

Exhibit: _____

Issues: Technical Details, RFP Process,
Project Risks

Witness: Damon Rea

Type of Exhibit: Direct Testimony

Sponsoring Party: Evergy Missouri Metro and
Evergy Missouri West

Case No. EA-2022-0043

Date Testimony Prepared: December 14, 2021

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO:

EA-2022-0043

DIRECT TESTIMONY

OF

DAMON REA

ON BEHALF OF

**EVERGY MISSOURI METRO
AND EVERGY MISSOURI WEST**

**Kansas City, Missouri
December 2021**

DIRECT TESTIMONY

OF

DAMON REA

Case No. EA-2022-0043

I. INTRODUCTION

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

2 A: My name is Damon Rea. My business address is 818 S Kansas Ave., Topeka, KS 66601.

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

4 A: I am employed by Evergy as a Renewables Engineer.

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

6 A: I am testifying on behalf of Evergy Metro, Inc. d/b/a Evergy Missouri Metro (“Evergy
7 Missouri Metro”) and Evergy Missouri West, Inc. d/b/a Evergy Missouri West (“Evergy
8 Missouri West”) (collectively, the “Company” or “Evergy”) in support of the approval of
9 the Company’s Missouri Certificate of Convenience and Necessity (“CCN”).

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

11 A. My responsibilities include the technical development and project management of
12 Renewable Energy projects for Evergy.

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

14 A: I am a 2015 graduate of the University of Kansas, with a B.S. in Mechanical Engineering.
15 I obtained my Professional Engineer’s license from the Kansas State Board of Technical
16 Professions in 2019 and maintain an active P.E. license with the State of Kansas. I joined
17 Evergy in 2015 and supported the Lawrence Energy Center, in various engineering roles

1 for approximately five years. In January of 2021, I transitioned to the Renewables
2 Engineering group within Evergy and now support the development and execution of
3 renewable energy projects.

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

6 A: No.

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

8 A. The purpose of my direct testimony is to support the approval of Evergy’s application for
9 a CCN in order to construct, own, operate and maintain a solar generation plant and
10 associated facilities (the "Project") to fulfill the customer demand for the Solar
11 Subscription Pilot Rider¹ (“Schedule SSP”) program (“Program”). My direct testimony
12 addresses the technical details, Request for Proposals (“RFP”) process and project risks of
13 the Project.

14 **Q: Please summarize the key conclusions in your testimony.**

15 A: My testimony addresses the RFP and site selection processes, which concluded that the 10
16 MW Hawthorn site, which is to be constructed by Burns & McDonnell, results in the most
17 cost-effective option for the Program subscribers and to fulfil the 393.1665 RSMo.
18 requirement. In addition, my testimony addresses the technical details of the project, the
19 benefits of constructing both the Schedule SSP and 393.1655 RSMo. portions in parallel,
20 as well as potential project risks.

¹ Evergy Missouri Metro, Solar Subscription Pilot Rider Schedule SSP “Schedule SSP”; P.S.C.MO. No. 7; Fourth Revised Sheet No. 39. Second Revised Sheet No. 39A, 39B, 39C; Third Revised Sheet No. 39D; effective December 6, 2018.

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

2 A: Yes, I will be sponsoring **Schedule 2 – Utility Crossing, Confidential Schedule 5 –**
3 **Hawthorn Solar O&M Plan, Confidential Schedule 6 – Solar Site Decision Matrix,**
4 **and Schedule 7 – Hawthorn Solar Permit Matrix,** which are attached to the Application
5 for CCN (“Application”).

6 **II. PROJECT OVERVIEW**

7 **Q: Please provide an overview of the Project and the estimated costs.**

8 A: The Project will install a 10MWac capacity Single-Axis Tracking Solar Photovoltaic
9 system at an estimated cost of **** [REDACTED] ****. As Company witness Brannan describes,
10 this Project will serve the needs for both Schedule SSP customers and 393.1665 RSMo.
11 Requirements. This single system approach allows for additional savings to be passed
12 along to the customers by taking advantage of economies of scale, and avoids potential
13 additional costs which would be incurred due to multiple phases of procurement and
14 construction, and the projects would also be subject to additional market risks for material
15 procurement.

