BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Evergy Metro, Inc. d/b/a Evergy) Missouri Metro's 2024 Triennial Compliance Filing) Pursuant to 20 CSR 4240 – Chapter 22) In the Matter of Evergy Missouri West, Inc. d/b/a) Evergy Missouri West's 2024 Triennial Compliance) Filing Pursuant to 20 CSR 4240-22)

COMMENTS OF RENEW MISSOURI ADVOCATES

COMES NOW Renew Missouri Advocates d/b/a Renew Missouri ("Renew Missouri") and offers the below comments in response to the Triennial Integrated Resource Plan ("IRP") filing of Evergy Metro, Inc. d/b/a Evergy Missouri Metro (herein referred to as "Evergy Metro") and Evergy Missouri West, Inc. d/b/a Evergy Missouri West (herein referred to as "Evergy West") (collectively, "Evergy" or "Company").

The below comments were prepared by Renew Missouri staff and reflect our organization's reactions to and opinions on the Company's most recent IRP. In addition, Renew Missouri would like to draw the Commission's attention to those comments submitted in this case on behalf of the Sierra Club. Renew Missouri appreciates the opportunity to share these comments and welcomes further discussion.

All communications and inquiries regarding the below comments, and any other communications to Renew Missouri relevant to this case, should be directed to the following individuals (see next page):

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I. Introduction

While Renew Missouri is optimistic about portions of Evergy Metro's and Evergy West's preferred Integrated Resource Plans ("IRP"), the tenor of our comments must be tempered by disappointment with the overall direction that Evergy proposes. Specifically, in this 2024 IRP filing, the Company increases new generation from natural gas facilities and other vaguely-noted firm resources. Although this IRP continues moving towards the Company's goal of achieving net-zero carbon emissions by 2045, the filing leaves significant gaps. Notably, the IRP fails to specify how 3,430 MW of "non-emitting firm dispatchable" generation will be produced beyond 2035 and exposes ratepayers both to vulnerabilities and avoidable costs through the Company's heavy reliance on new natural gas.

While Evergy delays wind investments and the retirement of the coal-fired Jeffrey 2 power plant, it focuses on building new natural gas generation. Instead, the Company should commit to greater investment in energy efficiency, new renewable facilities (i.e., solar and wind), grid-scale battery storage, and other demand-side resources and demand-side management programs to maximize what can be achieved prior to making costly investments in new fossil fuel-burning generators.

II. Electricity Cost and Rate Design

a. Time-of-Use Rates.

In Evergy's 2021 rate cases, a wide range of time of use ("TOU") rates were implemented, including a move to a moderate differential rate for the default rate for customers.¹ The Commission cited a myriad of benefits of TOU rates in its decision ordering mandatory TOU rates,

¹ 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, File No. ER-2022-0129, and 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, File No. ER-2022-0130, <u>Amended Report and Order</u>, Issued December 8, 2022.

including sending correct price signals to customers, shifting customer usage off-peak, utilizing installed AMI technology to its fullest potential, and providing customers options and control over their energy usage.² Since the Commission issued its Amended Report and Order, Evergy has completed an educational campaign and transitioned its customers to TOU rates. Evergy's most recent TOU reporting shows that 84.8% of customers are on the Default Time Based Plan, with 8.6% on the Summer Peak Time Based Plan, 4.3% on a high differential plan, and 2.2% on the three-period plan.³ Evergy does discuss TOU rates in Volume 5 of its IRP. However, Evergy's discussion assumes that TOU plan retention rates will be relatively low, and "has such a low differential rate that impacts will be negligible." This assumes, incorrectly in Renew Missouri's opinion, that the default rate will always retain the same differential and will not change as customers become more used to TOU rates. In addition, Evergy makes mention of load as an uncertain factor, but in its Volume 3 Load Analysis and Load Forecasting Volumes, it posits energy consumption to grow by .06% and peak demand to grow .4% annually for both Companies. Renew Missouri is concerned that, without a discussion of TOU rate impacts on load growth, load growth could be overstated. Overstating load growth may lead to investment in generation that could otherwise turn out to have been unnecessary. Renew Missouri is also concerned that assuming most customers will remain on the default TOU rate and that the default TOU rate will retain the same differential in perpetuity is an inappropriate assumption. Given that Evergy has implemented the TOU rate structure, the Company should (i) provide a variety of TOU options for customers to participate in, and (ii) increase the differentials in all of these rates as cost causation

² Id. at pages 58-74.

