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Issue(s):	Resource	e Planning Imprudence
Witness/Type of Exh	ibit:	Mantle/Direct
Sponsoring Party:		Public Counsel
Case No.:		EO-2023-0277

DIRECT TESTIMONY

OF

LENA M. MANTLE

Submitted on Behalf of the Office of the Public Counsel

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

CASE NOS. EO-2023-0277

** Denotes Confidential Information that has been redacted

November 14, 2023

PUBLIC

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DIRECT TESTIMONY

OF

LENA M. MANTLE, P.E.

EVERGY MISSOURI WEST FILE NO. EO-2023-0277

1	INTE	RODUCTION
2	Q.	What are your name and business address?
3	A.	My name is Lena M. Mantle and my business address is P.O. Box 2230, Jefferson
4		City, Missouri 65102.
5	Q.	By whom are you employed and in what capacity?
6	A.	I am employed by the Missouri Office of the Public Counsel ("OPC") as a Senior
7		Analyst.
8	Q.	On whose behalf are you testifying?
9	A.	I am testifying on behalf of the OPC.
10	Q.	What are your experience, education, and other qualifications?
11	A.	I began employment at the OPC in my current position as Senior Analyst in August
12		2014. In this position, I have provided expert testimony on a variety of issues in
13		electric, natural gas, and water cases before the Commission on behalf of the OPC. I
14		am a Registered Professional Engineer in the State of Missouri.
15		Prior to my employment at the OPC, I worked for the Staff of the Missouri
16		Public Service Commission ("Staff") from August 1983 until I retired as Manager of
17		the Energy Unit in December 2012. During my employment at the Missouri Public
18		Service Commission ("Commission"), I worked as an Economist, Engineer,
19		Engineering Supervisor, and Manager of the Energy Unit. Attached as Schedule -1 is
20		a brief summary of my experience with the OPC and Staff, and a list of the
21		Commission cases I filed testimony in, Commission rulemakings I participated in, and

Commission reports in rate cases that I contributed to as Staff.

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Q. What is your experience regarding Missouri's fuel adjustment clause?

After the Missouri Legislature passed Section 366.266, RSMo in 2005, enabling the electric utilities to request a FAC, I was instrumental in the development and application of the Commission's FAC rules and the FACs of the electric utilities in Missouri. I have provided testimony regarding FACs in numerous general rate cases, FAC rate change cases, and FAC prudence cases, both during my time on the Commission Staff and since my employment at the OPC.

Attached as Schedule LMM-D-2 is the *Electric Utility Fuel Adjustment Clause in Missouri: History and Application Whitepaper* that I wrote to provide background and a description on various aspects of the FAC in Missouri. This whitepaper provides an explanation of the operation of FACs in Missouri, including the FAC of Evergy West, and the terms used in discussing Evergy West's FAC in this testimony.

Q. What is your experience regarding Missouri investor-owned electric utility long-term resource planning?

My experience in electric utility resource planning began in the late 1980s when I worked in the Research and Planning Department for the Commission Staff. With abundant coal plants and the addition of nuclear generation plants for two of Missouri's electric utilities¹ it was evident that the electric utilities in Missouri had over built. In an attempt to avoid another overbuilding of capacity, the Commission tasked its Research and Planning Department with reviewing the utilities' current resource planning process and developing rules for the Commission regarding electric utility resource planning. I was a member of that team. After a comprehensive review of current resource planning practices of the Missouri investor-owned utilities, the current (at that time) state-of-the-art electric utility resource planning across the nation, and numerous workshops with electric utilities and other parties, the

¹ Union Electric Company's Callaway Nuclear Plant and Kansas City Power & Light Company's Wolf Creek Nuclear Plant

Commission's Electric Utility Resource Planning Chapter 22 (20 CSR 4240-22) became effective on May 6, 1993. Much later, as Manager of the Energy Department, I was also instrumental in the revisions of the Chapter 22 Electric Utility Resource Planning² rules. These revised rules became effective June 30, 2011.

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Q. What is the connection between resource planning and the FAC?

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With the advent of the Southwest Power Pool ("SPP") energy market, Evergy West, along with all other load-serving entities, are required to pay the SPP for every megawatt-hour ("MWh") of energy its customers require. In exchange, the SPP pays Evergy West for every MWh of energy that its resources generate. Both the cost Evergy West incurs for the energy purchased from the SPP energy market and the revenues generated by the energy Evergy West sells into the SPP energy market are ultimately recovered/returned to customers through its FAC. However, that does not negate the need for Evergy West to engage in prudent resource planning to ensure that it has generating resources that sufficiently meets Evergy West's customers load requirements at a just and reasonable cost.

