Exhibit No.: _____
Issue(s): Resource Planning Imprudence/ Wind PPAs/Fuel/FAC
Witness/Type of Exhibit: Mantle/Rebuttal
Sponsoring Party: Public Counsel
Case No.: ER-2022-0129 and ER-2022-0130

REBUTTAL TESTIMONY

OF

LENA M. MANTLE

Submitted on Behalf of the Office of the Public Counsel

EVERGY METRO, INC. D/B/A EVERGY MISSOURI METRO
AND
EVERGY MISSOURI WEST, INC. D/B/A EVERGY MISSOURI WEST

CASE NOS. ER-2022-0129 AND ER-2022-0130

** **
Denotes Confidential Information that has been redacted.

July 13, 2022

PUBLIC

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 LENA M. MANTLE

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Lena M. Mantle, of lawful age and being first duly sworn, deposes and states:

1. My name is Lena M. Mantle. I am a Senior Analyst for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Lena M. Mantle
Senior Analyst

Subscribed and sworn to me this 13th day of July 2022.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

TIFFANY HILDEBRAND
My Commission Expires
August 8, 2023
Cole County
Commission #15637121

Tiffany Hildebrand
Notary Public

My Commission expires August 8, 2023.

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REBUTTAL TESTIMONY

OF

LENA M. MANTLE, P.E.

EVERGY METRO, INC.
CASE NO. ER-2022-0129

EVERGY MISSOURI WEST, INC.
CASE NO. ER-2021-0312

Q. What is your name?

A. Lena M. Mantle.

Q. Are you the same Lena M. Mantle who filed direct testimony in this case?

A. Yes, I am.

Q. Why are you filing rebuttal testimony?

A. Staff witnesses Shawn E. Lange and Charles T. Poston filed direct testimony regarding Staff's process for modeling normalized fuel and purchased power expenses for Evergy Metro, Inc. ("Evergy Metro") and Evergy Missouri West, Inc. ("Evergy West"). Both of these Staff witnesses include recommendations that the Commission adopt their normalize fuel costs, however their testimonies do not provide to the Commission any explanations regarding the costs nor the implications of Evergy, Inc.'s ("Evergy") resource planning process on fuel and purchased power costs. In this testimony, I provide my analysis of the fuel and purchased power costs of Evergy Metro and Evergy West and the impact of Evergy's resource planning on the fuel and purchased power costs of the two utilities.

This testimony shows the cost impact of Evergy West's imprudent resource planning. Customers should not be required to continue to pay for the decisions of Evergy West to rely on capacity from Evergy Metro and energy from the market instead of acquiring resources to meet the customers' energy needs.

I expand on the recommendation of Staff witness Brad Fortson that any purchase power agreements ("PPAs") signed after May 2019 whose costs exceed

its revenues not pass through the fuel adjustment clause ("FAC") for cost recovery.[1] Customers should not have to continue to pay for current PPAs that were not part of the resource planning process and have consistently had costs that have exceeded their revenues.

Both Staff and Evergy included in its fuel runs wind PPAs that that are part of the Renewable Energy Rider program. I explain why these two PPAs should not be included in the normalization of fuel and purchased power costs. Evergy Metro's fuel model also included the Central Nebraska Public Power and Irrigation District ("CNPPID") hydro PPA. This PPA was not part of the revenue requirement set in the last case and should not be in this case either.

I respond to proposals for modifications to the FAC of both Staff and Evergy.

Finally, I provide testimony regarding a potential true-up issue from Evergy West's filing in its FAC rate change case, Case No. ER-2023-0011.

Q. What recommendations to the Commission do you make in this testimony?

A. I recommend the Commission:

1. Find Evergy West's resource planning imprudent;
2. Find Evergy West's prudent fuel and purchased power costs be determined using a weighted average dollars per megawatt-hour ($/MWh) of Evergy West and Evergy Metro multiplied by Evergy West's normalized annual load in this case;
3. Find the prudent fuel and purchased power cost as a percentage of the normal fuel and purchased power expenses and order those costs be applied to actual FAC costs going forward to determine Evergy West's prudent actual costs until prudent resources are obtained by Evergy West;

[1] Class Cost-of-Service Direct, page 17.

4. Order costs of current PPAs not be passed to customers once their cumulative net cost exceeds 100,000 times its contracted capacity. If that point has already been reached then customers should not have to pay any additional losses for that PPA but should receive any positive margins through the FAC. Once the benefits are greater than the accumulated losses that have already been recovered from customers, then shareholders and customers will split the losses and costs 50%/50%;
5. Order the net losses/gains of wind PPAs be calculated on an hourly basis;
6. Order, for Evergy Metro, the CNPPID hydro PPA net cost not be included in the revenue requirement or the FAC;
7. Require Evergy West and Evergy Metro to supply the OPC the same information that it is providing Staff and allow OPC access to the same information that it does Staff; and
8. Require Evergy West and Evergy Metro to continue to include in its FAC monthly submissions, for each of its wind PPAs, the MWh produced for the month, the energy cost, the curtailment cost, and the revenues produced.

Evergy West's Resource Planning Process is Imprudent

Q. What are Staff's estimates of Evergy West and Evergy Metro's fuel and purchased power costs?

A. Staff witness Poston recommends the Commission reflect fuel and purchase power expenses of $218,459,431 in Evergy West's revenue requirement.[2] Staff witness Shawn Lange recommends fuel and purchased power expenses of $253,278,267 be included in Evergy Metro's revenue requirement.[3]

[2] Direct testimony, page 2
[3] Direct testimony, page 2.

Q. Do Staff's fuel and purchase power cost estimates demonstrate that Evergy West's resource planning is imprudent?

A. Yes. A simple comparison of the recommended fuel and purchased power costs to the annual load requirement of electricity[4] for each utility is the first indication that Evergy West's resources are vastly different from Evergy Metro. While it is expected that different utilities would have different costs to meet their customer's requirements, it is important to remember that Evergy's has consistently asserted that combining the resource planning of Evergy West and Evergy Metro is the best strategy for Evergy West and Evergy Metro. That said, the cost per MWh for the two utilities is vastly different as shown in Table 1.