³ In the Matter of a Collaborative Workshop for Customer Education and Outreach Regarding the Introduction of Default Time-of-Use Rates by Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West, File No. EW-2023-0199, Quarterly Time of Use Report, filed on July 19, 2024.

and customer familiarity allow. Evergy should also be recording impacts of TOU rates on its load for future use in IRP modeling.

III. New Supply-Side Resources

a. New Natural Gas Generation and Vague Firm Dispatchable Resources.

As stated in our introduction, Renew Missouri is alarmed by the investments in new natural gas plants included in Evergy's Preferred Plan. Investment in new gas plants is risky from economic, environmental, and societal perspectives. Of course, reliable and dispatchable resources like wind and solar are of critical importance and we applaud the Company's plan to add 2,100 MW of solar and 1,650 MW of wind by 2035. As with many new clean energy investments, project timing will be a critical factor in securing the best outcome for the Company's customers with IRA financing now available, which we address in detail in Section III(d) "Siting that Maximizes Clean Energy Investment and/or Production Tax Credits" (on pp.8-9). Yet, Evergy expects to develop new natural gas generation assets over the next two decades. The Preferred Plan includes combined cycle natural gas ("CCNG") projects, both with and without carbon capture technologies, and potentially combustion turbine gas projects. The Company also modeled the inclusion of "non-emitting firm dispatchable" generation.

Evergy should be more specific in its plan for future "non-emitting firm dispatchable" resources. Evergy Metro's Supply-Side Resource Analysis Section 3.4 on low-emission future resources only models combined cycle natural gas ("CCNG") with carbon capture and sequestration ("CCS"), and nuclear SMR. New EPA rules will require natural gas baseload plants to reduce carbon emissions by ninety percent by 2032. The Company will be required to use CCS to comply with the new rules. Critics are concerned CCS technology is not ready for widespread deployment, that its efficacy in reducing total greenhouse gas emissions is largely unproven or

unrealized, that it is too expensive, and that there is insufficient time to permit and build the infrastructure for compliance by 2032.⁴ Ultimately, CCS technology faces high capital costs that drive up fixed costs as well as regulatory and public challenges. On the topic of non-emitting firm resources, Renew Missouri encourages Evergy to instead follow the lead of other large IOUs by investing in grid-scale battery storage to "firm up" existing and new renewables.

b. Grid-scale Battery Storage.

As reported by S&P Global, Western capacity queues (i.e., CAISO, the non-ISO West, and ERCOT) are dominated by interconnection requests of hybrid systems that pair grid-scale storage with wind and/or solar. Notably, the non-ISO West and CAISO are seeing 87% and 98% of proposed solar projects include storage, respectively.⁵ By contrast, only about 23% of planned solar in the Southwest Power Pool ("SPP") includes storage (for a total capacity contribution of 12 GW) and only 23 GW of stand-alone storage is in the queue.⁶ For its part, the Company does not include grid-scale storage as a component of its Preferred Plan, an omission Renew Missouri views as a serious flaw in this IRP.

Meanwhile, grid-scale energy storage costs are generally decreasing, due partially to greater availability of raw materials and increased market interest. Evergy should take advantage

⁴ World Resources Institute. "4 things to know about US EPA's new power plant rules". (May 3, 2024). Accessed at: <u>https://www.wri.org/insights/epa-power-plant-rules-explained</u>. Also see the Institute for Energy Economics and Financial Analysis. "The carbon capture crux: Lessons learned". (September 2022). Accessed at: <u>https://ieefa.org/sites/default/files/2022-09/The%20Carbon%20Capture%20Crux.pdf</u>. And see *Energy and Environmental Science*, Issue 12. Jacobson, M. "The health and climate impacts of carbon capture and direct air capture". (October 21, 2019). Accessed at: <u>https://doi.org/10.1039/C9EE02709B</u>