At the most simplistic level, if Evergy West has sufficient cost-effective resources to meet all of its customers' energy needs during the time periods required, the revenues from the generation of energy should effectively match, and thereby negate, the cost Evergy West paid to SPP for the energy its customers use.³ In this sense, the generation of energy can be said to have "covered" the cost of the energy that Evergy West purchased. To achieve this desired outcome, Evergy West must engage in resource planning to determine the right amount and type of resources

² At that time the word "integrated" was used to designate that demand-side resources were included. With the expectation that integrating demand-side resources would become a normal part of good planning, it was decided to name this rule and process in Missouri "Resource Planning." Unfortunately, the designation Integrated Resource Planning or IRP has stuck around. In this testimony, when I refer to resource planning, I mean the process as required by the Commission's Chapter 22 Electric Utility Resource Planning rules.

³ There are many other costs and revenues associated with participation in the SPP energy market that are not included in this example. However, the basic principle that if a load serving entity has resources to cost effectively meet its load, then the costs to customers will be minimized. See the whitepaper *Resource Planning of a Vertically Integrated Utility in the RTO World* attached as Schedule LMM-D-3.

necessary to balance the risk of adding or retiring resources and the risk of a volatile market. Generating resources are Evergy West's hedge or "insurance" against price volatility in the SPP energy market.

Q. How then should the Commission consider Evergy West's resource planning process as part of an FAC prudence review case?

- A. The FAC reveals how well Evergy West hedged against market risk and whether the "insurance," *i.e.* acquired generation, was adequate. The long-term electric utility resource planning decisions thus directly impact the costs and revenues that flow through the FAC. The only difficulty is addressing the time period between the cause (Evergy West's resource planning) and the effect (the energy costs/revenues passed through Evergy West's FAC). Market prices that change every five minutes are mitigated by decisions to acquire "insurance" (generation resources) that can take years to implement, *i.e.* build, and which are intended to last for decades. Consequently, the "incurrence" of the cost of natural gas that will be passed on to customers through any given FAC is set in motion by the decision to build a natural gas generation plant that might have been put in place years earlier⁴ just as the cost to fill up your car's gas tank today is dependent upon the decision you made years prior regarding what car to buy.
- Q. What happens if a utility fails to perform adequate resource planning and ends up with less generating resources (or "insurance") than is necessary to cover their energy costs?
- A. If no insurance is chosen, *i.e.* the utility choses to not acquire resources to offset the market costs, then the utility is betting on the market being less expensive than

⁴ Even if the utility determines that the best "insurance" is not to build generation, but rather, enter into purchased power agreements ("PPA"), energy costs are still passed through the FAC. Depending on some PPA contracts, this can mean that customers are paying more for the energy that they are getting from the PPA than they are receiving for that generation from the SPP. Evergy West in particular has six PPAs with wind projects that typically cost customers more than the revenue from the SPP for the energy generated. This is the subject of Staff's recommendation for an imprudence adjustment in this case.

 building generation resources to hedge the market prices. But it is just that – a bet on future market prices that may or may not be better than acquiring insurance, *i.e.* generation it controls. With an FAC, the decision to rely on an energy market places very little risk on the utility and a great deal of risk on the customers who are billed the market prices.

The determination of the correct insurance is a complex optimization of many forecasted variables including future market prices, the impact of demand-side resources, and customer load requirements. It involves identifying critical uncertain factors⁵ and weighing the risks, and costs, of unexpected events surrounding these uncertain factors and which of numerous different generation options can provide the insurance. For example, nuclear plants are exceedingly expensive to build yet usually generate energy at a much lower cost than other thermal alternatives. Wind energy, on the other hand, requires no fuel costs, but lacks the capability to be dispatched reliably absent additional investments in energy storage to meet the load requirements of customers. Moreover, proper generation resource planning solutions are not short-term or inexpensive decisions. Generation plants have lives of 20 to 50 years.

All these resource decisions made in the planning process will ultimately impact the FAC. It is therefore extremely important for utilities to get the right mix of fixed and variable costs that results in just and reasonable rates with risks appropriately balanced between shareholders and customers over a variety of potential futures of costs, market prices, and customer requirements.

Q. Could having a FAC impact the resource planning process and implementation?

A. Yes. Without a FAC, the utility is responsible for net energy and purchased power costs above what are included in permanent rates. If costs are above what is included in rates, the utility absorbs the increased cost and comes to the

⁵ 20 CSR 4240-22.020(8) Critical uncertain factor is any uncertain factor that is likely to materially affect the outcome of the resource planning decision.