Table 1

Normalized Cost per MWh of Load

**

**

This simple comparison shows that every MWh used by Evergy West's customers cost 51% more than it does Evergy Metro.

Q. Why is the cost so different given Evergy's resource planning process combines the two utilities?

A. Evergy Metro has generation in excess of its customers' needs. Evergy West does not have enough Southwest Power Pool ("SPP") accredited generation capacity to even meet its peak. Combined the two have enough SPP accredited generation to meet the combined loads.

[4] The generation required to meet the customers' electric requirements plus generation losses and company use. Often referred to as net system input or NSI.

However, the SPP energy market costs and revenues are assigned based on the utility that owns the generation. Evergy Metro's generation produces revenue on the SPP energy market that offsets fuel costs and some of its load costs. The revenues produced by Evergy West's generation covers the fuel cost but does not offset much of its load costs. Evergy West relies on the market to provide the electricity needed by its customers. The result of this is shown in Table 2 below.

Table 2

Staff's Direct Case Normalized Fuel and Purchased Power Costs
For Evergy West and Evergy Metro

**

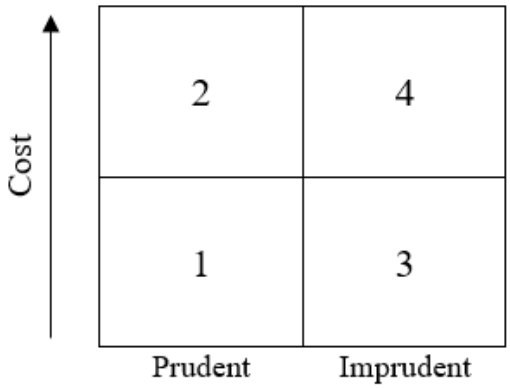
**

Q. What is the relationship between prudence and costs?

A. Figure 1 below depicts the realm of possibilities regarding prudence/imprudence and costs.

[5] Purchases from the market net of revenues generated from the market.

Figure 1: Relationship Between Prudence and Costs



Boxes 1 and 2 represent prudent decisions. Box 1 is the ideal - a prudent decision with low costs. While one of the objectives of a prudent decision is low cost, in reality, prudent decisions can sometimes result in increased cost. This is what Box 2 in the diagram illustrates.

Boxes 3 and 4 represent imprudent decisions. Box 3 is a decision that is imprudent but does not result in increased costs. Box 4 is a costly, imprudent decision.

Q. What does this relationship between prudence and costs have to do with Evergy West's resource planning process?

A. Simply put, Evergy West is imprudent because its resource planning, or rather the lack of resource planning, has resulted in Evergy West not having enough generation resources to meet the energy requirements of its customers. Evergy West's resource planning decisions have been imprudent because it is relying on Evergy Metro's capacity to meet the SPP resource adequacy requirement and the energy from other utilities in the SPP to meet its customers' needs. Prior to Storm Uri, Evergy West's customers did not see an increased cost due to the implementation of Evergy West's imprudent resource planning decisions. Market prices were low. Its imprudence was Box 3 in the chart in the response to the prior question. Its decisions were imprudent but those decisions did not result in harm

to customers. Storm Uri moved Evergy West's resource planning imprudence from Box 3 (an imprudent decision with low cost) into Box 4 (an imprudent decision with extreme cost).

Evergy West's imprudence has remained in Box 4. Natural gas prices have not returned to their pre-Storm Uri levels reflecting uncertainty of the supply of natural gas. Energy market prices reflect the uncertainty of the natural gas markets and future.

Q. Has OPC raised concerns regarding Evergy West's resource planning process prior to Storm Uri?

A. Yes. OPC raised its concerns regarding Evergy West's resource plan's increased reliance on energy purchased from the SPP market in at least the following cases:

EO-2017-0230	2017 Annual Resource Plan Update
EO-2018-0045	Contemporary Resource Planning Issue
ER-2018-0146	General Rate Increase Case
EO-2018-0269	Evergy West Triennial Resource Planning Compliance filing

In addition, I have filed testimony regarding the impact of Evergy West's imprudent resource planning in Case No. EF-2022-0155, the case in which Evergy West is requesting to recover more than $300 million from its customers due to Storm Uri.

Q. Would you briefly describe Evergy West's imprudent resource planning process?

A. Evergy, the parent company of Evergy Metro and Evergy West, has been conducting the resource planning of Evergy West ever since Great Plains Energy (now known as Evergy) acquired Aquila, Inc. (now known as Evergy West). Since the retirement of its Sibley 3 coal plant in November 2018, Evergy West has needed generation to meet the needs of its customers and the resource adequacy requirements of the SPP. While Evergy West needed generation in 2019, Evergy Metro had, and still has, generation above what is needed for its customers exceeding SPP's capacity resource adequacy requirements. When Evergy West

needed to add generation capacity for it to meet the SPP resource adequacy requirements, Evergy submitted the combined resources and loads of Evergy Metro and Evergy West to the SPP. In essence, Evergy was portraying that Evergy Metro and Evergy West were one utility and the generation of Evergy Metro would cover the generation capacity shortage of Evergy West. Combining the generation resources removed the need for Evergy to invest in additional generation to meet SPP's resource adequacy requirements. So, for the SPP, Evergy Metro and Evergy West are one utility. This is the least cost resource plan option for **Evergy.**

However, Evergy Metro and Evergy West are not one utility. Evergy has chosen to not combine Evergy West and Evergy Metro into one utility. They operate as one utility but each utility seeks different rates from their customers. To arrive at these rates, the shared services costs are allocated among the utilities. When costs can be directly attributed to one utility or the other, those costs are directly assigned to that particular utility. For instance, the cost of plants that were built by Evergy Metro are assigned to Evergy Metro. These plants are in Evergy Metro's rate base and increase the revenue requirement and the rates charged to Evergy Metro's customers. However, the expected revenues produced from selling the energy produced by the generation plants into the SPP market is also included in revenue requirement, resulting in a reduction in Evergy Metro's revenue requirement reducing the rates charged to Evergy Metro's customers.

