Exhibit No.:
Issue(s): Depreciation
Witness: Cedric E. Cunigan, PE
Sponsoring Party: MoPSC Staff
Type of Exhibit: Rebuttal Testimony
Case Nos.: ER-2022-0129 and ER-2022-0130
Date Testimony Prepared: July 13, 2022

MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

ENGINEERING ANALYSIS DEPARTMENT

REBUTTAL TESTIMONY

OF

CEDRIC E. CUNIGAN, PE

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2022-0129

Evergy Missouri West, Inc., d/b/a Evergy Missouri West
Case No. ER-2022-0130

Jefferson City, Missouri
July 2022

** Denotes Confidential Information **

REBUTTAL TESTIMONY

OF

CEDRIC E. CUNIGAN, PE

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2022-0129

Evergy Missouri West, Inc., d/b/a Evergy Missouri West
Case No. ER-2022-0130

Q. Please state your name and business address.

A. My name is Cedric E. Cunigan. My business address is 200 Madison Street, Jefferson City, Missouri 65101.

Q. Are you the same Cedric E. Cunigan that previously provided direct testimony in this case on June 8, 2022?

A. Yes.

EXECUTIVE SUMMARY

Q. What is the purpose of your direct testimony?

A. I will be providing an update to Staff's position on depreciation rates given new information that Staff was made aware of in the testimony of Midwest Energy Consumers Group witness Mr. Greg Meyer. I will also be responding to Evergy witnesses Mr. John S. Spanos regarding depreciation, Mr. Bradley D. Lutz regarding the Solar Subscription Pilot Rider ("SSP"), and Ms. Kimberly H. Winslow regarding the Residential Battery Energy Storage pilot ("RBES").

Q. Through this testimony, do you provide any recommendations that should be specifically reflected in the Commission's Report and Order in this case?

A. Yes. I recommend that the Commission reject tariff changes to the SSP and the proposed RBES.

DEPRECIATION

Q. What new information was Staff made aware of regarding plant depreciation?

A. In his direct testimony, Mr. Greg Meyer identifies discrepancies between the reserve balances in Case No. ER-2018-0146 and the reserve balances as proposed by Evergy in the current case for several accounts. The Jeffrey Energy, Lake Road, Iatan common, Iatan 1, and Iatan 2 accounts have significantly less reserve in the current case than they did in Case No. ER-2018-0146. Mr. Meyer states that Evergy has decreased the reserve in the accounts listed above to account for a portion of the Sibley unit retirements. Staff witness Keith Majors gives further explanation of this issue.

Q. Does this change Staff's original recommendation?

A. Staff is still investigating this matter at this time. Staff is awaiting Data Request responses and will be meeting with the Company and other parties to discuss this issue. If Staff determines that the reserve balances should be changed, then Staff's depreciation rates would be altered accordingly. Staff will update this issue in Surrebuttal.

Q. What issues would you like to address with Mr. Spanos's testimony?

A. Mr. Spanos includes terminal net salvage, which was derived from an 1898 & Co. study attached to the Direct Testimony of Jeffrey T. Kopp, in rates for generating plants.

Q. Why is using terminal net salvage an issue?

A. In Staff's direct testimony, Staff briefly discusses the Commission Order in Case No. ER-2016-0285 that denied recovery of terminal net salvage in depreciation expense due to the costs being speculative. The Findings of Fact from that Report and Order stated in part:

> 95. Terminal net salvage should not be included in depreciation rates because the actual cost KCPL will incur is unknown, cannot be measured, and is speculative.
>
> 96. The Commission has previously excluded terminal net salvage from rates for exactly that reason.
>
> 97. Nothing has changed in the interim and there is no good reason to admit costs for terminal net salvage to rates now.
>
> 98. As with any speculative cost, if the amount accrued for retirement during the plant's operation in fact exceeds the actual cost of that retirement, there will be no feasible way to return that money to the ratepayers that paid too much.[1]

Nothing has changed in the interim regarding terminal net salvage since the Order in Case No. ER-2016-0285. Costs associated with terminal salvage are not known and measurable at this time and are still speculative. Mr. Kopp discusses the methodology used to estimate terminal costs in his direct testimony. He acknowledges that the estimated costs are not a firm plan for decommissioning and that a contractor chosen in the future "will determine the means and methods by which the decommissioning will occur."[2] He also acknowledges that some costs cannot be determined until the decommissioning process has begun[3] and recommends a 20% contingency cost on top of his estimation of the direct costs.[4] There is error inherent to any estimation process. Given that some of these plants are not expected to be retired for more

[1] Case No. ER-2016-0285 Report and Order issued May 3, 2017, page 37.
[2] Direct Testimony of Jeffrey T. Kopp page 16, lines 1-9.
[3] Direct Testimony of Jeffrey T. Kopp page 17, line 18 through page 18, line 2.
[4] Direct Testimony of Jeffrey T. Kopp page 19, lines 10-14.

than 20 years, there are a myriad of factors that could change. Market costs, best practices, and available technology are just a sample of the factors that could influence the price of decommissioning in the future. The simple fact is no one knows at this time what the final cost will be and no one is sure of the method that will be used to decommission most of these plants. The estimations may give an idea of what to prepare for, but they are just estimations with inherent error. On top of those errors, Mr. Kopp has added a 20% contingency cost. These speculative amounts should not be included in depreciation rates. The rates proposed by Mr. Spanos include the speculative amounts as a component of net salvage.

Q. Does Staff think that cost of final termination should be recovered?

A. Yes. The costs of final termination should be recovered. The issue with speculating what those costs will be is that it can be vastly over or under estimated at present time. This creates generational inequity if you over or under collect from customers.

