMMISSION**

**CASE NO.: ER-2022-0129**

**DIRECT TESTIMONY**

**OF**

**ERIC T. PETERSON**

**ON BEHALF OF**

**EVERGY MISSOURI METRO**

**Kansas City, Missouri  
January 2022**

**DIRECT TESTIMONY**

**OF**

**ERIC T. PETERSON**

**Case No. ER-2022-0129**

1 **Q: Please state your name and business address.**

2 A: My name is Eric T. Peterson. My business address is 1200 Main, Kansas City, Missouri  
3 64105.

4 **Q: By whom and in what capacity are you employed?**

5 A: I am employed by Evergy Metro, Inc. ("Evergy Metro") and serve as Director, Analytics  
6 & Shared Services for Evergy Metro d/b/a as Evergy Missouri Metro ("Evergy  
7 Missouri Metro"), Evergy Missouri West, Inc. d/b/a Evergy Missouri West ("Evergy  
8 Missouri West"), Evergy Metro d/b/a Evergy Kansas Metro ("Evergy Kansas  
9 Metro"), and Evergy Kansas Central, Inc. and Evergy South, Inc., collectively d/b/a as  
10 Evergy Kansas Central ("Evergy Kansas Central") the operating utilities of Evergy, Inc.

11 **Q: On whose behalf are you testifying?**

12 A: I am testifying on behalf of Evergy Missouri Metro.

13 **Q: What are your responsibilities?**

14 A: My primary responsibilities include oversight of power marketing analytics, energy  
15 fundamentals, market modeling and fuel management (excluding natural gas).

16 **Q: Please describe your education, experience and employment history.**

17 A: I graduated the University of Tulsa in May 1996 with a Bachelor of Science degree in  
18 Business Administration & Finance. Next, I graduated from Oklahoma City University in  
19 October 1999 with a Master's in Business Administration Finance & Marketing.

1 I began my career with WorldCom in 1996 as a Specialist in network planning and facility  
2 cost management. In 1997, I started my energy industry career at American Electric Power  
3 (formerly Central & South West Services) in Strategic Research & Modeling as Analyst  
4 supporting Integrated Resource Planning. In 1999, I joined the Williams Companies in the  
5 Energy Marketing & Trading area as an Analyst focused on cross commodity analysis,  
6 market analysis, and development of forward curve modeling.

7 My career began with KCP&L in 2002 as an Analyst in Energy Resource  
8 Management focusing on Integrated Resource Planning, budget, and various energy  
9 analyses. In 2006, I was promoted to Manager, Portfolio & Risk Management, which  
10 focused on structured deal analysis, budgeting, and energy risk exposure. In 2009, I was  
11 promoted Senior Manager, Supply Resources, which focused on all fuel procurement and  
12 transportation. In 2010, I was promoted to Director, Supply Resources, which included all  
13 fuel, power dispatch operations, trading, and origination activities. In 2016, I was  
14 promoted to Senior Director, Generation Sales & Services, which included same  
15 responsibilities as Director with additional roles of benchmarking, scorecards, and O&M  
16 management. In 2018, job title changed to Director, Analytics & Shared Services, with  
17 duties consisting of all energy marketing and budgeting analytics and fuel procurement and  
18 transportation activities.

19 **Q: Have you previously testified in a proceeding at the Missouri Public Service**  
20 **Commission (“MPSC” or “Commission”) or before any other utility regulatory**  
21 **agency?**

22 A: No

1 **Q: What is the purpose of your testimony?**

2 A: The purpose of my testimony is to describe the level of fuel expense, purchased power  
3 expense and the wholesale sales revenues filed in the revenue requirement schedules  
4 included in the Direct Testimony of Company witness Ronald A. Klote. In addition, I will  
5 provide information regarding the requirements necessary to support an Electric Utility  
6 Fuel and Purchased Power Cost Recovery Mechanism related to the Company's request to  
7 continue use of the Fuel Adjustment Clause ("FAC"). I specifically address all or a portion  
8 of the requirements of 20 CSR 4240-20.090(2)(A) 15., 16., and 17.

