Exhibit No.:	
Issue:	RFP, Description of projects; Inservice criteria
Witness:	John Carlson
Type of Exhibit:	Direct Testimony
Sponsoring Party:	Evergy Missouri West
Case No.:	EA-2024-0292
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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. EA-2024-0292

DIRECT TESTIMONY

OF

JOHN CARLSON

ON BEHALF OF

EVERGY MISSOURI WEST

Kansas City, Missouri
October 2024

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DIRECT TESTIMONY

OF

JOHN CARLSON

Case No. EA-2024-0292

I. INTRODUCTION

Q: Please state your name and business address.

A: My name is John R. Carlson. My business address is 1200 Main, Kansas City, Missouri 64105.

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

A: I am employed by Evergy Metro, Inc. and serve as Director, Project Management & Controls for Evergy Metro, Inc. d/b/a as Evergy Missouri Metro ("Evergy Missouri Metro"), Evergy Missouri West, Inc. d/b/a Evergy Missouri West ("Evergy Missouri West"), Evergy Metro, Inc. d/b/a Evergy Kansas Metro ("Evergy Kansas Metro"), and Evergy Kansas Central, Inc. and Evergy Kansas South, Inc., collectively d/b/a as Evergy Kansas Central ("Evergy Kansas Central") the operating utilities of Evergy, Inc. ("Evergy").

Q: Who are you testifying for?

A: I am testifying on behalf of Evergy Missouri West ("EMW" or "Company").

Q: What are your responsibilities?

A: My responsibilities include oversight of a team responsible for the project management and delivery of renewable generating assets for the Company. Additionally, I oversee the team responsible for project controls, namely scope, cost

and schedule tracking for both conventional and renewable generation additions across Evergy's companies.

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

A: I received a Bachelor of Science degree in Architectural Engineering from the University of Kansas in 1997. In 2004, I received a Master of Business Administration from the University of Chicago Booth School of Business. I joined KCP&L in 2006 as an Energy Consultant in the Delivery Division, managing all facets of the customer relationship for KCP&L's large industrial customers. In 2007, I became Manager of Market Competitiveness where I was responsible for developing and implementing non-regulated products and services for residential, commercial, and industrial customers. In 2010, I moved to the Supply Division at KCP&L and started work as an Originator of wholesale power transactions. In 2017, I started working in market operations and managed the group responsible for submitting assets and load to the SPP daily. In early 2024 I moved into the Company's Development group where I manage a team responsible for project management for renewable generation projects and for project controls for new conventional and renewable generation.

Q: Have you previously testified in a proceeding at the Missouri Public Service Commission ("Commission" or "PSC") or before any other utility regulatory agency?

A: Yes, I have provided testimony in support of Evergy Missouri West's Winter Storm Uri securitization and their Certificate of Convenience and Necessity ("CCN") in support of the acquisition of a percentage of the Dogwood Energy

generating asset. In addition, I have submitted testimony in multiple Missouri Energy Efficiency Investment Act ("MEEIA"), fuel adjustment clause and rate case proceedings in Missouri.

Q: What is the purpose of your direct testimony?

A: The purpose of my direct testimony is to:

- provide a detailed overview of the Sunflower Sky and Foxtrot solar generating resources ("Sunflower Sky" and "Foxtrot," respectively, and "Projects" or "Assets" collectively),
- describe the competitive request for proposal ("RFP") process and outcome that led to the project selections,
- detail the economics of each project and how they compared to alternatives considered in the RFP process and due diligence,
- review the transaction that will allow EMW to acquire the Assets, and
- describe the in-service criteria for the Assets.

Q: Are you sponsoring any schedules with your direct testimony?

A: Yes, I am sponsoring the following schedules:

- Schedule JC-1a – Foxtrot Layout
- Schedule JC-1b – Foxtrot One-line Diagram
- Schedule JC-1c – Foxtrot Utility Crossings
- Schedule JC-2a – Sunflower Sky Layout
- Schedule JC-2b – Sunflower Sky Utility Crossings
- Schedule JC-3a – 23 RFP Documents
- Schedule JC-3b – 23 RFP Draft Scoring Matrix
- Confidential Schedule JC-4 – 23 RFP Bid Response Summary
- Confidential Schedule JC-5 – 23 RFP Scoring Matrix
- Confidential Schedule JC-6 – 23 RFP Short-List Scoring Matrix
- Confidential Schedule JC-7 – 23 RFP LCOE & LCOC Summary
- Confidential Schedule JC-8 – 23 RFP Short-List LCOE & LCOC Summary
- Confidential Schedule JC-9 – 23 RFP Congestion Study Results

- Confidential Schedule JC-10 – Foxtrot BTA Agreement
- Confidential Schedule JC-11 – Sunflower Sky PSA Agreement

Q: Please describe your role specific to these Assets.

A: In 2023, Evergy launched an all-source RFP to seek out generation options available to help meet the generation needs of Evergy's operating companies as stated in its integrated resource plan ("IRP"). The Development group at Evergy led the RFP and the negotiations with counterparties, narrowing down the offers to a select group. My team has been involved with term sheet and contract negotiations with the developers of Sunflower Sky and Foxtrot.