Similarly, the cost of plants that were built by Evergy West are assigned to Evergy West for cost recovery from Evergy West's customers. When the generation from Evergy West's plants is not enough to meet the needs of Evergy West's customers, it purchases energy from the SPP market to cover its customers' loads. Although Evergy Metro's additional generation allows Evergy West to meet SPP's resource adequacy requirement, the energy Evergy Metro sells into the market does not offset the cost to purchase energy from the SPP to meet Evergy West's customers' load.

Absent a fuel adjustment clause ("FAC"), the risk of this strategy of depending on an energy market would fall on Evergy West. However, because Evergy West has a FAC that allows cost recovery of its market purchases from customers, the risk of depending on the market shifts to Evergy West's customers. Whenever market costs are low and stable the cost of this risk is low. However, when market prices skyrocket as it did during February 2021, the cost of the risk resulting from Evergy West's resource planning decisions to rely on the market skyrockets.

The cost of relying on the market has also shown up in this case through the more than doubling of the Every West FAC base factor from the current $0.02186 per kilowatt hour ("kWh") to Staff's recommended $0.04924 per kWh.[6] Evergy Metro's reliance on the market is also reflected in the increase in the percentage of transmission costs recovered in the FAC[7] from 39.2% to 75.16%.[8]

The Commission is the only protection the customers have from the imprudent strategy chosen by Evergy in operating Evergy West and Evergy Metro as one utility, but charging the customers as if the two were stand-alone utilities. If there are savings from combining the two utilities, then all customers should realize the benefits of those savings and the two utilities should be combined. If Evergy continues to insist that these are two separate utilities, then it should provide Evergy West's customers with the protection of generation that meets the requirements of a stand-alone utility.

Q. What is the difference between energy and capacity?

A. In the simplest terms, capacity is the maximum output an electricity generator can physically produce, measured in megawatts ("MW"). Energy is the amount of

[6] Amanda C. Conner, Class Cost-of-Service direct testimony, page 3.
[7] The pass-through percentage of SPP transmission costs is associated with energy purchases, from both firm purchased power agreements and the energy market in excess of energy generation by Evergy West's generation units to meet the energy requirements of its customers.
[8] Staff witness Amanda C. Conner, Class Cost-of-Service Direct Testimony, page 4.

electricity a generator produces over a defined period of time. For example, a generator with a capacity of 100 MW that runs at full capacity for 10 hours generates 1,000 MWh (100 MW * 10 hours = 1,000 MWh) of energy.

Having enough capacity is essential to having enough energy to meet customers' load requirements. However, having enough capacity does not necessarily ensure that energy will be available when it is needed. For instance, Evergy West does not have enough generation capacity through its owned resources and purchased power agreements to meet the SPP resource adequacy standards. It can only meet the SPP resource adequacy standards when combined with Evergy Metro. Evergy West's resource plan depends on Evergy Metro to provide capacity and on SPP to provide energy.

Q. To better understand your response to the previous question, would you provide a general explanation of how the market interacts with generation resources?

A. Energy markets are very complex with various moving parts and products. However, a detailed understanding is not necessary to understand why Evergy Metro's normalized costs are so much lower than Evergy West's. It comes down to basic economics. On the generation side, utilities bid their generation into the market with a bid that at least covers the variable costs of the generation. The market determines the price it will pay. If the generation bid is below the market price, the unit will generate and will be paid the market price. If the bid is above the market price, the unit will not generate.

For example, assume a generation unit with a capacity of 100 MW and a variable cost of $15/MWh. It is bid into the market at $15/MWh. If the market price is $12, the unit will not run nor will it produce revenue for the owner. Because it does not generate electricity, it will not incur variable cost.

If the market price is $15/MWh, the unit generates electricity and its variable costs will be covered but it will not produce revenue for the owner because the bid price was the same as the market price.

If the market price is $20/MWh, the unit generates electricity. Its variable costs are covered and the owner receives $5/MWh of revenue.

The market also sets a price for the loads of the utility. This load market price is based on the generation bid into the market and transmission constraints. The utility pays that amount for every MWh of load regardless of how much generation the utility is providing to the market. If a utility has generation that can produce at a price lower than the market and at an amount equal to or greater than its load, then the revenues produced by that utility offset the load costs. This is Evergy Metro. If a utility does not have generation to cover its load, then it has no revenue source to offset the cost of the load. This is Evergy West.

Q. Are not the fuel and purchased power costs that Evergy West incurs beyond its control?

A. Yes and no. In the short-term, the fuel and purchased power costs Evergy West incurs are out of its control. This is one of the assumed risks for which the Commission has rewarded Evergy West a return for years.

However, the fuel and purchased power costs Evergy West incurs is a function of Evergy West's generation resource choices. Utility owned and PPA generation revenue is critical in mitigating exposure to elevated and volatile wholesale market prices. To the extent that they can, Evergy West's resources do just that – they mitigate SPP energy market prices charged to Evergy West for the energy required to meet its customers' energy needs. However, that mitigation is limited to the resources of **Evergy West**. If it had prudently completed its resource planning and obtained resources that could meet its customers' needs, Evergy West would have generation resources that would hedge the cost of its load charged by SPP.

Q. How are generation resources hedges against fuel and purchased power costs?

A. The benefit of any resource in the energy market is the difference between the cost to produce energy and the market price for that energy. SPP charges the market price for the energy load of Evergy West. If a utility has generation that it can offer into the market, revenue above the variable cost to generate the electricity is revenue that offsets the costs to customers.