9 **I. ENERGY PRICE FORECASTS**

10 **Q: Please describe how Evergy ~~Missouri~~ Metro forecasts electricity prices?**

11 A: Evergy ~~Missouri~~ Metro utilizes the PROMOD<sup>®</sup> IV ("PROMOD") software, similar to  
12 other fundamental price forecasting models that are commonly used in the industry.  
13 PROMOD is provided by Hitachi Energy (formerly ABB). PROMOD incorporates details  
14 in generating unit operating characteristics, transmission grid topology and constraints, and  
15 market system operations to simulate power flows within and between various energy  
16 markets, including but not limited to, Independent System Operators ("ISO"), Regional  
17 Transmission Organizations ("RTO"), and other North American Electric Reliability  
18 Corporation ("NERC") regions. PROMOD performs a security constrained unit  
19 commitment and co-optimized economic dispatch to generate Locational Marginal Prices  
20 ("LMP") at the nodal level, similar to how ISOs and RTOs set schedules and determine  
21 prices.

1 **Q: What are the primary inputs to the model?**

2 A: The model utilizes a sizeable input dataset that is populated with assumptions about market  
3 supply, demand, and transmission. The bulk of the input assumptions use NERC reports,  
4 Federal Energy Regulatory Commission (“FERC”) Form 1 data, Energy Information  
5 Administration (“EIA”) 411 reports, Continuous Emissions Monitoring System (“CEMS”) data  
6 compiled by the Environmental Protection Agency (“EPA”), and publicly available  
7 data reported by the various ISOs and RTOs as sources. The demand data includes  
8 projected hourly demand for virtually every electric power entity in the Eastern  
9 Interconnect. The supply data contains a representation of generating units within those  
10 entities and their operating characteristics, including, capacity, heat rate, fuel type, variable  
11 operations and maintenance costs, outage rates, emissions rates, and start-up costs. Other  
12 primary inputs are fuel (e.g., coal, natural gas, fuel oil) prices, emission allowance prices,  
13 renewable energy generation, reserve requirements, hurdle rates, and imports/exports to  
14 external areas. The dataset also includes detailed transmission grid topology, transmission  
15 constraints and contingency events within and between regions.

16 **Q: How does the model use this data to forecast power prices?**

17 A: PROMOD performs an hourly chronological commitment and dispatch of all generation  
18 resources to meet projected hourly demand in each region, as defined in the model’s  
19 geographic topology. For each hour, the model calculates the cost of generation, comprised  
20 of the production cost of the least-cost generating unit needed to meet demand. The model  
21 also determines the hourly cost of congestion, which is the added cost of needing higher-  
22 cost generators due to transmission constraints. Both the cost of generation and the cost of  
23 congestion make up the hourly power price, or LMP. Hourly LMPs are generated across

1 the model footprint at the nodal level; this means generators at different locations may have  
2 different LMPs in each hour. The model aims to minimize these system costs while  
3 simultaneously adhering to operating constraints and transmission grid limitations to meet  
4 load reliably. This is similar to how Southwest Power Pool (“SPP”), the RTO in which the  
5 Company resides, calculates its power prices.

6 **Q: Is this done for only one region?**

7 A: No. The model footprint includes SPP, Midcontinent Independent System Operator  
8 (“MISO”), Pennsylvania, New Jersey and Maryland (“PJM”), Associated Electric  
9 Cooperative Inc (“AECI”), Southwestern Power Administration (“SPA”), Tennessee  
10 Valley Authority (“TVA”), and Louisville Gas and Electric Company and Kentucky  
11 Utilities Company (“LGE/KU”). The model also includes imports and exports across the  
12 high voltage direct current (“HVDC”) ties which connect SPP to the Western Interconnect  
13 and the ERCOT Texas Interconnect, as well as other external areas that are not dynamically  
14 modeled (e.g., Florida, NYISO, etc.). Units may be economically dispatched to serve load  
15 in a neighboring region if transmission capacity exists.