16 **Q: Where will the Project be located?**

17 A: The Project will be located at the Hawthorn Generating Station in Kansas City, Missouri.
18 Site address is 8700 E. Front Street.

19 **Q: Why was this location chosen for the Project?**

20 A: This location was chosen based on an evaluation of multiple factors which included
21 lease/land cost, interconnection feasibility, environmental risks, and whether the site is
22 located within Evergy’s Missouri service territory. The initial screening for sites consisted
23 of reviewing available property, both Evergy owned and non-Evergy owned, that met the

1 acreage requirement for this project and were located within Evergy’s Missouri service
2 territory. Next, the sites were evaluated for interconnection feasibility, both at the
3 distribution level and the transmission level, which included evaluating the capacity of the
4 distribution circuit and the distance to the nearest substation. If interconnecting at the
5 transmission level, sites with an existing Southwest Power Pool (“SPP”) interconnect
6 agreement were given preference, since the SPP queue for new interconnects is
7 approximately a five-year wait time. Finally, the sites were evaluated based on
8 environmental factors, such as terrain and flood risk. Additional sites that were submitted
9 by bidders during the RFP process were also reviewed using these same criteria.² The
10 details of these criteria are outlined in **Confidential Schedule 6 – Solar Site Decision**
11 **Matrix**, attached to the Application.

12 **Q: What is the proposed construction timeline for the Project and what is the anticipated**
13 **date that Project will be operational and used for service?**

14 A: Construction for the portion of the Project to serve Schedule SSP customers is anticipated
15 to begin upon approval of the CCN. The Project is anticipated to be ready for commercial
16 operational and used for service by Fall 2022. Given that the Project could not pursue a
17 CCN until the 90 percent enrollment threshold was met under Evergy Missouri Metro and
18 Evergy Missouri West’s Schedule SSP requirements, the Project is expected to be
19 constructed on a compressed timeline in order to ensure this resource is available to provide
20 a benefit to the customers as soon as possible. In addition, the construction timeline of this
21 project will take advantage of current market pricing and lock-in material contracts as a
22 hedge against future price increases.

² Schedule 6 CONF - Solar Site Decision Matrix.

1 **Q: What are the main construction related drivers of the Project schedule?**

2 A: A transmission project is expected to begin in Fall of 2022 on the same property. The
3 Project must be completed by Fall of 2022 to avoid interfering with the planned
4 transmission construction. In the event the project is not completed by Fall of 2022, the
5 remainder of the construction will be required to be postponed until after the transmission
6 project is completed in Spring of 2023, which will lead to additional costs due to wage
7 increases, a second mobilization, and the need to store and double handle materials. This
8 delay would also impact the ability of the Company to begin offering the program to
9 customers under Schedule SSP.

10 **Q: Who is the contractor for the Project?**

11 A: The Project will be constructed by the selected Engineering, Procurement & Construction
12 (“EPC”) contractor, Burns & McDonnell. The general contractor will be AZCO and
13 multiple additional subcontractors will be utilized for specialty work as needed.

14 **Q: Are any permits or other approvals required for the construction of the Project?**

15 A: Yes, the permitting matrix. **Schedule 7 – Hawthorn Solar Permit Matrix** that shows all
16 required permits and approvals, is attached to the Application.

17 **Q: Are there any utilities the Project expects to cross during the course of construction?**

18 A: The only utilities in the Project area are Evergy Metro owned overhead transmission lines.
19 A single underground duct bank will be installed, which will cross below these
20 transmission lines. The overhead transmission lines will not be impacted by this
21 construction. See **Schedule 2 – Utility Crossing**, attached to the Application, for details.

1 **Q: How will the solar facility operate and be maintained?**

2 A: The solar facility will be operated by and maintained by existing Evergy personnel, as
3 indicated in **Confidential Schedule 5 – Hawthorn Solar O&M Plan**, attached to the
4 Application.

5 **III. RFP PROCESS**

6 **Q: Please provide an overview of the RFP process that led to the selection of the**
7 **contractor.**

8 A: The initial phase of the Project was to select a site that met the location requirements that
9 were previously described. This site evaluation process started in 2019 and concluded with
10 the selection of Hawthorn in early 2021.