For example, if a utility owns its wind resources where variable costs are zero, the entire revenue provided by the market for energy generated is a benefit. Whenever owned wind resources are generating electricity and market prices are positive, the wind resources are a hedge against load costs regardless of whether the price is high or low. This is the benefit of an owned wind resource. However, the intermittent availability of wind means that revenues from owned wind resources cannot be maximized by generating when the market price is the highest. These resources respond to the availability of wind, not the market price.

Dispatchable resources, on the other hand, provide a hedge when the market price is greater than the cost for that resource to produce electricity. When market prices are high and the dispatchable resources are producing electricity, the dispatchable resources are a hedge against market prices because they are able to provide electricity at the time when market prices exceed the cost for that resource to produce electricity. However, this excess revenue should not be the sole reason for a utility to have dispatchable resources. Rather, having resources available to offset high market prices should be.

There is a difference in the value of the resources based on the ability of the source of energy used to create electricity when needed. Intermittent resources provide benefits when their energy source—water, wind, or light—is available. Dispatchable resources use energy sources that are typically available upon demand.

Q. What do you mean by a resource being dispatchable?

A. A dispatchable resource provides electricity when the electricity is needed. Fossil fuel units are units that can be relied on to generate electricity when needed, *i.e.* dispatched, when fuel is available. When it is not needed to generate electricity, the plant does not generate. Renewable generation is not completely dispatchable. As Evergy witness Peters pointed out in his direct testimony, "[w]ind production, and therefore generation from wind farms, can be erratic and unpredictable"[9] meaning it cannot be counted on to provide electricity upon customer demands but it can be reduced when its generation is greater than demand. If the headwater is available (hydro), the wind blowing, or the sun shining, renewable generation can provide electricity. However, when the headwater is not available, the wind is not blowing, and the sun is not shining, these resources cannot generate electricity.

Q. Are you saying that to be considered prudent Evergy West should have generating resources to satisfy its customers' load at all times including all extreme events?

A. No. There is no way to accurately plan for all extreme circumstances. Adding generation resources should be a balance between cost and reliability as I describe in the whitepaper titled, *Resource Planning of a Vertically Integrated Utility in the RTO World*, attached to this testimony as Schedule LMM-R-1. While economics is important, so is looking at the probability customers will be without energy. A proper balance in the resource planning process will mitigate price volatility in the energy market.

Evergy West has made the assumption in its resource planning that because it is a member of SPP, it does not need to add dispatchable resources or even have enough resources to meet its forecasted peak load that is based on normal weather. It is depending on its customers always having energy available to them, because it

[9] ER-2022-0130 direct page 6 and ER-2022-0129 direct page 6.

assumes that it can always get energy from SPP. This strategy pushes market price and volatility risk upon its customers. Storm Uri exposed the cost of this risk. The large adjustments in FAC rate change filings since Storm Uri has shown that this risk continues.

Q. What is a prudent resource portfolio for a vertically-integrated electric utility like Evergy West and Evergy Metro?

A. A good resource portfolio is one that contains diverse types of generation resources, each with its own strengths and weaknesses that are chosen to meet the unique load demands of the utility's customers in all hours of the year while also minimizing the risk of high utility bills and loss of service. When determining the acquisition, continuation, or retirement of any resource, the availability of fuel and the dispatchability of the resource, along with meeting environmental regulations needs to be considered. No one type of resource on its own can meet all of the requirements of a prudent resource plan. However, a diverse portfolio of resources will.

Q. Does Evergy West have a resource portfolio that contains diverse types of generation resources?

A. No. Evergy West resources are limited to minority ownership of coal plants, full ownership of natural gas and fuel oil combustion turbines, and six[10] wind PPAs.[11]

Q. Does Evergy Metro have a resource portfolio that contains diverse types of generation resources?

A. Yes. Evergy Metro has a very diverse set of resources. In addition to the Wolf Creek nuclear plant, it has dispatchable coal units, natural gas combined cycle and

[10] Evergy West has an additional wind PPA that is reserved for its Renewable Energy Rider ("RER") program customers.
[11] Like Evergy Metro's wind PPAs these PPAs have been costly to Evergy West's customers costing them almost $22 million in the first five months of 2022.

combustion turbine plants, and fuel oil combustion turbine plants. Its resources are not limited to nuclear and fossil fuel plants. It owns two wind projects and has entered into eight[12] wind PPAs that provide energy when wind is available.[13]

Results of Imprudent Resource Planning

Q. Should the objective of resource planning be to acquire generation with variable costs that are below the market price on a regular basis?

A. No. This would be resource planning to beat the market not resource planning to provide safe and adequate electricity at a reasonable cost for the utility's customers. This type of planning, like Evergy West's resource plans, relies on the market to meet customers' needs while being guaranteed the cost recovery, plus a return, on the capital investment. However, market prices that are higher than variable costs are not assured. Acquiring owned-resources with the objective of producing revenues from the market, shifts risk to customers while assuring shareholder profit to the utility. The resource planning objective with energy markets should be the same as it was before there was an energy market - a balancing of the fixed and variable costs in a manner that minimizes cost and reliability risks to the customers.

Q. What are you basing your assertion that Evergy Metro does not have enough SPP accredited capacity to meet its peak load?