16 **Q: What is your opinion of the resulting forecasts?**

17 A: The fundamental supply and demand data are relatively good. The demand forecast from  
18 utilities and the existing public data on installed generation capacity are sufficiently  
19 reliable, so that identifying a reasonable unit to base an hourly price on is something that  
20 can be done with a reasonable degree of confidence. The input assumptions that create a  
21 larger challenge are fuel price and wind as discussed below. In SPP, Evergy ~~Missouri~~  
22 Metro’s market area, the market price is usually set by one of three fuels: wind, coal, or

1 natural gas. Wind generation is typically the marginal resource during off-peak hours,  
2 while coal or gas is largely the marginal resource during on-peak hours in SPP.

3 **Q: How difficult is it to predict the price of coal and natural gas?**

4 A: Coal prices are relatively less volatile and the model inputs are based on actual reported  
5 fuel costs, so the impact of coal on power prices can be forecasted with relative accuracy  
6 when coal is the marginal fuel. Natural gas prices are more volatile and difficult to predict.

7 **Q: How difficult is it to predict wind generation?**

8 A: Wind production, and therefore generation from wind farms, can be erratic and  
9 unpredictable. On average, wind makes up 29.5% of the total energy production in SPP (as  
10 of January 2021), but can be significantly higher during the Spring and Fall seasons.  
11 Schedule ETP-1 shows the volatility of wind generation in SPP from December 2020  
12 through November 2021. The natural variability of wind makes it difficult to predict power  
13 prices when wind is the marginal fuel.

14 **Q: How accurate are the power price forecasts?**

15 A: The power price forecasts are relatively accurate when the fuel price forecasts and wind  
16 forecasts are accurate. Deviations from the observed market price are typically congestion  
17 costs that are not captured due to unexpected generation or transmission outages, or power  
18 flows from neighboring regions (e.g., MISO, AECI, etc.).

## 19 **II. FUEL, PURCHASED POWER AND OFF-SYSTEM SALES NORMALIZATION**

20 **Q: What method for normalizing the test year fuel cost, purchased power cost and off-**  
21 **system sales did you use in this case?**

22 A: The method we used to normalize the test year fuel, purchased power and off-system sales  
23 is one where we normalized and annualized the system peak load and energy, the prices

1 paid for fuel, generating system maintenance, and available generating resources. After  
2 determining the appropriate normalized and annualized values, a production cost computer  
3 modeling tool was used to develop the appropriate generation and purchased power levels,  
4 and resulting fuel cost, purchased power cost and off-system sales revenues. Evergy  
5 ~~Missouri~~ Metro used the PROMOD software as its production cost model.

6 **Q: Please describe the PROMOD® IV software used in this normalization.**

7 A: This is the same modeling software as described previously. PROMOD simultaneously  
8 performs a security constrained and economic dispatch of generating units in the modeled  
9 footprint, which includes Evergy ~~Missouri~~ Metro, and produces hourly LMPs at each price  
10 node. The Company uses this model for various purposes, such as generating market price  
11 forecasts, resource planning decisions, fuel and interchange budgeting, purchase and sales  
12 analysis, etc.

13 **Q: Please describe the normalization of the system requirements for this rate case.**

14 A: Evergy Missouri Metro's native load was adjusted to reflect weather normalized and  
15 annualized customer growth by the Company's load forecasting personnel. This process is  
16 described in more detail in the Direct Testimony of Company witness Albert R. Bass.  
17 These normalized monthly peak demands and energy requirements were used as inputs  
18 into the PROMOD model. The software distributes these monthly energy requirements on  
19 an hourly basis, then utilizes the actual historical hourly system loads to shape the  
20 normalized loads. The resulting load shape was then used in the normalized production  
21 cost modeling.