Q: Please provide a summary of the key points for your testimony.

A: A summary of my testimony can be broken down into the following main areas:

I. Description of the Projects – Foxtrot will be a 100 MWac solar facility developed and built by Invenergy Solar Development North America ("Invenergy"). It has a fully executed generation interconnection agreement ("GIA") with the Southwest Power Pool, Inc. ("SPP") and has an expected commercial operation date ("COD") of December 2026. Sunflower Sky will be a 65 MWac solar facility developed by Savion, LLC ("Savion") and built by an engineering, procurement and construction ("EPC") contractor hired by Evergy. Sunflower Sky also has a fully executed GIA with the SPP and has an expected COD of December 2026.

II. The Process Leading to the Foxtrot and Sunflower Sky Agreements – The Company's 2023 IRP preferred plan identified a 150 MW solar need for EMW. Compared to other options presented in the Company's 2023 all-

source RFP, Foxtrot and Sunflower Sky were chosen as the best options to fill this need based on qualitative and quantitative analyses.

III. Commercial Negotiations and Risk Mitigation – Foxtrot is being structured as a build transfer agreement ("BTA") with negotiations that started in September 2023 and completed with a signed agreement on September 13, 2024. Invenergy will be responsible for the development and construction of the project. Sunflower Sky is structured as a development asset sale ("DAS") with negotiations that started in October 2023 and completed with a signed agreement on August 16, 2024. The Projects have clearly defined in-service criteria and will have operations plans, as-built drawings and plans for restoration of safe and adequate service post construction. Project risks for Foxtrot and Sunflower Sky include supply chain variability, change in law/tariff, permitting, transmission interconnection and construction. Mitigation of these risks occurs through contract provisions, through working with local jurisdictions on approvals, and through having approved GIAs in place with the SPP.

II. DESCRIPTION OF THE PROJECTS

Q: Please provide a detailed overview of Foxtrot.

A: Foxtrot Solar is a 130 MWdc / 100 MWac single axis tracking photovoltaic solar facility located in Jasper County, Missouri. The project is being developed by Invenergy and is projected to go commercial in December of 2026. The project maintains a fully executed GIA, study number GEN-2017-188, with the SPP and interconnects to the transmission grid at the 161kV Asbury substation, owned by

Liberty Utilities. Pending final design of the site, and in consideration of the construction of the Wolf Creek to Blackberry transmission project which bisects the site area, the total site capacity may expand to a maximum of 143 MWdc / 110 MWac. A layout and electrical one-line diagram of Foxtrot are contained in Schedule JC-1a and Schedule JC-1b, respectively.

Q: Please provide a detailed overview of Sunflower Sky.

A: Sunflower Sky Solar is an 88 MWdc / 65 MWac single-axis tracking photovoltaic solar facility located in Wilson County, Kansas. The project is being developed by Savion and is projected to go commercial in December of 2026. The project maintains a fully executed GIA, study number GEN-2017-022, with the SPP and interconnects to the transmission grid at the 138kV Altoona substation, owned by Evergy Kansas Central, Inc. A layout of Sunflower Sky is contained in Schedule JC-2a.

III. THE PROCESS LEADING TO THE FOXTROT AND SUNFLOWER SKY AGREEMENTS

Q: What process did Evergy pursue to identify energy resources to serve the needs of EMW customers?

A: As more thoroughly described in Mr. VandeVelde's testimony, Evergy identified the need for these projects through the annual IRP process. The 2024 triennial IRP preferred plan identified a 150 MW solar need for EMW. The Sunflower Sky and Foxtrot projects are uniquely suited to fill this 150 MW solar need due to their total capacity of 165 MW, their locations being near the EMW service territory, their relatively low permitting and environmental risk profiles, attractive capital cost,

and the levelized cost of energy ("LCOE") and capacity of the projects as compared to others that were offered in the 2023 all-source RFP.

Q: How was the RFP administered and distributed?

A: Evergy partnered with consultants from 1898 & Co. to develop, administer, and distribute a competitive RFP process, seeking projects interconnected within the SPP. As a first step to this process, 1898 & Co. was tasked with benchmarking peer RFP practices to identify clear RFP goals and objectives. These goals and objectives included definitions of quantitative and qualitative evaluation criteria, developing a screening process to eliminate non-complying proposals before the evaluation phase, use of a levelized costing approach to ensure an apples-to-apples cost comparison between project submissions, and creation of a criteria weighting system to accurately reflect Evergy's requirements for project selection. Next, in coordination with Evergy, 1898 & Co. developed the RFP document and technical specifications, with learnings from the benchmarking study. The final RFP documents allowed for bidders to submit proposals utilizing nearly any type of energy resource that is available in the market, including thermal generation, distributed energy resources ("DER" or "DERs"), renewable generation, and energy storage. The RFP also allowed for a variety of deal structures, including BTAs, power purchase agreements ("PPA"), and DASs. These RFP documents were posted to a standalone RFP website, which allowed developers to submit their proposals, ask questions, and receive notifications about the RFP process. At the time of posting, Evergy issued a press release to notify potential bidders that the RFP event was officially live as of January 18, 2023. In addition to the standalone

RFP website and press release, 1898 & Co. formulated a list of industry contacts, gathered from previous utility RFP's that they have facilitated, and issued notification of the Evergy RFP event to those potential interested parties. The flexibility built into the final RFP document and administration process aligned with Evergy's goal of casting a wide net, which ensured that all possible projects and interested parties were considered in the pursuit of satisfying the need identified in the 2023 IRP. The full set of RFP documents are available in Schedule JC-3a, and the RFP scoring matrix used to rank the RFP responses is shown in Schedule JC-3b. The RFP process followed the schedule shown below.