A. Evergy West's 2022 annual resource planning update report[14] shows its 2021 net peak demand as 1,925 MW.[15] While that page in the report also shows Every West as having 2,421 MW of generation resources, the wind capacity in that table is at nameplate.[16] Because intermittent resources cannot be depended on at peak hour,

[12] Evergy Metro has an additional wind PPA that is reserved for its RER program customers.
[13] However, as discussed later in this testimony, because of the high cost of the wind energy, these PPAs have not shown to be beneficial to Evergy Metro's customers. In the first five months of 2022 they have cost customers over $41 million.
[14] EO-2022-0202.
[15] Page 2.
[16] The U.S. Energy Information Administration ("EIA") defines nameplate capacity as the maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions

SPP "accredits" intermittent resources, e.g. wind resources at a lesser capacity to determine whether or not it meets SPP's resource adequacy standard. Utilizing the capacity balance spreadsheet also included in that filing, the 2022 SPP accredited capacity for Evergy West's generation resources is 1663 MW, which is 262 MW below Evergy West's peak for 2021.[17]

Q. Is the SPP okay with Evergy West having generation resources less than its peak demand?

A. Yes because the SPP allows Evergy West and Evergy Metro to meet its capacity resource adequacy standards as a single entity. Evergy Metro's excess capacity exceeds Evergy West's deficiency so they meet the SPP's resource adequacy requirements when combined.

Q. Should this Commission be okay with Evergy West having generation resources less than its peak demand?

A. No. As I previously stated, having enough capacity is essential to having enough energy to meet customers' load requirements but it does not assure that there will be enough energy to meet customers' energy requirements. Entering into capacity only contracts with Evergy Metro may satisfy capacity requirements but it provides no energy for Evergy West's customers, leaving Evergy West's customers exposed to the risks of the market.

designated by the manufacturer. Installed generator nameplate capacity is commonly expressed in megawatts (MW) and is usually indicated on a nameplate physically attached to the generator.

[17] That same capacity balance sheet shows the capacity only PPA that Evergy West has with Evergy Metro for 325 MW and a sale of capacity of 100 MW to an unnamed party resulting in a capacity balance of 70 MW.

Other Filings Showing Impact of Imprudent Resource Planning

Q. Have there been any other filings with the Commission that also show the imprudence of Evergy West's resource planning?

A. Yes. Evergy West incurred more than $315 million in fuel and purchased power expenses during February 2021 to meet the electricity requirements of its customers. It is requesting recovery of these costs through securitization in Case No. EF-2022-0155. In that case, I filed extensive rebuttal testimony, much like the testimony in this case, showing that this extraordinary cost was significantly the result of poor resource planning.

Q. Is this the only other case that has been filed that demonstrates Evergy West's resource planning is imprudent and costly?

A. No. In its last two FAC rate change cases, Case Nos. ER-2022-0174 and ER-2023-0011, Evergy West's FAC costs have exceeded the costs included in its base rates by $50.4 million for June 2021 through November 2021 and $46 million for December 2021 through May 2022 respectively. In other words, fuel and purchased power costs for the 12 months ending May 2022 were $96.4 million higher than what was determined to be normal in the last rate case.

Q. What is the reason for the large increase in fuel and purchased power costs?

A. The largest contributor to the increase is an increase in purchased power expense, *i.e.* the cost of purchasing energy from the market. Company witness Lisa Starkebaum stated in her direct testimony in Case No. ER-2022-0174 that actual costs exceeded the amount included in base rates in large part due to an increase in purchased power expense.[18] In her testimony in Case No. ER-2023-0011, Ms. Starkebaum notes that the purchased power expense in December 2021 through

[18] Page 6.

May 2022 was 44% or $37.3 million higher than Evergy West's costs in December 2020 through May 2021.[19]

Calculation of Prudent Fuel and Purchased Power Costs for Evergy West

Q. What adjustment should be made to Evergy West's fuel and purchased power costs to adjust for imprudence?

A. Because Evergy has chosen to do resource planning for the combined utilities, I recommend a prudence factor be calculated using the Evergy West and Evergy Metro normalized net fuel and purchased power costs and normalized annual loads as described in the box below.

Table 3
Calculation of Evergy West
Prudent Fuel and Purchase Power Costs and Prudence Adjustment Factor

Weighted average fuel and purchased power ($/MWh$_{avg}$) per MWh:

$$\$/\mathrm{MWh}_{\mathrm{avg}} = \frac{\mathrm{FPP}_{\mathrm{EM}} + \mathrm{FPP}_{\mathrm{EW}}}{\mathrm{MWh}_{\mathrm{EM}} + \mathrm{MWh}_{\mathrm{EW}}}$$

Prudent Evergy West net fuel and purchased power cost (Prudent FPP_{EW}):

$$\text{Prudent } \mathrm{FPP}_{\mathrm{EW}} = \$/\mathrm{MWh}_{\mathrm{avg}} * \mathrm{MWh}_{\mathrm{EW}}$$

Imprudence Adjustment Factor (Adj):

$$\mathrm{Adj} = \frac{\text{Prudent } \mathrm{FPP}_{\mathrm{EW}}}{\mathrm{FPP}_{\mathrm{EW}}}$$

Where MWh_{EM} = Normalized annual load for Evergy Metro

MWh_{EW} = Normalized annual load for Evergy West

FPP_{EM} = Normalized annual net fuel and purchased power costs for Evergy Metro

FPP_{EW} = Normalized annual net fuel and purchased power costs for Evergy West

[19] Page 7. Purchased power cost for February 2021 used in this calculation was the average of the purchased power costs for February 2018, February 2019, and February 2020.

Using the results of the Staff's direct case fuel models, Evergy West's fuel and purchased power costs would be reduced by 21.5% or $47,017,825 to $171,441,606. The calculation of this percentage is shown provided on Schedule LMM-R-2 with the results shown in Table 4 below.

Table 4

Calculation of Adjusted Evergy West Fuel and Purchased Power Costs
Using Results from Staff's Direct Case Fuel Model

** _____ **

The actual percentage reduction of Evergy West's fuel and purchased power costs included in the revenue requirement of Evergy West in this case should be determined using the results of the trued-up normalized fuel costs for Evergy West and Evergy Metro. That percentage should be applied until Evergy West's next general rate case.