22 The Company's wholesale contract customers that contain an energy component  
23 have been added to the native load to arrive at the total system requirements.



1 **Q: Please describe these wholesale contract customers.**

2 A: These are energy sales to the city of Eudora. The revenue for this transaction and the  
3 associated fuel expense is included in Schedule ETP-3 (**Confidential**).

4 **Q: Please describe the fuel price normalization.**

5 A: The normalized fuel prices used in the modeling are described in the Direct Testimony of  
6 Company witness Jessica Tucker. These fuel prices were input into the model on a plant-  
7 specific basis and were then used in the normalized production cost modeling.

8 **Q: Please describe the maintenance outages normalization.**

9 A: Evergy ~~Missouri~~ Metro performs scheduled maintenance on the base load generating units  
10 on a cyclical basis over a set number of years i.e., a specific unit in any given year may  
11 have an extended turbine generator outage, an extended boiler outage, a shorter boiler  
12 outage, a short inspection outage or no outage at all. In addition, refueling and maintenance  
13 outages at the Wolf Creek nuclear plant occur every 18 months, either in the spring or the  
14 fall. Thus, in every third year Wolf Creek is available for generation for the entire year.  
15 Consequently, in any specific year, there may be higher or lower scheduled maintenance  
16 outages than the long-term average maintenance outages. To normalize the availability of  
17 the generating resources, the total number of weeks that a unit would be scheduled for  
18 maintenance over the cycle was averaged over the number of years in the maintenance  
19 cycle. These normalized maintenance outage assumptions were then spread over a 12-  
20 month period to develop a normalized maintenance schedule. These outages were  
21 scheduled so that no two base load units would be out at the same time, and that all base  
22 load generating resources would be available during the peak load periods of June through

1 mid-September, and December through February. Schedule ETP-2 (**Confidential**)  
2 contains the maintenance schedule that was used for the normalization.

3 **Q: Please describe the generating resources available capacity normalization.**

4 A: The generating resources available in the rate case modeling are the same as Evergy  
5 ~~Missouri~~ Metro's existing resources with capacity levels that are expected to be in place  
6 and operational as of the true-up date in this case.

7 **Q: How was the generation from renewable resources modeled in this rate case?**

8 A: The wind generation from the Spearville Wind Energy Facility, owned by Evergy ~~Missouri~~  
9 Metro, was modeled based upon the actual 12-month ending June 2021 historical  
10 generation. Other renewable generation resources that were included in the model were  
11 Power Purchase Agreements ("PPA") from resources that are operating and under contract.  
12 They are the Cimarron, Osborn, Ponderosa, Prairie Queen, Pratt, Rock Creek, Slate Creek,  
13 Spearville 3, Waverly wind farms, and the Central Nebraska Public Power and Irrigation  
14 District ("CNPPID") hydro units. The generation levels and energy prices are based upon  
15 signed contracts and actual 12-month ending June 2021 historical generation.

16 **Q: What is the SPP Integrated Marketplace ("IM")?**

17 A: The SPP IM consists of a day-ahead energy market with transmission congestion rights, a  
18 real-time energy balancing market, and an operating reserve market. The IM allows SPP  
19 to decide which generators should operate one day ahead of time. By allowing SPP to  
20 monitor energy costs from multiple sources, the SPP IM is intended to improve grid  
21 reliability, the regional balancing of supply and demand, and cost-effectiveness. In March  
22 2014, the SPP IM replaced SPP's Energy Imbalance Service Market, which was in  
23 operation since 2007.

1 **Q: How does the SPP IM impact Evergy ~~Missouri~~ Metro's fuel and purchased power**  
2 **modeling?**

3 A: Prior to the SPP IM, Evergy ~~Missouri~~ Metro generation was first dispatched to meet the  
4 Company's native load obligations, with any excess economic generation being sold off-  
5 system. When wholesale market prices were such that it was economic to purchase power  
6 to meet a portion of Evergy ~~Missouri~~ Metro's native load obligations instead of using the  
7 Company's generating resources, wholesale purchases were made.