Commission requesting a general rate increase to cover future increased costs. If there is no FAC, the utility would want to take out platinum "insurance" *i.e.* building whatever resources it believes is necessary to minimize its risk of having to absorb any energy related costs. ⁶

Having a FAC removes the risk of the utility not recovering its fuel and purchased power costs and places the risks of the utility making an incorrect decision on its customers. Increasing fuel or market prices are just passed on to customers with negligible impacts on shareholders. Resource planning decisions, such as entering into PPAs with no capacity charges (only charges for energy which are recoverable through the FAC), remove all risks of building plant from the shareholder and puts all the risk of increased energy costs on the customers. The same is also true of short-term capacity contracts that do not include energy. With these tools, having a well thought-out comprehensive safety net of "insurance" is not always necessary to keep shareholders from absorbing costs, but it places incredible risk on the customers. The only time that shareholders even come close to bearing any risk when a utility uses an FAC is during the periodic, after-the-fact prudence reviews such as this one.

Evergy West chose to rely on PPAs that require reliance on the market to meet capacity requirements instead of obtaining "insurance" against energy market volatility, in the form of acquiring cost-effective generation, as part of its resource planning process. This was an imprudent decision that has resulted in Evergy

⁶ Without a FAC, the utility also gets to retain the savings when net FAC costs are below what are in permanent rates. In Missouri a FAC is optional. The electric utilities have determined the likelihood of costs below what is included in rates is low and the risk that costs will be above what is included in rates is unacceptable and all have requested, and received, a FAC. Thus all this risk that was unacceptable to the utility is now on its customers.

⁷ Evergy West's FAC includes a 95/5 sharing of the net costs **above** the amounts included in permanent rates. The impact on cost recovery of variances from the FAC costs included in permanent rates is described on pages 13-14 of the FAC whitepaper attached as Schedule LMM-D-2. This whitepaper shows that even with an increase in costs of 50%, Evergy West would recover over 98% of its net FAC costs.

⁸ Evergy West's FAC includes the capacity costs of PPAs of less than one year.

West's customers being unnecessarily billed \$86,376,294 in excess FAC costs accumulated between June 1, 2021 and November 30, 2022.

Q. What are you recommending in this testimony?

A. I recommend that the Commission

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- 1) Find Evergy Missouri West, Inc. ("Evergy West") imprudent for not having maintained sufficient generation and relying on the Southwest Power Pool ("SPP") for energy to meet its customer's needs; and
- 2) Disallow \$86,376,294 (plus interest) of FAC costs charged the customers for FAC costs incurred over the eighteen month time period of this prudence review as a result of that imprudence.
- Q. Before moving to the rest of your testimony, would you define capacity, energy, and load requirements as you are using them in this testimony?
 - With respect to generation, in the simplest terms, capacity is the maximum output an electricity generator can physically produce, measured in megawatts ("MW"). Energy is the amount of 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 megawatt-hours ("MWh") (100 MW * 10 hours = 1,000 MWh) of energy.

Customers have load requirements measured in peak demand and energy. Peak demand is the highest amount of electricity used by the customer over a set time period. Energy is the sum of the hourly demands over a set time period. If over ten hours, the customer uses 50 MW in nine hours and 550 MW in one hour, then the customers' peak demand in that ten hours is 550 MW and the energy they use over that ten hours is 1,000 MWh. (1,000 MWh = 50 MW x 9 hours + 550 * 1 hour.) In this testimony, when I use the words "load requirement" I am referring to both the peak demand and energy of the customers.

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One important point to keep in mind when considering these terms is that capacity and load requirement are not guaranteed to match even if the amount of energy being supplied or consumed are the same. For example, both of the preceding paragraphs discussed an energy amount of 1,000 MWh. The generation plant could generate 1,000 MWh of energy and the customer consumed 1,000 MWh of energy. However, the generation plant with a 100 MW of capacity would not be able to meet the peak demand requirement of 550 MW of the customer. At the same time, though, that generating plant would generate an excess of 450 MWh of energy over the other nine hours because the customer would only be needing 50 MW of each 100 MW of capacity in the other nine hours. The generation would therefore not be "sufficient" to meet this customer's load requirement even though it could generate the amount of energy the customer requires.

Q. How does this impact resource planning?

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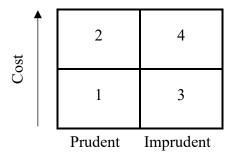
Having enough resources to produce enough energy to meet the customers' energy requirement is a minimal standard of resource planning. However, prudent resource planning is not just coming up with ways to pour an amount of energy equivalent to what customers use into the market. While energy that is generated when customers do not need it may provide revenue, the utility is taking a risk that the revenue produced will cover the costs of the customer requirements. With an FAC, this type of planning puts the risk that the revenue from the sale of energy will not cover the cost of the energy taken from the market on the customers, not the shareholders. If instead a resource is chosen that cost-effectively generates at the time the customer is needing energy, then the risk that revenues will not cover the costs is very low thus reducing the risk to customers.