Q. Should Evergy Metro's normalize fuel and purchased power costs be adjusted in the same manner?

A. No. Evergy Metro's fuel and purchased power costs should not be increased because of the imprudence of Evergy West's resource planning. The impact of the adjustment should be borne by the shareholders.

Q. Would this be a one-time adjustment?

A. No. Evergy West's fuel and purchased power costs included in the FAC in each FAC rate change filing should be reduced by the same percentage until prudent resources have been obtained by Evergy West.

Q. What would be the result if a corresponding adjustment was not made in the FAC rate change filing cases?

A. If similar adjustments are not made, Evergy West would recover its costs through the FAC instead of through the base rates. There would be no adjustment for imprudence.

Q. You stated that a corresponding percentage reduction should be made until prudent resources are obtained by Evergy West. Will just any resources that produce revenues above cost be prudent?

A. No. While Evergy West needs more generation resources, it needs to add resources in a manner that meet its customers' requirements in a least-cost yet reliable manner, not just add more resources in an attempt to increase market revenues. Prudent resource planning results in generation resources that produce revenues that correspond to load so that resources are available at times when the load cost is greatest.

Q. Does this mean that Evergy West has to build more generation resources?

A. Not necessarily. In addition to building, Evergy West could obtain sufficient resources through capacity and energy PPAs that will provide both capacity and energy at the times Every West's load is most expensive to meet.

Alternatively, Evergy could actually merge Evergy West and Evergy Metro either legally or combine resources and allocate generation costs between Evergy West and Evergy Metro customers in an equitable manner.

Wind Purchase Power Agreement Costs

Q. What is Staff's position regarding Evergy's wind PPAs?

A. Staff witness Brad Fortson, in his Class Cost-of-Service direct testimony in this rate case, recommends language be included in the FAC tariff sheets that would hold shareholders responsible for the net costs associated with PPAs entered into after May 2019.[20] Mr. Fortson provides the following reason for his recommendation.[21]

> This language is necessary because EMM and EMW continue to enter into wind PPA contracts that have neither followed the fundamental objective of the resource planning process nor have been necessary to meet Missouri renewable energy standard ("RES") requirements, which in turn have resulted in more costs than revenues flowing through the FAC for a majority of its PPAs. Because of this, ratepayers are bearing the majority of the costs of these PPAs. Since the Companies are not following the fundamental objective of the resource planning process and exceed what is needed for the RES requirements, ratepayers should not be burdened with the bulk of the costs from the losses of future PPAs. (footnotes omitted)

Q. Do you agree with Mr. Fortson's recommendation?

A. Yes. However, I would also apply this recommendation to current PPAs once their cumulative net cost exceeds 100,000 times its contracted capacity. For example, if the nameplate capacity of the PPA was 100 MW then no cumulative losses above $10 million should be recovered from customers. If that point has already been reached then customers should not have to pay any additional losses for that PPA but should receive benefits if any occur through the FAC with costs/benefits calculated on an hourly basis. Once the cumulative benefits provided the customers equal the losses that have been paid by customers, shareholders and customers will split the losses and costs 50%/50%. The only way that Evergy West and Evergy Metro should be able to recover losses from a PPA above the set amount[22] would

[20] Page 2.
[21] *Id.*
[22] 100,000 * contracted capacity.

be to designate the PPA as a RES resource. However, Section 393.1030.2.(1) RSMo. and Commission Rule 20 CSR 4240-20.100 cap these costs.

Q. Would you provide a brief description of Evergy's wind purchased power agreements?

A. The majority of Evergy Metro's and Evergy West's wind PPAs are 20-year contracts that require Evergy to pay a set amount for every MWh the wind turbines can produce regardless of the market price being offered by SPP. Many of these contracts include a "take or pay" clause meaning if the turbine does not produce when wind is available,[23] then Evergy is required to pay to the owner of the wind project the contract amount for the MWh that was not produced and the production tax credit the owner would have obtained had the turbine produced the MWh. This results in these wind projects generating energy even when the SPP market price is negative because it is cheaper for Evergy to pay SPP to take the energy than to pay for the production tax credit.[24]

Q. Why did Evergy enter into these PPAs?

A. In its most recent RES plan filed in Case No. EO-2022-0287, Evergy Metro states that the Cimarron II and Spearville 3 wind PPAs were entered into to meet the Missouri RES requirements. The rest of Evergy Metro's PPAs (Osborn Creek, Rock Creek, Slate Creek, Waverly, Pratt, and Prairie Queen) it claims they were entered into because of "favorable economics."

Evergy West in its RES plan filed in Case No. EO-2022-0288 provides that the Gray County wind PPA was entered into prior to the RES and was justified at the time it was executed.[25] The report is unclear about why it entered into the

[23] This includes SPP ordered curtailments and instances where paying a negative market price is more costly than paying the production tax credit.
[24] Some of the wind projects may be considered dispatchable variable energy resources, which means these resources can be called on to reduce their production.
[25] However, Evergy Metro did not provide whether or not the renewal of the PPA in 2016 was "justified."

Ensign PPA although the report does state that it was entered into as a result of a request for proposals for resources to meet Missouri's RES. It states it entered into the Osborn, Pratt, Rock Creek and Prairie Queen PPAs because of "favorable economics."

Q. Regarding the PPAs for which Evergy states it entered into because of "favorable economics," has Evergy's expectations been realized?

A. No. Table 5 below shows the net gain/(net loss) of the PPAs from the time they started producing energy through May 31, 2022.