8 Evergy ~~Missouri~~ Metro now sells all of the energy it generates to the SPP IM, and  
9 purchases all native load energy requirements from the SPP IM. This significantly  
10 increases the amount of both wholesale sales and purchases. The production cost modeling  
11 performed with PROMOD emulates the operations of the SPP IM.

12 **Q: For the test period, what revenue and expense items, if any, were adjusted as a result**  
13 **of normalizing fuel cost, purchased power costs and off-system sales?**

14 A: Adjustments were made to fuel costs to reflect both a normalized fuel market and  
15 normalized generation levels. Purchased power expenses and bulk power sales were also  
16 adjusted to reflect the changes in the quantity of energy purchased or sold, and the prices  
17 of such purchases or sales. Schedule ETP-3 (**Confidential**) shows the generation levels by  
18 resource type, purchased power levels, the costs of each, and the revenues from generation  
19 sales and wholesale contract customers. The adjustments are reflected in Schedule RAK-  
20 4, attached to the Direct Testimony of Company witness Ronald A. Klote (adjustments CS-  
21 24, CS-25, and R-35).

1 **III. ADJUSTMENTS TO THE NORMALIZED FUEL, PURCHASED POWER and**  
2 **WHOLESALE SALES RESULTS**

3 **Q: Does Evergy ~~Missouri~~-Metro propose any adjustments to the PROMOD® IV model**  
4 **results?**

5 A: Yes. Adjustments are made for SPP Purchased Power Administrative Fees and the  
6 Renewable Energy Rider (“RER”) program. Adjustments are also made for ancillary  
7 services purchases and sales, line loss payments related to the Missouri Iowa Nebraska  
8 Transmission (“MINT”) line, SPP Revenue Neutrality Uplift (“RNU”) charges, and  
9 Transmission Congestion Right (“TCR”) margins.

10 **Q: What are SPP Purchased Power Administrative Fees?**

11 A: As a participant in the SPP IM, SPP charges Evergy ~~Missouri~~-Metro administrative fees  
12 related to costs of running and operating the SPP market. These charges include fees to  
13 recover costs of operating the Day-Ahead and Real-Time Balancing markets, market  
14 settlements, credit services, market monitoring, and Transmission Congestion Right  
15 (“TCR”) operations. These charges were previously recorded to a 575 subaccount but were  
16 switched over to a 555 subaccount by SPP beginning in September 2021. These charges  
17 are not included in the model used by the Company to calculate fuel and purchased power  
18 costs. As such, the SPP Purchased Power Administrative Fees have been included as an  
19 adjustment to Evergy ~~Missouri~~-Metro’s model results. Absent this adjustment, these  
20 charges would not otherwise be reflected in the Company’s retail cost of service.

21 **Q: What amount of SPP Purchased Power Administrative Fees has Evergy ~~Missouri~~**  
22 **Metro included in this case?**

23 A: The amount of SPP Purchased Power Administrative Fees included in this case is an  
24 annualized forecast of charges, for a period beginning after the change in accounts was

1 made, through May 2022. This adjustment is shown in Schedule ETP-3 (**Confidential**).  
2 These values will be updated to the actual amounts for the most recent 12 months at true-  
3 up.

4 **Q: What is the RER program?**

5 A: The RER program allows non-residential Evergy ~~Missouri~~ Metro customers to purchase  
6 renewable energy from renewable resources that the Company contracts. Revenues and  
7 costs associated with this program should be not be included as part of the FAC but are  
8 included in the model used by the Company to calculate fuel and purchased power costs.  
9 As such, the revenues and costs associated with the RER program have been removed as  
10 an adjustment to Evergy ~~Missouri~~ Metro's model results.