⁵ S&P Global. "Q1'24 Power Forecast webinar: The growing role of hybrid battery storage in the energy transition". (May 16, 2024). Accessed at: <u>https://pages.marketintelligence.spglobal.com/Q124-Power-Forecast-Webinar-The-growing-role-of-hybrid-battery-storage-in-the-energy-transition-Register-May-</u> 2024.html?utm_medium=email&utm_source=marketo&utm_campaign=WLG-240516-PC-NA-EN-CBL-CIQPro-power-forecast-Q1-24-1944247&utm_content=email1 ⁶ Id. of the Investment Tax Credit ("ITC") for energy storage, which is available in full through 2033 but which steps down in 2034 and again in 2035, expiring thereafter.⁷ In the fourth quarter of 2023, lithium carbonate spot prices were at their lowest in two years and were forecast to correlate with decreased prices for lithium-ion storage systems going forward, a key market trend given that lithium-ion based batteries are common candidates for storage systems.⁸ The U.S. Energy Information Administration predicts, furthermore, that grid-scale energy storage deployment will double by 2026, which could lower prices further.⁹

Nevertheless, in order for the Companies to develop least-cost energy storage resources, Evergy should seek the full ITC for energy storage, a plan which hinges on three factors: *when* the grid-scale energy storage facilities are placed in service, *where* the facilities are located, and *whether* the projects meet prevailing wage and apprenticeship criteria. As with the ITC for other clean energy resources [see Section III(d)], the ITC for energy storage can be stacked with up to ten percent in additional tax credits each for projects located in "energy communities" as well as for projects *paired* with eligible wind or solar facilities and *located* in low-income communities, and that are *less than* 5 MW total capacity. Further, it will apply to projects greater than 1 MW that meet domestic content requirements.¹⁰ Therefore, Renew Missouri encourages the Company

⁷ 2022 Inflation Reduction Act. Section 48 created an ITC for standalone energy storage projects that begin construction by January 1, 2025. The base rate of the ITC is 6% and the bonus rate of the ITC is 30% (if certain prevailing wage and domestic content criteria are met). The IRA also established the new section 48E ITC, which applies to energy storage projects placed in service after December 1, 2024. Section 48E follows the same base/bonus rate structure as Section 48. The maximum bonus will drop to a credit of 22.5% in 2034 and to a credit of only 15% in 2035. Projects will only qualify for the bonus rate if (a) the prevailing wage and apprenticeship criteria are met, or (b) they are less than 1 MW.

⁸ See Wood Mackenzie Power & Renewables/American Clean Power Association. "U.S. Energy Storage Monitor: Q4 2023 Executive Summary."

⁹ U.S. Energy Information Administration. "Short-Term Energy Outlook." (January 9, 2024). Accessed at: <u>https://www.eia.gov/outlooks/steo/report/elec_coal_renew.php</u>

¹⁰ (1) Regarding "energy communities", these are defined as those that include (i) a brownfield site; (ii) a census tract or any adjoining tract in which a coal mine closed after Dec. 31, 1999, or a coal-fired electric power plant was retired after Dec. 31, 2009; and (iii) an area that has (or, at any time during the period beginning after Dec. 31, 1999, had) significant employment or local tax revenue related to the extraction, processing, transport or storage of coal, oil or

to *creatively site and size* energy storage facilities to obtain the maximum ITC bonus and adders available. Importantly, storage projects that are less than 1 MW are automatically eligible for the maximum ITC bonus rate (which is 30% through 2033), and eligible for fast-tracked interconnection per FERC Order No. 792 [see Section III(e) "Transmission", pp.9-10].¹¹ Such qualifying projects could conceivably be distributed in low-income communities and paired with community solar projects, thus making them eligible for the ITC low-income community adder. Additionally, such projects could even be located in areas of Evergy's footprint where energy resiliency is of more concern – and energy storage therefore of greater value – including where critical infrastructure (e.g., hospitals, emergency response) is located. As the map below shows, there is currently very little energy storage operating in the SPP footprint of Missouri, meaning there is an important opportunity for Evergy to contribute to both the adoption of the technology and to greater energy resiliency in the region.

natural gas. (2) Regarding the credit for storage paired with wind and/or solar facilities in low-income communities, the total project capacity must be less than 5 MW to qualify. (3) Regarding the credit for domestic content, the credit increases through 2026 to account for greater availability of domestic materials in future units.

¹¹ Federal Energy Regulatory Commission. Final Rule. *Small Generator Interconnection Agreements and Procedures*. Order No. 792. Issued November 12, 2013. Accessed at: <u>https://www.ferc.gov/electric-transmission/generator-interconnection/standard-interconnection-agreements-and-procedures</u>



Figure 1. US battery storage capacity and additions in Q3, 2023. Source: S&P Global Commodity Insights, US government filings. 2023. Accessed at: https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/electric-power/111423-us-battery-storage-capacity-surpasses-146-gw-in-q3-35-gw-planned-in-q4

c. Power Purchase Agreements.