Figure 1: RFP Process

Milestone	Completed By Date
Issue RFP	January 18, 2023
Submit Appendix A and B with intent to bid	January 31, 2023, 5:00 PM CST
Pre-bid conference	February 7, 2023, 9:00 – 10:00 AM CST
Submit all questions	February 21, 2023, 5:00 PM CST
Bids and payments due	February 28, 2023, 5:00 PM CST
Shortlist selected	April 4, 2023
Final negotiations complete	August 16, 2024 (Sunflower Sky) September 13, 2024 (Foxtrot)
Expected notice to proceed ("NTP")	June 2025
Latest commercial operation date ("COD")	December 31, 2026

Q: Please describe the responses to the RFP?

A: EMW received valid responses to the RFP from 17 developers, who offered approximately 92 different project constructs. These offers included (1) early-stage developments where land leases and potential interconnection queue positions could be purchased via a development asset sale, (2) BTA options, (3) PPA options,

and (4) existing operational project sites. Many developers offered the same project via multiple deal structures. The projects offered had various commercial operation dates ("COD") ranging from April of 2020 to December of 2026. See Confidential Schedule JC-4 for the RFP bid responses.

Q: How did Evergy evaluate the RFP responses?

A: 1898 & Co. assisted Evergy in developing scoring criteria and ranking the projects submitted to the RFP. This evaluation process consisted of three steps: (1) an initial screening evaluation to ensure compliance with RFP documents and/or to eliminate projects where feasibility or cost issues may disqualify the proposal, (2) a quantitative analysis of the bids utilizing an LCOE and levelized cost of capacity ("LCOC") approach, and (3) a qualitative analysis to evaluate non-cost attributes of the proposals, such as environmental risk, interconnection queue status, land control status, technical merit, and developer experience and financial surety plan. After evaluation and ranking of the submitted proposals, the list was narrowed down to short-listed candidates, who were then requested to provide best and final offers. Following receipt and evaluation of the best and final offers, final short-listed candidates were selected to move forward with detailed evaluation and possible negotiations. The proposal requirements and scoring criteria are more thoroughly detailed in Schedule JC-3a, while the weighted scoring matrix used to evaluate and rank proposals is detailed in Schedule JC-3b. The scorecard which applied the weighted scoring criteria to each proposal is detailed in Confidential Schedule JC-5. The scorecard was then updated to re-evaluate the short-listed projects, and it is detailed in Confidential Schedule JC-6.

Q: How were the LCOEs and LCOCs calculated?

A: All projects that met the minimum screening requirements were evaluated by 1898 & Co. on an LCOE and LCOC basis. To ensure an apples-to-apples comparison for this initial simplified LCOE and LCOC evaluation, standard assumptions for operations and maintenance costs, fixed charge rate %, and discount rate % were used across the range of projects. The simplified LCOE's and LCOC's were calculated by dividing the total levelized annual costs by the estimated annual energy (MWhs) and the assumed capacity accreditation value (MWs) of the project, respectively. See Confidential Schedule JC-7 for a summary of the evaluated LCOE's and LCOC's for the qualifying proposals. For short-listed projects, full levelized revenue requirements models were calculated and divided by the expected annual MWhs to generate a $/MWh LCOE value for each project. A summary of the short-listed LCOE's, along with a comparison of those LCOE's to the original 1898 & Co. evaluation can be found in Confidential Schedule JC-8.

Q: What were the next steps after a short list was identified?

A: After a short list was identified, projects were prioritized based on their potential CODs, refined LCOE based on best and final offers, and responses to questions and answers ("Q&A") submitted in mid-2023. For the short-listed projects, a congestion analysis was performed by 1898 & Co. to estimate curtailment and locational marginal price ("LMP") risk in the SPP market. Based on the responses to the Q&A, updated cost factor models, and evaluation of the congestion analysis, sites were then selected and targeted for commercial discussions. For the targeted

2026 COD sites, two sites were selected to move forward with detailed negotiations: Foxtrot and Sunflower Sky.

Q: Please describe the scenarios studied and the results of the congestion analysis.

A: As part of the overall administration of the RFP, 1898 & Co. was contracted to perform a congestion analysis for multiple scenarios involving the short-listed projects. The analysis evaluated five different project combinations, as well as an all-resource scenario which assumed all short-listed projects would be constructed. For each of those combinations, four different SPP transmission futures were modeled: (1) 2027 Future 1, representing an "expected" amount of renewables additions to the SPP, (2) 2027 Future 2, representing a "high" amount of renewables additions to the SPP, (3) 2032 Future 1, and (4) 2032 Future 2. The results of each modeled scenario provided an output of expected revenue ($), generation (MWh), capacity factors (%), curtailment (MWh), curtailment (%), and average generation-weighted LMP ($/MWh) for each project. Foxtrot and Sunflower Sky were included in all the modeled combinations. The results of the analysis are more thoroughly detailed in Confidential Schedule JC-9. In summary, the analysis indicates that both Foxtrot and Sunflower Sky are ideally situated, with relatively high LMP's and low curtailment risk in each of the modeled futures.