11 **Q: What amount of the RER adjustments has Evergy ~~Missouri~~ Metro included in this  
12 case?**

13 A: The amount of RER adjustments is based on the adjusted and annualized values from the  
14 Company's model results. These values will be updated to actual amounts for the most  
15 recent 12 months at true-up.

16 **Q: What are ancillary services purchases and sales?**

17 A: As a participant in the SPP IM, Evergy ~~Missouri~~ Metro is obligated to provide or procure  
18 certain ancillary services. These services include spinning, supplemental and regulating  
19 reserves. The Company purchases its SPP-specified ancillary services from the SPP-  
20 operated ancillary services market. In addition, Evergy ~~Missouri~~ Metro has the opportunity  
21 to sell these ancillary services in the SPP-operated market.

1 **Q: What amount of ancillary services purchases and sales has Evergy ~~Missouri~~ Metro**  
2 **included in this case?**

3 A: The amount of ancillary service purchases and sales included in this case is based on the  
4 average annual actual costs and revenues incurred by Evergy ~~Missouri~~ Metro for the 3  
5 years ending June 2021. This adjustment is shown in Schedule ETP-3 (**Confidential**).  
6 These values will be updated to actual amounts for the most recent 12 months at true-up.

7 **Q: What are the MINT line loss payments?**

8 A: These are payments made to AECI for transmission losses on the MINT line. AECI  
9 provides coverage of the losses in-kind and the Company reimburses them for its share.

10 **Q: What amount of MINT line loss payments has Evergy ~~Missouri~~ Metro included in**  
11 **this case?**

12 A: The line loss payments included are based on the actual payments for the twelve months  
13 ending June 2021. This adjustment is shown in Schedule ETP-3 (**Confidential**). These  
14 values will be updated to the actual amounts for the most recent 12 months at true-up.

15 **Q: What are SPP's RNU charges?**

16 A: As a participant in the SPP IM, there are a number of miscellaneous charges and credits  
17 incurred in order for SPP to remain revenue neutral. These charges and credits that make  
18 up the RNU charges include items such as rounding errors and inadvertent interchange  
19 costs or revenue. RNU is distributed among the market participants as either a debit (if SPP  
20 is short of funds to balance payments between participants) or a credit (if SPP has collected  
21 more than needed to balance payments between participants).

1 **Q: Why is it appropriate that Evergy ~~Missouri~~ Metro include net RNU charges in its**  
2 **calculation of revenue requirements?**

3 A: As a participant in the SPP IM, Evergy ~~Missouri~~ Metro is exposed to RNU charges and  
4 credits. These charges and credits are not included in the model used by the Company to  
5 calculate fuel and purchased power costs. As such, the net SPP RNU charges have been  
6 included as an adjustment to Evergy ~~Missouri~~ Metro's model results. Absent this  
7 adjustment, RNU-related charges and credits would not otherwise be reflected in the  
8 Company's retail cost of service.

9 **Q: What is the basis of the net SPP RNU charge amount included in this case?**

10 A: The RNU charges included in this case are based on the average annual charges for the 3  
11 years ending June 2021. This adjustment is shown in Schedule ETP-3 (**Confidential**).  
12 This RNU amount will be updated to the actual amount for the most recent 12 months at  
13 true-up.

14 **Q: What is TCR margin?**

15 A: Under the SPP IM, there are congestion charges for moving energy from generation to load  
16 when the transmission system becomes congested. As the SPP IM was developed,  
17 financial instruments were created to hedge these transmission congestion charges. These  
18 hedges are called TCRs. In theory, transmission customers such as Evergy ~~Missouri~~ Metro  
19 are allocated TCRs in sufficient quantity to hedge the actual transmission congestion  
20 charges incurred to serve their native load obligations. However, during the period twelve  
21 months ending June 2021, the revenue received from Evergy ~~Missouri~~ Metro's TCR  
22 portfolio has exceeded the estimated congestion costs. The estimated annualized net gain  
23 on Evergy ~~Missouri~~ Metro's TCR portfolio has been included as a credit to the retail cost

1 of service. This amount can be found in Schedule ETP-3 (**Confidential**). This amount  
2 will be updated to the actual amount for the most recent 12 months at true-up.