Regarding consideration of Power Purchase Agreements ("PPAs"), Renew Missouri encourages Evergy to pursue PPAs when and where it makes economic sense. To highlight Staff's comments on PPAs in a previous docket, Staff witness Mr. Luebbert noted that "[a] PPA could provide substantially similar energy and accredited capacity attributes at a lower cost and potentially less ratepayer risk" than the utility-owned solar facility at issue in that case.¹² Yet, Evergy did not consider PPAs as part of its preferred plan. By narrowly focusing on owning all its generators, Evergy is disregarding better alternatives to risky investments. Evergy should be comparing the cost-effectiveness of a PPA to that of building and owning its own generation facilities, as well as assessing SPP interconnection queue issues that could be avoided via a PPA. For example, a PPA

¹² PSC. Case No. File No. EA-2023-0286. Rebuttal Testimony of Mr. Luebbert. (Filed October 11, 2023). See p.10 lines 10-15.

for an existing clean energy generator in SPP's interconnection queue -- with stable, consistent prices -- could provide substantial savings compared to the costs of both the construction of new natural gas generators and the volatile fuel costs associated with gas.

Beyond the potential cost savings, we argue that even a clean energy PPA with a substantially similar cost to new natural gas generation remains beneficial to the Company in reaching its netzero emission goals. Renew Missouri reiterates the need for Evergy to model the potential for clean energy PPAs and to defer or replace fossil fuel investments planned for in this IRP. Additionally, we would also note the importance of evaluating bids submitted in response to any Request for Proposal ("RFP") for PPAs issued by the Company in a fair and consistent manner, especially when renewables are involved. We raise this here due to concerns Renew Missouri had with how Evergy **



d. Siting that Maximizes Clean Energy Investment and/or Production Tax Credits.

Evergy has evaluated a wide range of different resources and technologies involving new supplyside resources. Renew Missouri is encouraged by the consideration and inclusion of the ITC and Production Tax Credit ("PTC") for any new renewable projects. We note the IRP is missing analysis for projects utilizing the fifty-percent tax credit rate, such as those generating less than 5MW projects in Low-to-Moderate Income ("LMI") communities, qualified low-income residential building projects, and qualified low-income economic benefit projects. It is encouraging that the Company is already evaluating projects at the 40% ITC to include energy communities, but there is an opportunity to capture even higher savings at the 50% level. There are qualified communities and properties within Evergy's service territory that are likely appropriate for solar and that qualify for these larger tax credit amounts. Renew Missouri urges the Company to pursue these and capture the full value provided by the IRA. Additionally, there may be opportunities associated with Missouri's Solar for All award to bring energy savings to low-income communities through community solar and that could *also* leverage these federal tax credits, bringing even more cost-savings to the Company and to consumers. For example, rather than waiting for the Company's existing community solar offering to reach the subscription level that would open slots to LMI customers, Evergy could feasibly develop a new communist solar project for LMI customers that utilizes both Solar for All funding and the federal tax credits, including any applicable adders.

The IRA also includes increased funding for the Department of Energy's Loan Programs Office ("LPO") to support loan guarantees through the Energy Infrastructure Reinvestment program ("EIR").¹³ The EIR is authorized to offer loan guarantees for energy infrastructure-related projects that replace existing fossil fuel electricity generation, repurpose existing fossil-based infrastructure, replace older renewable assets, or upgrade existing operations (including any site remediation).¹⁴ This funding stream for such activities would expedite these developments and

¹³ See Section 1706 of the Inflation Reduction Act.

¹⁴ In fact, this can be used to help reduce ratepayer cost for ongoing and future securitization dockets as the EIR can be used to use government-backed bonds to help utilities rid themselves of undepreciated assets off their books. But

create synergies with any project located in energy and LMI communities and, therefore, would be eligible for the 40-50% ITC. Furthermore, the ITC includes adders of ten percent each for projects that utilize domestically sourced material and that adhere to labor standards specified by the U.S. Department of Energy.