Q: Why were these two projects chosen to begin commercial negotiations?

A: Foxtrot was selected to begin commercial negotiations for a variety of factors. As noted in Confidential Schedule JC-5, **[redacted]**, a mature SPP queue position

(a positive indication of the likelihood of the interconnection to be finalized), low permitting and environmental risk, and while located slightly outside of Evergy's service territory, the congestion analysis revealed low LMP and curtailment risk when delivering energy to EMW's load. Importantly the project is also located in an Energy Community and is eligible for additional tax benefits as described in the testimony of Company witness John Grace.

Sunflower Sky was selected for many of the same reasons. The asset had a mature SPP queue position with an executed GIA, excellent solar resource potential, a viable path to local and environmental permitting, and with the structure of the purchase as a DAS, EMW would be able to utilize its experience in constructing large and complex projects to self-build the project.

Q: Can you expand on Evergy's experience with solar and large, complex projects?

A: Regarding solar, Evergy has completed the design, permitting, construction, commissioning and start-up for six wholesale projects, dozens of small commercial projects, and two regulated projects, Hawthorn Solar and Greenwood Solar. Evergy currently has six additional wholesale projects in varying stages of development and construction with four of them scheduled for completion in the second quarter of 2025. These range in size from approximately 1 MW to 18 MWs. Additionally, in order to satisfy future regulated solar needs, Evergy has several utility scale projects under early-stage development.

Large, complex projects are the "bread and butter" of most electric utilities, and Evergy is no exception. Recent history of large projects includes the

environmental retrofits at the LaCygne generating station and the turbine rebuild at the Jeffrey Energy Center. In addition, large, planned outages are complex in nature and can include many contractors with different schedules and objectives. Evergy also has experience constructing power plants and working on transmission and distribution projects, not to mention the detailed and exacting work that occurs at the Wolf Creek generating station.

IV. COMMERCIAL NEGOTIATIONS AND RISK MITIGATION

Q: What are the purchase prices and plans for financing the purchase and operation of the Foxtrot and Sunflower Sky?

A: The base BTA purchase price of Foxtrot is [redacted]**. The total construction cost of Foxtrot is estimated to be **[redacted]**, which is inclusive of the BTA purchase, the allowance for funds used during construction ("AFUDC"), and Evergy internal labor & fees. Expansion of this project up to 110 MWac is possible, and the purchase price will be updated to reflect the final project size at notice to proceed ("NTP"). Capacity beyond the first 100 MWac will cost an additional **[redacted]** per kW installed.

The DAS purchase price for the Sunflower Sky is **[redacted]**. This price includes **[redacted]** for the development assets and $5,486,414 for reimbursement of SPP TOIF and network upgrades. The total construction cost of the asset is estimated to be **[redacted]**, which is inclusive of the DAS purchase, construction costs, AFUDC, and Evergy internal labor & fees.

Company witness John Grace addresses how the Company plans to finance the Assets.

Q: Are there production tax credit ("PTC") or investment tax credit ("ITC") benefits available for the Projects?

A: Yes. Company witness Grace describes these tax credits and how the Company is accounting for them with these Projects.

Q: What are the timelines for commercial negotiations with the developers of Foxtrot and Sunflower Sky?

A: The material negotiations for Foxtrot began in September 2023 when Evergy and Invenergy began negotiating a transaction term sheet. This document is effectively a summary of the commercial terms and conditions to be addressed in a final contract. Negotiating a term sheet prior to the contract presumably saves time as most of the commercial items have been addressed. Topics such as the project capacity, transaction purchase price, payment schedule, closing conditions, transmission interconnection, project development and construction (if applicable), warranties, procurement (if applicable), and definitions are included in the term sheet. The Foxtrot term sheet was agreed to by both parties in April 2024. Contract negotiations started at that time and resulted in a signed agreement on September 13, 2024. A copy of the signed agreement is included as Confidential Schedule JC-10.

Material Sunflower Sky term sheet negotiations, between Evergy and Savion, commenced in October 2023, and contract negotiations started in December 2023. The Sunflower Sky Purchase and Sale Agreement ("PSA"), which

effectuates the DAS, was finalized on August 16, 2024. A copy of the executed contract is included as Confidential Schedule JC-11.

Q: How have the acquisitions of Foxtrot and Sunflower Sky been structured?

A: As referenced earlier in my testimony, the Foxtrot acquisition has been structured as a BTA, or build transfer agreement. This transaction has both acquisition agreement and construction contract portions. Invenergy is responsible for securing land rights, permits, interconnection rights, approval from local jurisdictions, and required engineering, land, and water studies of the site. Once the development work and a contract have been finalized, the project goes into the construction phase. The developer (or its contractor) will then procure all necessary material, design and build the project (in the case of Foxtrot, Invenergy will hire a contractor for this work).