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EVERGY WEST'S RESOURCE PLANS HAVE BEEN IMPRUDENT

- Q. Before diving into the specifics of Evergy West's resource planning, could you please explain the relationship between prudence and costs?
- A. Figure 1 below depicts the realm of possibilities regarding prudence/imprudence and costs.

Figure 1: Relationship Between Prudence and Costs



Boxes 1 and 2 represent prudent decisions. Box 1 represents a prudent decision that ultimately results in lower costs while Box 2 represents a decision that untimely result in higher costs yet still may be considered prudent. An easy way to understand these two boxes is to consider the decision of a homeowner living here in Jefferson City to purchase home insurance that, in the event of a tornado, covers the full cost of the replacement of the dwelling and its contents. The purchase of such an insurance policy will cost the homeowner money in the form of regular premium payments. In the event that the homeowner does ultimately lose his home to a tornado, however, then the purchaser will only be out the cost of the insurance policy. He will not have to pay the cost of repairing his home out of his own pocket – a much more expensive endeavor than paying for insurance. His decision was

Box 2 represents the purchase of home insurance that covers tornado damage but a tornado never hits the house. This insurance still costs the homeowner money through its premium payments, but the homeowner did not have

therefore prudent and, because the insurance ultimately lowered his overall costs,

we can place him in box 1 of the diagram.

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to go through the trauma of his house being hit by a tornado. Despite that fact, purchasing insurance was still prudent because, even though it ultimately cost the homeowner more money than the policy paid out (given that no claim was ever made), it eliminated the risk that came with living in an area where a tornado is, while not probable, possible and the cost would be tremendous.

Boxes 3 and 4 are imprudent decisions, such as when an imprudent homeowner rolls the dice that a tornado will not hit his house and decides not to buy insurance. As long as the house does not get hit by a tornado, there are no cost implications and he remains in Box 3. Does he know that his house will not be hit by a tornado? No, but every time he hears the tornado sirens go off or hears about a nearby tornado, he likely second guesses his decision. Is he taking a risk that could be very costly? Yes. As those of us that experienced the tornado that hit Jefferson City in May 2019, we know that tornadoes can be devastating. Many long-term Jefferson City residents thought that a tornado would never hit this hilly city. However a tornado did hit the city on May 22, 2019 and if a homeowner did not have insurance and was in the path of the tornado, their imprudence quickly moved them from Box 3 to Box 4 – a costly, imprudent decision.

Q. Would you explain how this applies to resource planning and the FAC?

Yes. A prudent resource plan that falls into Boxes 1 and 2 is likely to be a bit more costly than the least cost plan because it can handle a broad range of potential futures. In other words, a prudent resource plan has adequate insurance, *i.e.*, sufficient generation to cover its customers' load requirements. If future outcomes that increase the resource plan costs do not materialize, the plan lands in Box 2 and unfortunately cost ratepayers more money. Yet, even though the resource plan was not necessarily the least cost plan, it was prudent because it provided insurance that would cover costly potential futures if they had materialized. The increased costs to cover these risks do not make the resource plan imprudent. Both the ratepayer

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and the shareholder are content with the plan because it best balances the risks of both the shareholder and the ratepayer.

Boxes 3 and 4 represent implementation of an imprudent resource plan that does not seek to ensure the utility has adequate generating resources needed to offset market volatility. Even though this may be a "lower cost" resource plan on paper, the risks of extreme costs and market volatility are not covered and there is a definite possibility that this might result in significantly increased cost. Box 3 represents the costs when energy and gas market prices are low and stable and the critical uncertain factors proceed as estimated. Box 4 represents an imprudent resource plan when one or more of the potential costly futures, such as natural gas costs skyrocketing, materialize.

Ultimately, the theoretical lowest cost plan can end up being very costly by not accounting for the extreme cost of a low risk factor in the much the same way not buying home insurance to save money may end up leading to far higher costs when something catastrophic does happen to the home.

Q. Why is Evergy West's resource planning imprudent?

- Simply put, Evergy West is imprudent because it decided that it did not need insurance to fend off potential high costs of energy. Its resource planning, or rather the lack of resource planning specific to Evergy West, has resulted in Evergy West not having enough generation resources to meet the load requirements of its customers during this prudence period. Further, this is a problem that has persisted for more than a decade and is also an issue that the OPC has continuously warned about for at least the last six years.
- Q. How long has Evergy West been in a situation where it did not have enough generating resources to meet the load requirements of its customers?
- A. Evergy West has not had the resources to meet the load requirements of its customers since before it was acquired by Great Plains Energy ("GPE") in 2008.