Another important factor to consider is the ability to fast-track interconnection of renewable energy systems that are less than 5MW under FERC Order 792, which specifically reforms "*pro forma* Large Generator Interconnection Procedures, *pro forma* Small Generator Interconnection Procedures, *pro forma* Large Generator Interconnection Agreement, and *pro forma* Small Generator Interconnection Agreement to address interconnection queue backlogs, improve certainty, and prevent undue discrimination for new technologies. The reforms are intended to ensure that the generator interconnection process is just, reasonable, and not unduly discriminatory or preferential."¹⁵ The reforms under FERC Order 792 would make a 50% ITC-eligible project even more beneficial to the Company as it would allow for fast-track approval under SPP and would make such a project operational sooner than previous regulations would allow.

e. Transmission.

Evergy's distribution engineering team did not explicitly incorporate demand-side management programs ("DSM") as a transmission resource to offset specific future distribution or substation capacity projects. The Company should task the distribution engineering team with evaluating how the existing battery storage pilot program could be incorporated into a DSM program and how a

only in a limited fashion as this opportunity ends in 2026, which is all the more reason for Evergy to accelerate coal plant closures.

¹⁵ Summary provided by the Federal Registry dated November 6th of 2023. See also <u>https://www.federalregister.gov/documents/2023/09/06/2023-16628/improvements-to-generator-interconnection-procedures-and-agreements</u>

targeted demand-side battery storage program could interact with TOU rates as it relates to the Company's transmission and distribution systems. With the Company's diverse service area serving both urban and rural customers with different needs, a targeted DSM battery storage program could be tailored to meet the varying needs of customers. This could be specifically helpful for continued suburban and rural build-out as such a program would strengthen the existing transmission system and reduce the chance of a load shedding event or outage.

Furthermore, in recent updates from SPP and MISO at the Commission-sponsored resource adequacy summit on August 13 of this year, both grid operators shared an expectation for load growth to remain a major concern for member utilities, including for Evergy. SPP shared that their 2023 Summer Peak Load increased by 5.5% and the 2022/23 Winter Peak Load was 8% higher than the previous year.¹⁶ With rapid electrification and the growth of the tech industry (e.g., cryptocurrency and AI) driving the demand for new data centers, utilities expect load growth to increase beyond what was even modeled in this IRP. A key piece of meeting this potential future load growth is making adequate transmission available. It would be worthwhile to evaluate all potential solutions, including how DSM programs can strengthen the transmission system especially in areas that are at the greatest risk of failure. Renew Missouri specifically urges the Company to explore how an expanded Virtual Power Plant ("VPP") program could fit in with existing DSM offerings compared to expanding or upgrading existing transmission infrastructure (see VPPs section).

An additional benefit of a DSM solution to transmission is that DSM offers a short-term fix to a long-term problem of interregional transmission. In particular, energy efficiency (either

¹⁶ Southwest Power Pool. "Power MO: Securing Missouri's Energy Future". (August 13th, 2024) p. 12.

combined with DERs or functioning separately) is widely recognized for its positive impacts on the grid, which include resiliency (e.g., extends the duration of storage and reduces demand), reliability (e.g., defers/avoids need for distribution system investments), and cost (e.g., lowers wholesale capacity auction prices) benefits.¹⁷ New transmission projects will be needed across the country for the foreseeable future, and it is currently a lengthy, cumbersome process to even get large transmission projects completed in a timely manner. For example, the five projects making up the SPP-MISO Joint Targeted Interconnection Queue have been years in the making, with grid operators still seeking federal approval for the associated tariffs. Construction on the projects – proposed in 2020 – has yet to begin.¹⁸ By including a DSM approach to strengthen existing transmission and cover gaps, the Company will be able to be more proactive with grid planning and will have greater flexibility if there is strong local opposition to large transmission projects being located in rural areas or other delays.

f. Distributed Energy Resources.