The Sunflower Sky agreement, by contrast, is structured as a PSA for the development assets. In this arrangement, Savion has set up a project company, Sunflower Sky Solar Project, LLC ("SSSP"), that is developing the Sunflower Sky project. Just like the BTA, in the PSA Savion's project company is responsible for securing land rights, permits, interconnection rights and etc. When the contractual conditions to closing have been met, to include approval from the local jurisdiction, the equity interests in the project company will be transferred to EMW.

Unlike the BTA, in the PSA SSSP will provide as part of its deliverables an engineering, procurement and construction ("EPC") bid package. Evergy will take that EPC bid package, release an EPC contractor RFP and contract with an EPC contractor to design the project, procure material and build Sunflower Sky.

Below are pre and post-closing organizational charts of the transactions.

Figure 2: Sunflower Sky Organizational Chart

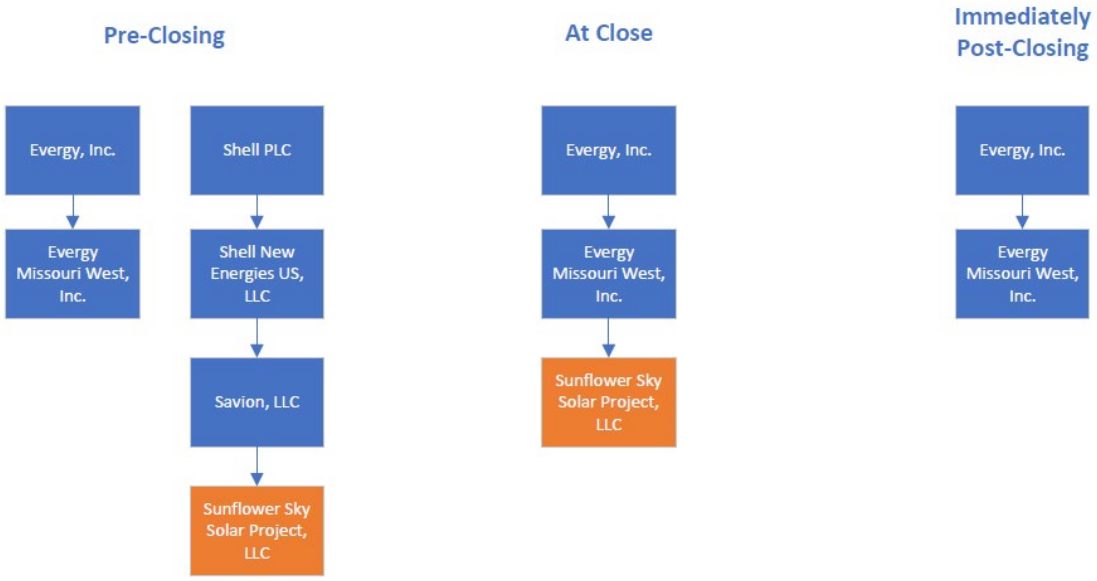
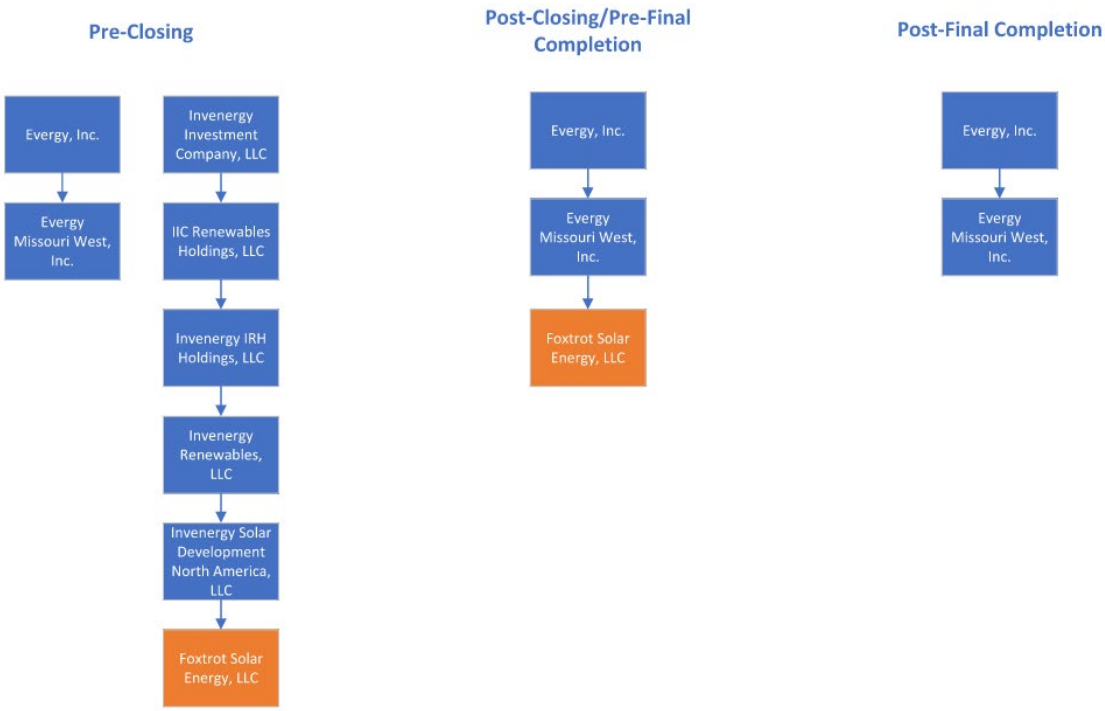


Figure 3: Foxtrot Organizational Chart



Q: What will happen to the project companies of Foxtrot and Sunflower Sky after the transactions close?