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In its first triennial resource plan filing after it was acquired by GPE, Evergy West estimated that its generation resources could only generate 74% of the energy its customers' need, *i.e.* it was depending on the market to cover at least 26% of its customers' load requirements. In its latest resource plan update, Evergy West estimates it can only generate 62%. In the eleven years since its 2012 triennial resource plan, Evergy West's dependence up on the energy market has increased from 26% to 38%. The energy needs of its customers was about the same in 2022 as it was in 2011 but the resources to meet that need has declined. Evergy West has not added any generation resources, *i.e.* insurance, specifically chosen to mitigate the risk to its customers of fluctuating energy market prices.

Q. Would you provide some of the history behind resource planning at Evergy West?

A. Yes. While my experience with this utility's resource planning goes back to the 1980's, I will only go back to when the utility was called Aquila, Inc, ("Aquila"), just prior to its acquisition by GPE.

among the boxes shown in Figure 1 above. In the last resource plan that it filed prior to being acquired by GPE, Aquila's preferred resource plan was to add **______ ** 11 These resources were in addition to its 153 MW of a portion of the Iatan 2 coal plant that was under construction at that time. The

SPP did not have an energy market to rely on for energy and Evergy West did not

At this time, Aquila was struggling in its resource planning, wavering

⁹ EO-2012-0324, In the Matter of the Resource Plan of KCP&L Greater Missouri Operations Company, Executive Summary, KCP&L Greater Missouri Operations Company (GMO) Integrated Resource Plan, Tables 1 and 2.

¹⁰ EO-2023-0213, *In the Matter of Evergy Missouri West, Inc. d/b/a Evergy Missouri West's 2023 Integrated Resource Plan Annual Update Filing*, Evergy Missouri West Integrated Resource Plan 2023 Annual Update, Tables 1 and 2

¹¹ Case No. EO-2007-0298, *In the Matter of the Resource Plan of Aquila, Inc. d/b/a Aquila Networks-MPS and Aquila Networks L&P pursuant to 4 CSR 240- Chapter 22.* The capacity balance sheet for Aquila's preferred plan in Case No. EO-2007-0298 is attached as Schedule LMM-D-4.

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have a FAC although it had requested one. ¹² In its preferred resource plan, Aquila projected that it would need some PPAs to fill in gaps throughout its 20 year planning horizon but did not plan to consistently rely on PPAs.

Important to this case is that when GPE acquired Aquila, GPE very clearly stated that Aquila and Kansas City Power & Light Company (later named Evergy Metro, Inc.) were not merged. The two electric utility companies would be affiliated entities by virtue of GPE's common ownership but the two utilities would remain separate legal entities.¹³

Q. What happened following the acquisition?

Even though GPE had stressed to the Commission in the acquisition case that Evergy West and Evergy Metro were not merged into one utility, Evergy began combining the resource planning of the two utilities, Evergy West and its sister utility Evergy Metro, Inc. ("Evergy Metro"). ¹⁴ But these were not two utilities with comparable resources, *i.e.* the insurance of the two utilities were vastly different. Evergy West did not then, and still does not, have generation resources to meet its customers' needs. It was getting by with very minimal insurance. Evergy Metro then had, and still has, excess generation resources. It had the premium insurance. The modeling by Evergy in every resource plan filing after the acquisition of Evergy West shows that the resource plan of the "combined utilities" has the lowest net present value revenue requirement ("NPVRR") of the potential resource plans it analyzed. ¹⁵ The only resource additions since the acquisition, for both of these

¹² Aquila had requested a FAC in Case No. ER-2007-0004 while this resource plan was being developed. The Commission approved a FAC for Aquila effective July 5, 2007, five months after the resource plan was filed with the Commission in Case No. EO-2007-0298.

¹³ EM-2007-0374, Report and Order, pg. 222.

¹⁴ In the most recent resource plan filings, Case Nos. EO-2023-0212 and EO-2023-0213, the "combined" plans also include Evergy Kansas.

¹⁵ Resource planning models like any computer model can be manipulated to achieve a given outcome. For example, the amount of energy purchased on the market can be set at any point from zero to one hundred percent. Zero would likely result in overbuilding. One hundred percent could result in a dependency on the market.

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utilities have been PPAs for wind energy that Evergy West claims that it entered into for "economic reasons," not to meet their customers' energy requirements or to meet Missouri renewable energy standards.¹⁶

No other resources have been added to Evergy West's resource portfolio despite Aquila's 2007 resource plan that showed that it needed to add 775 MW of capacity before 2027. In addition to not adding any resources to meet its customers' load requirements, Evergy West retired the only coal plant of which it had control. Aquila's resource plan showed this plant running throughout the entire planning horizon.