<u>Virtual Power Plants</u>. As technology continues to advance, new opportunities will proliferate for electric providers to interact with customer owned DERs, including residential battery storage systems and electric vehicle batteries. Utilities across the United States are evaluating how to integrate these technologies into new or existing demand-side programs that effectively operate as VPPs. For example, if distributed solar systems were integrated with battery storage systems and Evergy were able to call on those resources, the DERs would operate as a VPP. This arrangement would better align the contributions and capabilities of the technologies with peak demand and

¹⁷ Lawrence Berkely National Labs. "Quantifying grid reliability and resilience impacts of energy efficiency: Examples and opportunities". (December 2021). Accessed at: <u>https://emp.lbl.gov/news/new-report-available-quantifying-grid</u>

¹⁸ "MISO, SPP advance 'unprecedented' transmission plan that could support up to 30 GW". Utility Dive. (August 22, 2024). Accessed at: <u>https://www.utilitydive.com/news/miso-spp-jtiq-transmission-seams-ferc/724952/?utm_medium=email</u>

support the resource adequacy imperative of the Companies. Used thus, VPPs can also increase transmission and distribution efficiency by smoothing system peaks. When dispatchable batteries (such as those in the Company's battery storage pilot program) are strategically called on, that added capacity can lead to deferred investments in the Company's local transmission system and avoided fuel costs. In this way, VPPs provide affordability benefits through direct reduction of the utility's costs or through compensation to customers that participate in such demand-side programs. Excluding societal benefits (e.g., emissions reductions), the Brattle Group found the net cost of VPPs providing resource adequacy benefits to the utility is about 40% to 60% of that of traditional alternatives.¹⁹ Ultimately, the integration of dispatchable batteries with existing demand-side generation will increase reliability and resiliency.

However, VPPs are not limited to residential storage-plus-solar applications and should be evaluated in a few other ways. The more readily available application of VPPs is for smart thermostats to preheat or pre-cool buildings and homes during off-peak hours to reduce demand surges, typically over periods of two to four hours. Similarly, smart water heaters or heat pumps can be controlled remotely to preheat water during peak demand periods. Now that the Company has deployed smart meters across its residential customer base, both applications should be viable. Additionally, Evergy should pursue a larger-scale VPP in the style recently proposed to Minnesota regulators by Xcel Energy for a dispersed set of projects ultimately resulting in the combination of 440 MW of solar with 400 MW of storage that would potentially include more backup generators and energy efficiency measures.²⁰

¹⁹ The Brattle Group. "Real reliability: The value of virtual power". (May 2023). Accessed at: <u>https://www.brattle.com/wp-content/uploads/2023/04/Real-Reliability-The-Value-of-Virtual-Power 5.3.2023.pdf</u> ²⁰ "In Minnesota, Xcel Energy looks to mimic power plant with solar and storage networks".

Energy News Network.(August 23, 2024). Accessed at: <u>https://energynews.us/2024/08/23/in-minnesota-xcel-energy-looks-to-mimic-power-plant-with-solar-and-storage-networks/?utm_medium=email</u>

Finally, it is also important to note FERC Order 2222 can help with the deployment of VPPs. While specifically targeting the proliferation of distributed energy resources ("DERs"), FERC Order 2222 will allow VPPs to compete with conventional resources in wholesale markets and motivate the creation of more programs and incentives to encourage VPP project development once the order is fully implemented by SPP between 2027 and 2029. In areas served by vertically integrated utilities without trading options, as is the case with Evergy Metro and Evergy West, there is less incentive to support VPP project development. In other words, allowing participation in wholesale markets more VPP programs because it allows the resources to interact with the grid in more ways and to earn revenue by doing so.²¹

Distributed Solar. Regarding customer-owned solar, Renew Missouri would like to reiterate here our argument that all residential rate design options be offered to all customers, as we have said in recent cases before the Commission. This necessarily includes making all TOU rates available to net-metered solar customers ("DG customers"), as the Net-Metering and Easy Connection Act requires utilities offer the same rates and rate structures to DG- and non-DG customers alike.²² Meanwhile, Evergy offers the Default Time Based Plan, the Summer Peak Time Based Plan, the Nights & Weekends Plan, the Nights & Weekends Max Plan, and the EV Only Plan. However, only customers without net-metered on-site solar may choose from these plans that which best suits their lifestyle. DG customers are barred from all but the default plan, which has the lowest price differential and provides the least flexibility.

The matter of the inclusion of DG customers in Evergy's TOU rates first emerged in the Company's 2022 rate case (Case Nos. ER-2022-0129 and ER-2022-0130). In that application,

²¹ "Virtual Power Plants and Energy Justice". Brittany Speetles, Eric Lockhart, and Adam Warren. National Renewable Energy Laboratory. Technical Report 7A40-86607. (October 2023).

²² See §386.890.3, RSMo.