A: The equity interests from the Foxtrot project company, and associated development assets, will be owned by EMW upon closing at NTP. The project company will remain as a separate entity under EMW throughout construction to facilitate purchasing and contracting on behalf of the project. Once final completion is reached, EMW plans to effect a short-form merger of the project company with and into EMW, with EMW surviving the merger, in order to consolidate the asset of the project company with those of EMW.

The equity interests in SSSP will be transferred to EMW prior to construction, in a similar fashion as described above for Foxtrot.

Q: Have the Foxtrot and Sunflower Sky transactions been evaluated from a technical standpoint?

A: Yes, the Company's internal engineering team has reviewed the technical data, asset life design, engineering specifications, approved suppliers, and site plans provided by the developers of the Foxtrot and Sunflower Sky projects. Due to the stage of development of both sites, technical information will continue to be developed as the sites mature and Issued For Construction ("IFC") packages are developed. Prior to executing the BTA for Foxtrot, Evergy's engineering team performed a thorough review and approved the technical scope of work and basis of design to ensure that the Project was aligned with Evergy's expectations for a utility scale solar array. Evergy's technical team will continue to stay involved

throughout to ensure contracts are followed and the developments are of utility grade quality.

Technical reviews completed thus far primarily focused on verification of the estimated production of the sites using the equipment and design assumptions provided by the developers, as well as a review of the geotechnical studies performed on each site. The Company's engineering review found the developer's production estimates for both sites to be within reason, based on the preliminary designs submitted and the available solar resource for each location. For Foxtrot, a geotechnical and terrain analysis were performed and the site was found to be well suited for solar development. A geotechnical analysis was also performed for Sunflower Sky, which revealed shallow bedrock on a majority of the site. This concern can be easily mitigated via pre-drilling the foundation supports, a common practice in solar construction. No other geotechnical concerns were noted for Sunflower Sky.

Q: Were there potential environmental or permitting concerns evaluated by the bidders or the Company during and after the RFP stage?

A: Yes, during the Q&A period after short-listing, bidders were asked to provide detailed information on the status of local and environmental permitting. Through this Q&A process and subsequent update calls with bidders, it was determined that both Foxtrot and Sunflower Sky presented low permitting and environmental risk.

Foxtrot is in Jasper County, Missouri, which is an un-zoned county. Invenergy has obtained a "letter of no zoning" signed by the county commissioners stating that no local permits are required for the construction of the project. The

Company's internal environmental experts reviewed project documentation submitted by Invenergy and found no major concerns with the project.

Sunflower Sky is in Wilson County, Kansas and will require a Special Use Permit ("SUP") to construct the project. As a condition for closing on the sale of the development assets, Savion must obtain an approved SUP with conditions satisfactory to the Company. Some environmental concerns were identified in a Phase I Environmental Site Assessment ("ESA") such as active and historical oil & gas activity on the site. Prior to closing, a Phase II ESA will be performed to determine if action is necessary on the observed recognized environmental conditions. In addition, per in-field habitat assessment, impacts to the state-listed Eastern Spotted Skunk are anticipated. Any necessary permit and required mitigation to offset impacts to critical habitat will be obtained from the Kansas Department of Wildlife and Parks in advance of the project.

Q: Will the projects impact any existing utilities?

A: Both Foxtrot and Sunflower Sky have various existing utilities within their given project areas. During design and construction, measures will be taken to limit impact to these existing utilities, such as incorporation of setbacks and hydro-excavation where underground crossings are required. A list of impacted utilities for the Foxtrot project is included in Schedule JC-1c, and a map of impacted utilities for the Sunflower Sky project is included in Schedule JC-2b.

Q: What are the proposed In-service criteria for the facilities?

A: The in-service criteria for the Projects will be the following:

1. All major construction work is complete.

2. All pre-operational tests have been successfully completed.

3. Facility successfully meets contract operational guarantees that are necessary for satisfactory completion of all other items in this list.

4. Upon observation of the facility for 72 consecutive hours the facility will have demonstrated that when sunlight was shining on it during that period it produces power in a standard operation mode.

5. Facility shall meet at least 95% of the guaranteed AC capacity based on the capacity test as outlined in the contract or amended contract, or liquidated damages have been received for any shortfall below the guaranteed capacity. The capacity test shall determine the facility's corrected capacity at the design point conditions.

6. Sufficient transmission/distribution interconnection facilities shall exist for the total plant design net electrical capacity at the time the facility is declared fully operational and used for service.