- Q. If the two utilities complement each other one with excess resources and one with not enough why then is a plan that utilized Evergy Metro's excess for Evergy West's customers imprudent?
 - The resource planning process was, and still is, conducted as if Evergy West and Evergy Metro were a single utility. They are not. Evergy has chosen to not merge the two utilities. This means that even though the resource planning process shows that the combined resources result in the lowest NPVRR, there is not an equal risk or cost sharing between the two utilities. Evergy West's customers do not have to pay the capital costs of Evergy Metro's resources but they are exposed to the risks of dependence upon the market for energy. Evergy Metro's customers have to pay for its generating resources plus a return on the resources, but the efficient, low cost energy of these resources generate revenue on the SPP energy market protecting customers from the risk of fluctuating market prices. In addition, Evergy Metro's customers do not have to take the risk that other members of the SPP will have

¹⁶ As of September 30, 2023 these PPAs have cost customers of Evergy Metro and Evergy West almost \$560 million.

 $^{^{17}}$ With the acquisition of Westar Energy by GPE, Evergy began including Westar Energy (n/k/a Evergy Kansas) in the resource planning process beginning with the Evergy West's 2021 triennial resource plan filing in Case No. EO-2021-0036.

excess capacity for purchase and benefit from the sale of excess capacity at market prices to Evergy West. 18

Q. Is the planning process imprudent or is it imprudent that Evergy has not combined the two utilities?

A. Evergy has made it clear that it does not intend to merge the two utilities. This is a management decision that does not preclude prudent resource planning. It is Evergy West's implementation of a resource plan with a low NPVRR that placed the risk of volatile market prices on its customers that is imprudent. The modeled "least cost" NPVRR was based on Evergy West not adding any dispatchable generation resources. This plan has the advantage of low risk to Evergy's shareholders but did not take into account the risk to Evergy West's customers of increased bills due to volatile market prices. Prior to Storm Uri in February 2021, Evergy West's resource plan was in Box 3 – imprudent but not costly because market prices were low and relatively stable. Its decisions were imprudent but those decisions did not result in harm to customers.

Storm Uri showed the imprudence of Evergy West's resource planning imprudence from Box 3 (an imprudent decision with low cost) into Box 4 (an imprudent decision with extreme cost) when its actual net energy costs to skyrocketed to **____** million when its prior maximum had been \$111 million. The inadequacy of its resource plan has continued to remain costly to its customers in the three accumulation periods of this prudence period with actual net energy costs of \$154 million, \$143 million, and \$213 million.

¹⁸ In its Report and Order in EM-2007-0374, the Commission granted a waiver from its affiliate transaction rule "for all transactions except for wholesale power transactions, which would be based on rates approved by [the Federal Energy Regulatory Commission]." All PPAs between the two utilities are wholesale power transactions at market prices.

Q. Is winter Storm Uri the basis for your conclusion that Evergy West was imprudent?

A. No. As I have previously stated, the imprudent decision of Evergy West to not acquire "insurance" was made prior to Storm Uri. The extreme market and natural gas prices just moved this decision from imprudence Box 3 to costly Box 4.

In addition, this prudence review period does not include Storm Uri and the costs incurred during Storm Uri were not included for review in this case. The basis for my conclusion that Evergy West was imprudent was 1) Evergy West does not have resources to meet its customer's requirements (imprudent decision identified long before Storm Uri), and 2) the lack of resources resulted in a dependence upon market energy that resulted in high costs in the time period of this prudence review.

Q. Has OPC previously raised concerns regarding Evergy West's resource planning process?

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-2017-0232	FAC Prudence Review
EO-2018-0045	Contemporary Resource Planning Issue
ER-2018-0146	General Rate Increase Case
ER-2018-0180	FAC Rate Change Case
EO-2018-0269	Evergy West Triennial Resource Planning Compliance filing
ER-2021-0312	General Rate Increase Case
ER-2022-0130	FAC Rate Change Case
EF-2022-0155	Securitization of Storm Uri Costs
EO-2023-0213	2023 Annual Resource Plan Update

Q. Why has OPC brought this to the Commission so many times?

A. The Commission's general prudence standard is that the utility's conduct should be judged by asking how, based on information available at that time, a reasonable person would have responded. We presented our concerns with Evergy West in every avenue possible so that a reasonable person would respond to the information

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provided in a prudent manner. Monetary relief for customers for imprudence was not an option in many of the cases in the table simply because no increased costs had manifested (the tornado had not struck the home yet to borrow from the earlier analogy).