Evergy proposed to exclude DG customers from TOU rates entirely based on the claim that a DG customer's excess generation could not be accounted for in a manner compliant with the statute. Ultimately, DG customers were only made eligible to participate in the TOU plan with the lowest price differential and the least flexibility. However, the Commission ordered Evergy to conduct a study on the integration of DG customers into all TOU plans, which the Company did. Again, the Company found no technical or billing constraints that would prohibit DG customers from participating in TOU plans.²³ Yet, the Company still claims a legally-spurious barrier exists. Nevertheless, following that report, the Commission encouraged the Company and other stakeholders "to bring a solution for all customers being able to access all TOU rates" in the next rate case, which was filed on February 2, 2024, in docket No. ER-2024-0189.²⁴ That proceeding is on-going and Renew Missouri is an intervenor with that issue being actively litigated.²⁵

Aside from the legal issues, there is a strong public policy argument for why customerowned DERs complement TOU programs. On-peak and off-peak pricing differentials can encourage DG customers to adapt their energy usage to times of the day that are most cost-effective for them. Pairing rates with a variety of customer owned DERs (e.g., solar, battery energy storage, electric vehicles paired with EV charging equipment, and smart meters) is a comprehensive approach for full utilization of the best available technology to achieve demand savings, at both

²³ PSC. Case No. ER-2022-0129, 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 and Case No. ER-2022-0130, 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, "Barriers to Net Metering Time of Use Rate Structures: Final Report". (February 1, 2024).

²⁴ PSC. Case No. ET-2024-0182, In the Matter of Evergy Metro, Inc. d/b/a Evergy Missouri Metro's and Evergy Missouri West, Inc. d/b/a Evergy Missouri West's Solar Subscription Rider Tariff Filings, "Report and Order". (May 15, 2024). See pp. 23-24.

²⁵ PSC. Case No. ER-2024-0189, 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. (February 2, 2024).

the household and system levels. If the Company is serious about reducing demand, as this IRP states it is, Evergy should also be serious about enabling every customer to support that goal.

Beyond consideration for whether DG customers will be allowed to participate in any of the Company's TOU plans, we reiterate the need for Evergy to model the potential for integrated solar and storage programs to aid in deferring or avoiding at least a portion of the transmission and generation needs planned for in this IRP. A recent case study found that, in a scenario where utility-owned storage was paired with customer-owned DERs and compared to traditional system upgrades, the DERs approach would result in a 40% reduction in operating costs over the planning horizon.²⁶ Evergy should promote residential and commercial adoption of DERs by adding battery storage and solar to the Company's Pay-As-You-Save ("PAYS") program and by expanding and making permanent the current battery storage pilot.

g. Demand Response, FERC Order 2222, and Third-Party DSM Aggregators.

Evergy considered the impacts of demand side management in its IRP, including the impacts of its MEEIA portfolio. This analysis is included in Volume 5 for both utilities. Evergy currently offers demand response in its MEEIA portfolio, as well as a battery pilot program. FERC 2222 also requires SPP to allow greater market access to DERs and SPP is currently developing a process to comply with the FERC Order. However, aside from a brief mention, Evergy did not include third party aggregators of DERs in its IRP. Evergy in the past has been criticized by stakeholders for not calling demand response events more often or at all.²⁷ Renew Missouri has

²⁶ "Valuing distributed energy resources for non-wires alternatives". Electric Power Systems Research. (September 2024). Accessed at: <u>https://www.sciencedirect.com/science/article/pii/S0378779624004073</u>

²⁷ In the Matter of Evergy Missouri Metro and Evergy Missouri West's Notice of Intent to File Applications for Authority to Establish a Demand-Side Programs Investment Mechanism, File No. EO-2019-0132 and EO-2019-0133, <u>Staff Rebuttal Report</u>, p. 59-73.

concerns that if customers can opt out or override events with limited penalty, or events are not called, demand response outcomes may not match impacts modeled in the IRP. Furthermore, demand response can be a valuable tool in Evergy's arsenal to meet load and peak needs. Since customers are already paying for demand response incentives in Evergy's MEEIA program as well as its battery storage pilot program, Renew Missouri offers that demand response should be utilized more often. This means modeling a variety of demand response participation levels and third-party aggregation efforts in the IRP, as well as future efforts to call events and encourage participation from customers who have received incentives.