3 **IV. ELECTRIC UTILITY FUEL AND PURCHASED POWER COST RECOVERY**  
4 **MECHANISM**

5 **Q: In regard to Evergy ~~Missouri~~-Metro's request for continued use of an FAC, which**  
6 **portions of the Electric Utility Fuel and Purchased Power Cost Recovery Mechanism**  
7 **filing requirements are you addressing in your testimony?**

8 A: I will address all or portions of 20 CSR 4240-20.090(2)(A)15.), 16., and 17. Requirement  
9 15. addresses heat rate test results, requirement 16. addresses the long-term resource  
10 planning process, and requirement 17. addresses forecasted environmental investments.

11 **Q: Has Evergy ~~Missouri~~-Metro supplied the heat rate test results and documentation of**  
12 **the actual test/monitoring procedures for its generating units required per 20 CSR**  
13 **4240-20.090(2)(A)15.?**

14 A: Yes. Heat rate test results conducted within the previous 24 months are provided in  
15 Schedule ETP-4 (Confidential) and Schedule ETP-5 (Confidential). The documentation  
16 of the actual test/monitoring procedures is provided in Schedule ETP-6 (**Confidential**).

17 **Q: Please provide your support for 20 CSR 4240-20.090(2)(A)16.**

18 A: 20 CSR 4240-20.090(2)(A)16. requires the Company to provide:

19 Information that shows that the electric utility has in place a long-term  
20 resource planning process;

21 Evergy ~~Missouri~~-Metro has a long-term resource planning process in place. The electric  
22 utility resource plan produced by the process is also known as an integrated resource plan  
23 ("IRP"). An objective of this planning process is to identify the least cost and preferred  
24 resource plans while maintaining adequate capacity reserves for reliability.



1 **Q: When was Evergy ~~Missouri~~ Metro's last IRP prepared?**

2 A: Evergy ~~Missouri~~ Metro prepared and filed its latest IRP update report in April 2021 in Case  
3 No. EO-2021-0035.

4 **Q: When will the next Evergy Missouri Metro IRP be prepared?**

5 A: Under the current IRP rule, the next Evergy ~~Missouri~~ Metro IRP update is to be filed in  
6 March 2022. This filing will be an annual update filing.

7 **Q: Please provide your support for 20 CS 4240-20.090(2)(A)17.**

8 A: 20 CSR 4240-20.090(2)(A)17. states:

9 If the electric utility proposes to include emissions allowances costs or sales  
10 revenue in the proposed FAC and not in an environmental cost recovery  
11 mechanism, a detailed explanation of its emissions management policy, and its  
12 forecasted environmental investments, emissions allowances purchases, and  
13 emissions allowances sales;

14  
15 At this time, Evergy ~~Missouri~~ Metro has no forecasted environmental investments that  
16 would impact emission allowances costs or sales revenues.

17 The forecasted emissions allowances purchases and sales and an explanation of Evergy  
18 ~~Missouri~~ Metro's emissions management policy required by 20 CSR-4240-20.090(2)(A)  
19 17. can be found in the Direct Testimony of Company witness Jessica Tucker.