7. Sufficient transmission/distribution facilities shall exist for the total plant design net electrical capacity into the utility service territory at the time the facility is declared fully operational and used for service.

Q: What is the operations plan for ongoing operations of the Foxtrot and Sunflower Sky projects once in-service?

A: The operations plans for Foxtrot and Sunflower Sky will be provided within 60 days post commercial operation of each project. At this time, vendors for major equipment have not been finalized so any operations plan would not be complete. Evergy operations personnel will work with contractors and vendors when the

Projects are nearing completion to verify specific operational characteristics of systems and to finalize the operations plans.

Q: When will the Projects' as-built drawings be provided?

A: Evergy will provide the Projects' as-built drawings within 100 days post commercial operation of each project. While high-level design layouts can be found in Schedules JC-1a, JC-1b and JC-2a, as-built drawings can only be provided once construction is completed. As-built drawings will include site, racking, and electrical plans.

Q: When will the plans for restoration of safe and adequate service be provided?

A: Evergy will provide the Projects' plans for restoration of safe and adequate service within 60 days post commercial operation of each project. As discussed previously with the operations plans, plans for restoration of safe and adequate service will not be complete until final equipment vendor selection, installation, and discussions between Evergy operations personnel and the projects' contractors and equipment vendors.

Q: What are the overall project risks for Foxtrot and Sunflower Sky, and how does EMW intend to mitigate those risks?

A: As with all major construction projects, there are risks associated with the Projects. The primary risks associated with the Projects are:

1. Supply chain variability;
2. Change in law/tariff;
3. Permitting;

4. Transmission interconnection; and

5. Construction

Q: Please expand on the supply chain risks and how Evergy plans to mitigate them.

A: Global supply chains continue to be impacted by strong demand for solar modules, inverters, and power equipment (e.g., transformers and breakers). In addition, some of the raw materials used in manufacturing this equipment is also used in the electronics, battery and artificial intelligence industries, which are seeing strong demand as well. These all point to longer lead times and increased costs for equipment.

The Foxtrot BTA was structured with provisions to reduce supply chain risks at multiple levels. As a condition precedent to notice to proceed ("NTP"), **[redacted]**

[redacted]**

The Sunflower Sky project will utilize an engineering, procurement, and construction ("EPC") contractor for project completion. Evergy will procure modules through its vendor relationships and is utilizing its internal expertise to supply transformers, and breakers for the project, which represent the primary long-lead items needed for construction.

Q: Please elaborate on the change in law/tariff risks and how the Company has responded.

A: With the ability to purchase domestic panels being limited, there is a reliance on manufacturing primarily in Southeast Asia. Concerns around purchasing from Chinese suppliers and/or utilizing parts manufactured in China for panels manufactured elsewhere is increasing risk around changes in law that could increase the costs of procurement. In addition, there is risk that tariffs imposed on solar panels manufactured in countries shown to be circumventing federal law on the use of Chinese parts could vary dramatically. Tariffs by supplier could vary by year as calculations are updated annually. Also, there is risk that if a supplier has manufacturing in a country found to be circumventing regulations and utilizing

parts from China, even if modules from other countries, by the same supplier, adhere to regulations, all modules from that supplier could be subject to increased tariffs.

For Foxtrot, **[redacted]**

Although the Sunflower Sky project will be designed and constructed through an EPC contract, Evergy will procure the solar modules, the main power transformer, and the high-voltage circuit breakers. Evergy's supply chain has procured modules for recent projects and feedback from the panel market has been positive thus far. Equipment purchased, including panels, will be from non-Chinese suppliers and Evergy will eliminate companies that have been identified as circumventing regulations around Chinese parts and manufacturing.

Q: What permitting risks exist with these Projects, and how is Evergy mitigating them?

A: As discussed previously in my testimony, Jasper County, Missouri is an un-zoned county and does not have any local authorities within the project area that could enforce rules or regulations on the construction or operations of a solar project. No permit will be required, and Evergy has received a letter signed by the county stating the same. Regarding the Sunflower Sky project, as a condition for closing, Savion must obtain a Special Use Permit ("SUP") with Wilson County, Kansas that is acceptable in all respects to Evergy. Conversations between Savion and Wilson County have been ongoing during the process to help alleviate permitting risk. Savion is working with Wilson County to incorporate public feedback into their design and will come before the Wilson County Planning Commission for a vote on the project in late 2024. Full SUP approval is expected by early 2025. Environmental risk has been discussed previously in my testimony.

Q: Please describe transmission interconnection risk with the Projects and how the Company is addressing this risk.

A: The risk around transmission interconnection has both financial and timing aspects. Interconnection of new generation to the SPP transmission system requires a GIA. The study process for a GIA can take years, and interconnection dates are dependent on the study timeline and prior studies in the queue and/or system upgrades that might be necessary. The financial impact (potential transmission system upgrades needed to grant interconnection) is also an unknown until a GIA

is granted. The Projects both have fully executed GIAs, meaning that timing and financial risk is known and has been mitigated.

Foxtrot has GIA expenses of ** [redacted] ** If prior to NTP the costs of interconnection exceeded ** [redacted] ** Again, it is Evergy's expectation that the interconnection costs will not change from what is currently known and represented in the contract.