OPC did not prescribe to Evergy West how to cure this imprudence because the OPC does not have the tools necessary to conduct the resource planning needed. However, the OPC did use every opportunity available to identify the problems with Evergy West's processes. Most of the time OPC's concern was dismissed. However, had Evergy West responded to these concerns in 2017, when OPC first brought up its concerns and added generation to meet its customers' load requirements, customers would have faced less risk and likely much lower costs over the prudence period.

- Q. Did the Commission rule on the prudency of Evergy West's resource planning decisions to rely on the SPP energy market in Evergy West's last general rate case?
- A. No. In Evergy West's last rate case, Case No. ER-2022-0130, the prudency of Evergy West's resource planning in the Commission's *Amended Report and Order* centered on Sierra Club's recommendations to retire coal plants more quickly than already planned. ¹⁹ The Commission did not find the reason for Sierra Club's request for a full retirement study of Evergy's coal units persuasive. This finding has nothing to do with the adequacy of Evergy West resource planning to meet the load requirements of its customers.

¹⁹ Pg. 84.

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EVERGY WEST AGREES

- Q. Does Evergy West agree that a dependence on the energy market is risky?
- A. Yes. In Case No. EA-2023-0291,²⁰ Evergy West witness John J. Reed provides the following testimony that summarizes various generation resource acquisition strategies.

There are various resource strategies by which the utility can meet customers' needs in a cost-effective manner with acceptable risks. One strategy is for utilities to own resources that provide services to their customers, which provides more control over and certainty of deliverability for meeting customers' needs. This approach also limits exposure to adverse pricing in wholesale electricity markets as the services are effectively self-provided through ownership.

An alternative is to meet these needs through bilateral contracts with pre-determined pricing for energy, capacity and ancillary services. This approach also typically provides a hedge against adverse pricing in wholesale markets but is generally a shorter-term solution and thus is subject to adverse pricing in subsequent rounds of contracting. A third alternative is to rely on broader wholesale market mechanisms to meet the needs of customers. This approach imposes the most price and resource sufficiency risk on the utility.²¹

As I described earlier in this testimony, because Evergy West has a FAC, "this price and resource sufficiency risk" testified to by Mr. Reed is not on Evergy West but instead is passed on to its customers.

In that same case, Case No. EA-2023-0291, Evergy West witness Kayla Messamore also recognizes the risk of depending on the marked with the following testimony:

This need for energy can, and has, been met by the wholesale energy market, but this dependence on the energy market can create risk if it is covering a large portion of customer needs for the long-term.²²

²⁰ In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Permission and Approval of a Certificate of Public Convenience.

²¹ Direct testimony, pg. 12.

²² Direct testimony, pg. 11 - 12.

1	Q.	Does Evergy West agree that energy markets can be volatile?
2	A.	Yes. Mr. Reed also states in his testimony in Case No. EA-2023-0291:
3 4		Energy prices in the wholesale market can be volatile and increase the risk of high costs for power purchases to meet load. ²³
5	Q.	Does Evergy West provide testimony that it has a need for energy?
6	A.	Yes. Ms. Messamore in her direct testimony in Case No. EA-2023-0291 states "the
7		forecasted reserve balance in the 2023 IRP is an indication of a current and
8		ongoing energy need for [Evergy West] customers." (Emphasis added) ²⁴
9	Q.	Have there been any changes in the energy needs for Evergy West's customers
10		between the end of the prudence period (November 30, 2022) and the filing of
11		Ms. Messamore's testimony in Case No. EA-2023-0291 on November 8, 2023?
12	A.	I am not aware of any changes other than the typical weather fluctuations and the
13		normal fluctuations in customers leaving and coming on Evergy West's system.
14	CAL	CULATION OF IMPRUDENCE ADJUSTMENT AMOUNT
15	Q.	Would you explain how you calculated the amount of \$86,376,294 you are
16		asking the Commission to order Evergy West to return to its customers?
17	A.	Yes. To determine a method to estimate the amount that Evergy West's customers
18		overpaid, I looked to the resource planning documents filed with the Commission.
19		As I previously testified, in each of these filings Evergy reached the conclusion that
20		the combined resource plans of Evergy West and Evergy Metro were the preferred
21		resource plan for Evergy West. Therefore, I used the FAC and plant in service
22		costs of both Evergy West and Evergy Metro to determine the amount Evergy
23		West's customers would have paid if the two utilities were combined.

²³ Direct testimony, page 7. ²⁴ Direct testimony, pg. 11.