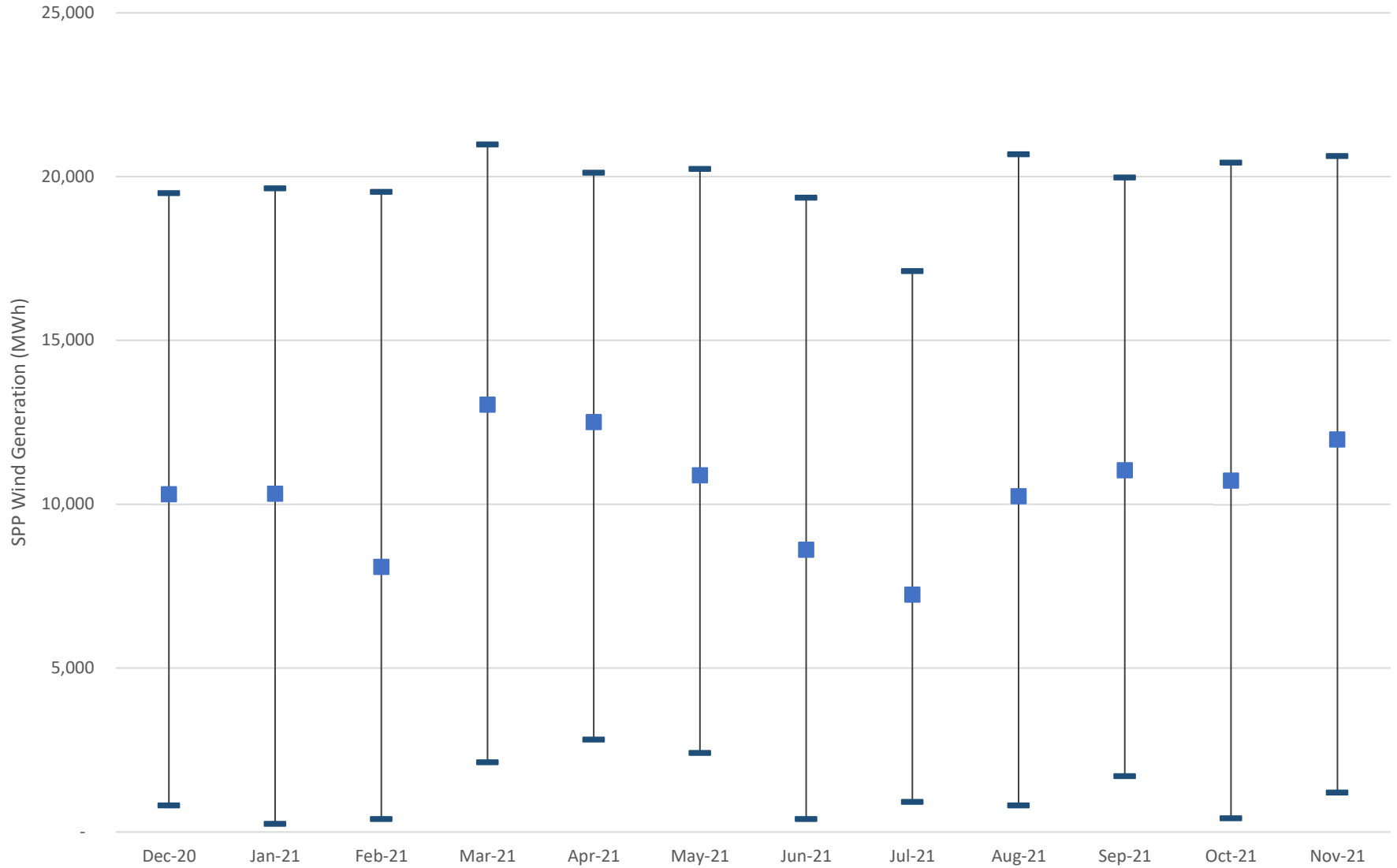
20 **Q: Does that conclude your testimony?**

21 A: Yes, it does.



# Volatility of Wind Generation in SPP Region

*Minimum, Average and Maximum*



Schedule ETP-1

**SCHEDULES ETP-2 THROUGH ETP-6  
CONTAIN CONFIDENTIAL  
INFORMATION  
NOT AVAILABLE TO THE PUBLIC.  
  
ORIGINALS FILED UNDER SEAL.**