Sunflower Sky's interconnection costs are also known and finalized with a fully executed GIA and no incremental SPP studies of concern. The $5,486,414 of transmission network upgrades ** [redacted] **

Q: Please address Construction risk and the measures taken by the Company to mitigate them.

A: The Inflation Reduction Act from 2022 ("IRA") has improved the economics of, and resulted in an increased demand for, new solar generation. The construction

labor market to build the solar farms is tight due to demand and is more expensive due to higher U.S. inflation relative to historical averages. Additionally, the high demand for solar puts schedule risk in play as more projects vie for less resources (labor).

Evergy has transferred these risks to Invenergy and their EPC contractor through the BTA for Foxtrot. For Sunflower Sky, the risk will be mitigated in a similar fashion except that Evergy will manage the EPC contractor. Both of these arrangements transfer the responsibility and obligation to the developer or contractor to supply labor, equipment, and manage construction activities to meet the Projects' schedule milestones. Further, there are liquidated damages provisions in the BTA with Invenergy that address delays in meeting project milestones.

Q: Please summarize your testimony.

A: Through a robust process that commenced with the 2023 all-source RFP and included quantitative and qualitative analyses and internal and external due diligence, the Sunflower Sky and Foxtrot projects were selected as options to pursue. From a contract structure perspective, Foxtrot is a BTA agreement with Invenergy having responsibility for building the project and transferring to Evergy Missouri West and Sunflower Sky is a DAS with Savion having responsibility for securing land leases and permitting and the Company having responsibility for hiring an EPC for final design, procurement of equipment and construction of the project. Both projects will meet a clearly defined set of in-service criteria and operations plans, as-built drawings, and plans for restoration of service will be provided post commercial operation of the Projects. Identified project risks of

supply chain variability, change in law/tariff, permitting, transmission interconnection, and construction have been mitigated through contract provisions, through procurement strategies and through the location of each project.

In summary, these projects are the right projects for Evergy for multiple reasons. Foxtrot had the **[redacted]**, a mature SPP queue position, low permitting and environmental risk, low LMP and curtailment risk, and is also located in an Energy Community and is eligible for additional tax benefits. Sunflower Sky also has a mature SPP queue position with an executed GIA, excellent solar potential, a viable path to local and environmental permitting, low LMP and curtailment risk, and EMW will utilize its large project experience to self-build the project.

Q: Does that conclude your testimony?

A: Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

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 and Necessity	))))	Case No. EA-2024-0292

AFFIDAVIT OF JOHN R. CARLSON

STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

John R. Carlson, being first duly sworn on his oath, states:

1. My name is John R. Carlson. I work in Kansas City, Missouri, and I am employed by Evergy Metro, Inc. as Director, Project Management & Controls.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Evergy Missouri West consisting of twenty-eight (28) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

John R. Carlson

Subscribed and sworn before me this 25th day of October 2024.

Notary Public

My commission expires: 4/26/2025

ANTHONY R. WESTENKIRCHNER
NOTARY PUBLIC - NOTARY SEAL
STATE OF MISSOURI
MY COMMISSION EXPIRES APRIL 26, 2025
PLATTE COUNTY
COMMISSION #17279952

Evergy Metro, Inc. d/b/a Evergy Missouri Metro and
Evergy Missouri West, Inc. d/b/a Evergy Missouri West

Docket No.: EA-2024-0292
Date: October 25, 2024

CONFIDENTIAL INFORMATION

The following information is provided to the Missouri Public Service Commission under CONFIDENTIAL SEAL:

Document/Page	Reason for Confidentiality from List Below
Carlson Direct, p. 11, lns. 22-23	3, 4, and 6
Carlson Direct, p. 13, lns. 10-13; 18-20; and 22	3, 4, and 6
Carlson Direct, p. 22, lns. 13-23	3, 4, and 6
Carlson Direct, p. 23, lns. 1-7	3, 4, and 6
Carlson Direct p. 24, lns. 4-13	3, 4, and 6
Carlson Direct p. 26, lns. 3-13 and 18-19	3, 4, and 6
Carlson Direct, p. 28, lns. 5-6	3, 4, and 6
JC-4 thru JC-11	3, 4, 6, 7, and 8

Rationale for the "confidential" designation pursuant to 20 CSR 4240-2.135 is documented below:

1. Customer-specific information;

2. Employee-sensitive personnel information;

3. Marketing analysis or other market-specific information relating to services offered in competition with others;

4. Marketing analysis or other market-specific information relating to goods or services purchased or acquired for use by a company in providing services to customers;

5. Reports, work papers, or other documentation related to work produced by internal or external auditors, consultants, or attorneys, except that total amounts billed by each external auditor, consultant, or attorney for services related to general rate proceedings shall always be public;

6. Strategies employed, to be employed, or under consideration in contract negotiations;

7. Relating to the security of a company's facilities; or

8. Concerning trade secrets, as defined in section 417.453, RSMo.

9. Other (specify) _____.

Should any party challenge the Company's assertion of confidentiality with respect to the above information, the Company reserves the right to supplement the rationale contained herein with additional factual or legal information.