Table 5

Wind PPA Net Gains/(Losses)[26]
In Million $

	Evergy West	Evergy Metro
Cimmaron II		($103.0)
Spearville 3		($29.4)
Osborn Creek	($20.6)	($30.0)
Rock Creek	($27.5)	($40.5)
Ensign	($60.4)	
Gray County	($25.0)	
Slate Creek		($42.2)
Waverly		($73.0)
Pratt	($10.4)	($7.6)
Prairie Queen	$0.9	$0.6
Total	($143.0)	($325.1)

Q. Why is this important in this case?

A. These PPAs were not entered into because they were the best outcome of a resource planning process.[27] They were entered into because Evergy determined, based on its projections, these PPAs would beat the market and provide revenues greater than

[26] This information is from Evergy responses to data requests in FAC prudence cases and FAC monthly reports submitted to the Commission in EFIS.
[27] Class Cost-of-Service direct testimony of Brad J. Fortson, page 2.

their costs, *i.e.* favorable economics. There has only been one month since the SPP market started in March 2015 that all of Evergy West's and Evergy Metro's PPAs provided revenues greater than their costs. That month was February 2021 when the SPP energy market prices skyrocketed.

Customers have paid over $450 million to date for Evergy's mistaken analysis that these PPAs had favorable economics. Customers should not have to continue to pay for Evergy's miscalculations. The wind PPAs costs and revenues should be removed from the revenue requirement for all wind PPAs that have not been designated as RES resources.

Fuel Model Concerns

Q. You have included information on Staff's fuel runs for Evergy Metro and Evergy West in this testimony. As a result of your review of the results of the fuel models, do you have any concerns?

A. Yes. Staff has included in its Evergy West fuel run the Cimarron Bend III PPA which is allocated between its Renewable Energy Rider ("RER") Program[28] and its special service contract customer Nucor. The fuel run for Evergy Metro includes the Ponderosa PPA for Evergy Metro which it entered into for its RER program. The costs of these PPAs are recovered from and the revenues are provided to the participating customers.[29] Any energy cost and revenues from undersubscribed capacity is to be borne by shareholders. Therefore neither the cost of nor the revenues from these two wind PPAs should be included in Staff's normalized fuel and purchased power costs.

[28] Evergy West tariff sheets P.S.C. MO. No. 1 Original Sheet No. 139 through 139.7 and Evergy Metro tariff sheets P.S.C. MO. No. 7 Sheets No. 40 through 40H.
[29] Evergy West tariff sheets P.S.C. MO. No. 1 Original Sheet No. 139 and Evergy Metro tariff sheets P.S.C. MO. No. 7 Sheet No. 40G.

Q. What is the Renewable Energy Rider program?

A. According to the tariff sheets for renewable energy rider Schedules RER:

> This Program is designed to provide non-Residential Customers a voluntary opportunity to purchase Renewable Energy, in addition to service provided through a generally available rate, from Renewable Energy sources that the Company contracts.

Q. Do you have an estimate of how the removal of these wind PPAs would impact Staff's fuel and purchased power modeling?

A. Taking into account both the PPA costs and the SPP revenue estimated for these PPAs, the fuel and purchased power costs of Evergy West and Evergy Metro should be reduced by $909,825 and $1,736,674 respectively.

Q. Do you have any concerns regarding Evergy Metro's fuel and purchased power estimates?

A. Yes. Evergy witness Eric T. Peterson states in his testimony that he also included these two wind PPAs in his estimates of fuel and purchased power costs.[30] I was not able to discern the impact of removing these PPAs from the fuel costs. The trued-up fuel models should not include them.

In addition, Mr. Peterson testified in the Evergy Metro case that he included the hydro PPA with Central Nebraska Public Power and Irrigation District ("CNPPID").[31] Evergy Metro entered into this PPA to meet the Kansas RES. This is a very costly PPA and is not needed for the Missouri RES. In Evergy Metro's last rate case, it agreed to not pass any of the cost of this PPA to Missouri retail customers so this cost should not be included in the revenue requirement for Evergy Metro's Missouri retail customers.

[30] ER-2022-0129 direct, page 9 and ER-2022-0130 direct, page 9.
[31] ER-2022-0129 direct, page 9.

Q. What is Evergy Metro's position on including this PPA in rates for Missouri customers?

A. I do not know. It was included in the fuel model. However, the language in its proposed FAC tariff sheets that requires the exclusion of this PPA's cost remains. So if the Commission approved Evergy Metro's tariff sheets, it would be excluded from the FAC. If the Commission approved Evergy Metro's normalized fuel costs, it would be including the cost in revenue requirement.

Q. Did Staff include this PPA in its normalized fuel costs?

A. No.

Q. What is your recommendation regarding the CNPPID hydro PPA?

A. I recommend the Commission order the CNPPID hydro plant cost not be included in the revenue requirement or the FAC of Evergy Metro.

Modification to Evergy's FAC Changes

Q. Which Evergy witness proposes changes to Evergy's FACs in their direct testimony?

A. Evergy witness Linda J. Nunn proposes changes to both Evergy West's and Evergy Metro's FAC. However she provides little to no information on why the Commission should allow the changes she proposes. For example, she proposes that Federal Energy Regulatory Commission ("FERC") account 501420 should be added to Evergy Metro's FAC. She does not tell the Commission what costs are included in FERC account 501420, how these costs are fuel or purchased power costs, the magnitude of the costs, how the costs are out of the control of Evergy Metro, or how Evergy Metro's return on equity has been impacted by the volatility of this cost. She merely states that Evergy Metro proposes adding the costs in Account 501420.[32]

[32] Evergy Metro direct, page 4.

I found some of the changes Evergy is proposing only after reviewing the redline/strikeout version of the proposed tariff sheets that were provided by Evergy in response to Staff data requests 263 and 260 for Evergy West and Evergy Metro, respectively.

Q. Should the Commission adopt any of Evergy's proposed changes to its FAC?

A. The Commission should only allow Evergy's proposed changes that I included in my revenue requirement and Class Cost-of-Service direct testimonies. The Commission should not approve any changes that are not supported in direct testimony.

Q. Does Staff propose any changes to Evergy's FACs?

A. Yes. Staff recommends the transmission percentages and base factors be updated just as Evergy and I did. In addition, as I discussed above, Staff proposed a change to the FAC regarding passing future wind PPA losses through the FAC. In addition, Staff recommends language that specifies how the auxiliary power for Evergy West's steam system would be removed from Evergy West's FAC costs.