11 This RFP package was issued to six bidders, who were given approximately six
12 weeks to provide a response. The six bidders were selected from a field of local engineering
13 firms that have supported previous Evergy projects and also a number of small to medium
14 sized solar developers that had previously submitted bids for other Evergy renewable
15 projects. As an option in the RFP, bidders were asked to provide other potential sites that
16 could be used as an alternative to the Evergy selected site from its initial screening process
17 prior to the RFP.

18 **Q: What responses were received?**

19 A: Responses were received from all six bidders.

20 **Q: What were the selection criteria Evergy used in the initial screening evaluation of the**
21 **bids?**

22 A: The bids were evaluated based on completion, technical feasibility, modeled Levelized
23 Cost of Energy (“LCOE”), and developer experience. Initial screening consisted of

1 eliminating bids that were only budgetary in nature and bids that did not meet the
2 requirements of the RFP. Next, the bids were reviewed to ensure compliance with site
3 requirements (i.e. layout restrictions, technical specifications, etc.). Then, the LCOE
4 estimates were calculated using the production estimates and capital cost from each bid.
5 Company witness Brannan's testimony will go into more detail on how the LCOE was
6 calculated. Finally, each bidder's historical project experience was reviewed to ensure that
7 they were competent and capable of performing the work.

8 **Q: How did the RFP process proceed after the initial screening evaluation?**

9 A: Based on the above criteria, two bidders were selected as short-list candidates. Additional
10 questions were submitted to these bidders and their responses were reviewed by Evergy.
11 The selected bidder was the one that showed the lowest LCOE and demonstrated superior
12 project experience.

13 **IV. ADDITIONAL PROJECT RISKS**

14 **Q: Please outline the main risks associated with development and construction of the**
15 **Project?**

16 A: Commodity and shipping prices have increased sharply in 2021, which can present a
17 financial risk to the Project if the project is delayed and prices continue to increase. The
18 project materials and services will be bid on a firm fixed basis to mitigate the financial risk
19 of commodity and shipping related price increases. As of November 2021, a majority of
20 the major components for this project have been secured, such as solar panels, inverters,
21 and transformers.

1 **Q: What happens to the 10 MW solar project if the Commission does not approve the**
2 **CCN request?**

3 A: While Evergy has demonstrated its compliance with Schedule SSP and the Tartan factors
4 as outlined in witness Brannan's testimony, if the Commission does not approve this CCN
5 request, the Company will continue to move forward with construction of the solar array
6 to fulfill compliance with 393.1665 RSMo., but Evergy will scale back the size of the solar
7 array proportionally to be approximately 5 MW.

8 **V. TIMING & SUMMARY OF RELIEF REQUESTED**

9 **Q: Please summarize the Company's request in this case to include any consequences if**
10 **there is a delay.**

11 A: The Company's request in this case is for the Commission to issue a CCN for the portion
12 of construction of the 10 MW solar array, no later than May 1, 2022, to meet the
13 requirements of Schedule SSP. If the Commission's order is delayed significantly beyond
14 this date, construction start for the Solar Subscription portion of the Project would need to
15 be pushed out until mid-2023, which is when the planned transmission work on the site is
16 expected to be finished. This would delay the start of customer participation in Schedule
17 SSP.

18 **Q: Does this conclude your testimony?**

19 A: Yes.

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Application of Evergy)
Metro, Inc. d/b/a Evergy Missouri Metro and)
Evergy Missouri West, Inc. d/b/a Evergy)
Missouri West for Permission and Approval of) Case No. EA-2022-0043
a Certificate of Public Convenience and)
Necessity Authorizing It to Construct, Install,)
Own, Operate, Maintain and Otherwise Control)
and Manage Solar Generation Facilities in)
Kansas City, Missouri.)

AFFIDAVIT OF DAMON REA

STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

Damon Rea, being first duly sworn on his oath, states:

1. My name is Damon Rea I work in Topeka, Kansas, and I am employed by Evergy as a Renewables Engineer.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Evergy Missouri Metro and Evergy Missouri West consisting of eight (8) 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.

Damon Rea

Damon Rea

Subscribed and sworn before me this 13th day of December 2021.

Anthony R. Westenkirchner

Notary Public

My commission expires: 4/26/2025