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First I calculated what the actual net energy costs ("ANEC")²⁵ would have been for both Evergy West and Evergy Metro had the two utilities been combined using the combined ANEC and the load requirements of the two utilities.²⁶ This analysis was conducted on a monthly basis and is shown on Schedule LMM-D-5. I have summarize the calculation for the prudence period in Table 3 below.

Table 3
Calculation of ANEC for
Combined Evergy West and Evergy Metro

	Metro		West		Combined	
Actual ANEC	\$	420,844,782	\$	510,291,308	\$	931,136,091
Cust Rqmt (MWh)		24,187,051		13,690,184		37,877,235
\$/MWh	\$	17.40	\$	37.27	\$	24.58
Allocated ANEC ²⁷	\$	594,512,384	\$	336,623,706	\$	931,136,091

This calculation shows that, had the two utilities been combined, the ANEC of Evergy West would have been \$337 million or \$174 million less than actually was incurred. This is Evergy West's "Prudent ANEC."

Given this difference, I calculated how much, had Evergy West incurred the prudent ANEC of \$337 million, would have been passed through to customers through Evergy West's FAC. Again, I did this calculation on a monthly basis but I am showing that analysis aggregated over the 18 month prudence review in Table 4 below.

²⁵ Actual Net Energy Costs = Fuel Costs + Emission's cost + Purchased Power costs - (Off-System sales revenues + Renewable Energy Credit Revenues). Evergy Missouri West, Inc. d/b/a Evergy Missouri West, P.S.C. MO. No. 1 Tariff, Original Sheet No. 127.25.

²⁶ This information came from the Section 8 filings provided in the Evergy West FAC rate changes case nos. ER-2022-0174, ER-2023-0011, and ER-2023-0210 and Evergy Metro rate change case nos. ER-2021-0244, ER-2022-0025, ER-2022-0206, and ER-2023-0030.

²⁷ This is calculated as the combined \$/MWh multiplied by the customer requirement in MWh for each of the utilities. In this table the Allocated ANEC does not exactly equal the total \$/MWh multiplied by the Cust Rqmt due to the difference between calculating on an 18-month aggregated basis and summing the monthly calculations.

Table 4
Calculation of FAC Imprudence Adjustment

Prudent ANEC	\$ 336,623,706
Actual Paid in Base Rate (B)	\$ 306,660,121
Prudent ANEC – B	\$ 29,963,585
Jurisdictional Factor	99.832%
J*(Prudent ANEC - B)	\$ 29,913,310 ²⁸
Prudent 95/5 Sharing	\$ 28,417,644
Actual 95/5 Sharing	\$ 193,042,150
Imprudence Adjustment	\$ 164,624,506

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Q. Why is the imprudence amount in Table 4 almost twice the prudence adjustment you are recommending?

Prudent management of Evergy West's resources would have also resulted in its customers being billed increased capital costs. To determine an appropriate amount of offset amount, I used the fixed costs of the generation plant that were included in Staff's true-up workpapers of the revenue requirements of Every West and Evergy Metro in Case Nos. ER-2018-0145 and ER-2018-0146.²⁹ Using this information, I calculated that Evergy West's annual revenue requirement would have been \$52 million higher at \$204 million had the two utilities been combined.³⁰ For the eighteen month prudence period Evergy West customers would have paid \$306 million or \$78 million higher than what was actually included. Workpapers detailing this calculation can be found in Schedule LMM-D-5.

Since Evergy West's permanents rates would have been \$78 million higher had the utilities been combined as modeled in the resource planning process, I reduced the imprudence amount by \$78,248,211. My calculation of the final amount is shown in Table 5 below.

²⁸ From the sum of the monthly values.

²⁹ Rate from these rate cases were in effect during the prudence period.

³⁰ This calculation is also shown on Schedule LMM-D-5.

Table 5 Final Imprudence Adjustment

Fuel & Purchased Power Imprudence	\$ (164,624,505)
Rate Base Imprudence	\$78,248,211
Total Imprudence	\$ (86,376,294)

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Q. Does this conclude your direct testimony?

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Yes.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Eleventh Prudence Review of Costs Subject to the Commission-Approved Fuel Adjustment Clause of Evergy Missouri West, Inc. d/b/a Evergy Missouri West		Case No. EO-2023-0277
<u>AFFIDAVIT OF LE</u>	NA M.]	MANTLE

STATE OF MISSOURI) 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 direct 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 November 2023.

TIFFANY HILDEBRAND
NOTARY PUBLIC - NOTARY SEAL
STATE OF MISSOURI
MY COMMISSION EXPIRES AUGUST 8, 2027
COLE COUNTY
COMMISSION MERA77121

My Commission expires August 8, 2027.

Tiffany Hildebrand