Q. Do you agree with specifying the treatment of the steam auxiliary power?

A. Yes. I have learned from experience that the more detailed the information the better in the FAC tariff sheets and less disagreement later in how things should be handled.

Q. You recommended a modification to Staff's recommendation that the losses of future wind PPAs not pass through the FAC. If the Commission chooses instead to adopt the Staff's recommendation, do you have any refinements that you recommend be added to Staff's recommendation?

A. Yes. The FAC language needs to be specific that the net losses of new wind PPAs should be calculated on an hourly basis.

Q. Do you have any additions or changes to the additional information Staff requested the Commission order Evergy West and Evergy Metro to provide?

A. Yes. I recommend the Commission require Evergy West and Evergy Metro to supply the OPC the same information that it is providing Staff and allow OPC access to the same information that it does Staff.

In addition, the Commission should require Evergy West and Evergy Metro to continue to include in its FAC monthly submissions, for each of its wind PPAs, the MWh produced for the month, the energy cost, the curtailment cost, and the revenues produced.

Potential True-up Issue

Q. What is the potential true-up issue that you want to point out to the Commission?

A. On July 1, 2022, Evergy West filed Case No. ER-2023-0011 requesting a change to its FAC rate based on costs it incurred December 1, 2021 through May 31, 2022. The direct testimony of Evergy West witness Darrin Ives filed in that case included the following:

> Evergy Missouri West proposes to include $13.6 million in FAC-related costs in the fuel adjustment rate effective September 1, 2022, and *to defer the balance of $31 million in FAC-related costs* incurred during the subject accumulation period to the PISA regulatory asset created under section 393.1400. (emphasis added)

Q. How does this FAC rate change filing case, Case No. ER-2023-0011 impact this rate case?

A. Mr. Ives, in his direct testimony, requests a deferral of cost recovery to "a subsequent rate case."[33] He does not define what he means as a "subsequent rate case" but in his testimony he states:

[33] Page 14.

> Granting of the deferral sought by the Company will enable resolution of the ongoing general rate proceeding – whether by settlement agreement among the parties or Commission decision of contested issues or some combination thereof – without exceeding the 3 percent [compound annual growth rate] cap prescribed by section 393.1655.3 as a result of fuel price increases.

It seems Mr. Ives is proposing the deferral should be recovered from customers in the next general rate case so that rates set in this rate case would not exceed the cap set in section 393.1655.3.

Q. Do you agree that a deferral should be made?

A. From my limited review of the testimony filed and the workpapers provided, at this time I do not believe a deferral is necessary. As provided in the quote above from Mr. Ives' direct testimony in Case No. ER-2023-0011, the deferral seems to be an attempt to get around the cap on rate increases it accepted when it elected to exercise its option under the Plant in Service Accounting ("PISA") statute.[34]

Q. If there is a deferral, should the determination of recovery be put off to the next case?

A. No. The deferral should be dealt with in this case because the costs that are the subject of this FAC rate change were incurred in December 1, 2021 through May 31, 2022.

Q. Why?

A. The Commission's *Order Establishing Test Year* set the test year as the twelve months ending June 30, 2021, updated through December 31, 2021 trued-up through May 31, 2022.

Finally, Section 393.1400 that Mr. Ives has requested treatment requires the deferred amount to accumulate interest at Evergy West's weighted average cost of

[34] Section 393.1400 RSMo.

capital ("WACC") which means that Evergy would get to accumulate WACC on expenses that it incurred that otherwise would at most incur interest at Evergy West's short-term interest rate since the costs are FAC costs, which by statute,[35] are allowed interest at the short-term interest rate – a rate that is lower than WACC. The accumulation at WACC will increase the amount Evergy West will request be recovered from customers.

For these reasons, if the Commission allows Mr. Ives' request for deferral treatment of $31 million of fuel and purchased power costs incurred in December 1, 2021 through May 31, 2022, the treatment of the deferral should be taken up and resolved in this rate case.

Q. Is there anything in Mr. Ives' testimony that you want to respond to?

A. Yes. Mr. Ives testifies that the large difference between actual FAC costs and what was set in the last rate case in the recovery period were extraordinary because they were impacted by external factors beyond Evergy West's control.[36] While I do not disagree with Mr. Ives that there were external factors that impacted fuel and market prices, the biggest reason that Evergy West's costs were so much higher is that Evergy West's resource plan is to depend on the market for energy at whatever the market price is. The early retirement of the Sibley 3 unit in November 2018, a few months before new rates went into effect in the last rate case, only increased Evergy West's dependency on the market to meet is customer's requirements.

As Mr. Ives stated, market prices have increased considerably since rates were set in 2018. What he did not say is that Evergy's resource plan to only add intermittent wind PPA resources and that, even with higher market prices, these

[35] Section 386.266 RSMo.
[36] ER-2023-0011 Direct testimony, page 2.

PPAs Evergy West entered into because its analysis showed they were "economic", cost $26.6 million in those six months.[37]

Q. Do you have an estimate of an imprudence disallowance amount?

A. Not at this time.

Q. Would you explain the timeline for the FAC rate change case, Case No. ER-2023-0011?

A. Evergy Metro filed its request on July 1, 2022 with a requested tariff sheet effective date of September 1, 2022. The Commission ordered Staff to file its recommendation regarding this tariff filing no later than July 29, 2022. OPC and other parties are to file their responses by August 10, 2022.

Q. Why are you including testimony regarding this FAC rate change case, Case No. ER-2023-0011, in this rate case, Case No. ER-2022-0130?

A. The intent of this testimony is to provide notice that OPC intends to incorporate any deferral from the FAC rate change case ER-2023-0011 in this case.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

[37] Evergy West FAC Monthly reports for December 2021 through May 2022 submitted to the Commission in EFIS.