Q. Do you have generational inequity with the current recovery methods for final termination costs?

A. Yes. It is near impossible to eliminate generational inequity related to these costs without exact foreknowledge of final termination costs. The current approach of amortizing the final costs after they are known, or securitizing those costs limits the impact to current customers compared to speculating the costs prior to them being known. The utility does not actually incur costs related to final termination until the facility is terminated. However, under Mr. Spanos' approach, the utility would begin recovering the termination expense from the moment a facility is placed in rate base. An over recovery prior to termination would be impossible to return to previous customers. An under recovery prior to termination would work in a similar manner to how termination costs are currently handled with the cost either being securitized or amortized over a period of time.

Q. What does Staff recommend regarding terminal salvage?

A. Staff recommends that the Commission not include terminal salvage in depreciation expense due to the speculative nature. The costs of final termination should be recovered once they are known, but the utility should not be able to collect speculative amounts and use them for other purposes.

<u>SOLAR SUBSCRIPTION PILOT RIDER ("SSP")</u>

Q. Please describe the SSP.

A. Evergy's SSP was approved in Case No. ER-2018-0145 and ER-2018-0146. The SSP allows customers to subscribe to a portion of a solar resource. Subscribers pay a solar block charge, which is based on the cost to of the solar resources built to serve the program, and a services and access charge for the amount of energy produced from their subscribed blocks. The energy produced by the resource would offset customer usage.

Q. What changes are being proposed to the SSP?

A. Evergy has proposed the following changes to the SSP:

- Convert the program from a pilot rider to a permanent program
- Reduce subscription threshold to construct a new facility from 90% to 70%
- Remove requirement that the program maintain a 90% subscription level for 2 years prior to constructing a new facility
- Remove section defining pilot evaluation terms, but commit to providing the reporting information for 2 years
- Remove 50% limit for nonresidential customers participating in the program
- Remove sizing requirement of the facilities

- Change subscription limit from 50% to 100% of annual energy
- Change cost sharing of unsubscribed costs from 75/25 shareholder/ratepayer split to first 50% shareholders, remaining 50% ratepayers

Q. What is Evergy's reasoning for proposing the changes?

A. Evergy states that its program is similar to Ameren Missouri's Community Solar Program and is proposing similar changes to those made in ER-2021-0240.[5] Evergy also states that the proposed changes would remove some delay of future expansion.[6]

Q. What is Staff's recommendation on these changes?

A. Staff is opposed to the changes to the SSP.

Q. Please explain Staff's reasoning.

A. As of the date of this testimony, the solar facility used for the pilot has not been completed. Therefore, Evergy, and thus Staff and other stakeholders, have not been able to evaluate the cost and benefits of Evergy's offering, making expansion and changes premature. Many of the tariff changes Evergy proposes involve tariff and program requirements meant to help evaluate the success of the initial program that have not been able to be fulfilled so proper examination of the usefulness of the information provided is not possible. In addition, some of the tariff requirements were directly agreed to in the third stipulation and agreement in Case No. ER-2018-0145, specifically the requirement for 90% subscription of the initial facility for two years prior to building an additional facility, the cost sharing of unsubscribed portions of the resource, and the evaluation criteria of the program. The current tariff language states, "This program may be expanded, depending on Customer interest and with

[5] Direct Testimony of Brian D. Lutz page 54, lines 2-4.
[6] Direct Testimony of Brian D. Lutz page 56, lines 15-16.

Commission approval, after successful completion of the initial offering and pilot evaluation."[7] And further states,

> The Company will complete and submit to Staff an evaluation of this Program prior to any request for expansion or after five years of operation, whichever is first. The evaluation will include:
>
> 1. Tracking of program costs and revenues (participants, all ratepayers, Company),
> 2. Numbers and types of subscribers (by rate class and participation by low and moderate-income customers if available),
> 3. Annual surveys of participating customers covering (economic considerations and customer service),
> 4. Impact or benefits of the facility on the utility distribution system, and
> 5. Plans to site program expansion facilities in areas where distributed generation would benefit the electric utility's distribution system, such as areas where there is a potential to avoid or minimize distribution system investment.[8]

To reiterate, bulk of the information required to be submitted prior to a request for expansion has not been provided as Evergy has not acquired the solar facility necessary for the project. Evergy has provided quarterly updates on the status of the program that show the number of customers subscribed and the amount of money spent on marketing. However, for lessons learned Evergy has consistently reported, "At this stage in the pilot program, the Company has nothing to report in this area. This will be provided after solar resources have been acquired."[9] It is Staff's recommendation that Evergy should actually run the pilot program

---

[7] P.S.C. MO. No. 1 2nd revised sheet No. 109, 2nd paragraph.
[8] P.S.C. MO. No. 1 Original Sheet no. 109.3, Pilot Evaluation section.
[9] Case No. ER 2018-0145, Notice of Solar Subscription Rider Report.

as agreed to and collect the agreed to information prior to expanding the program or making it a permanent offering. While the programs are similar, they are not identical. Ameren's pilot facility was one-fifth the size of Evergy's pilot program. Ameren Missouri also completed the initial facility and ran the program while completing required reporting on the program prior to the changes made in ER-2021-0240. Evergy has yet to complete the first facility and the reporting agreed to in the third stipulation and agreement from Case No. ER-2018-0145 and ER-2018-0146, for these reasons, Staff is opposed to the tariff changes to the SSP.

<u>RESIDENTIAL BATTERY ENERGY STORAGE ("RBES") PILOT PROGRAM</u>

Q. Please describe the RBES.

A. The RBES pilot program as proposed would consist of Evergy purchasing 50 battery energy storage systems and placing them at residential sites. The batteries will have a capacity of 4.5kW or 6kW and 19.4 kWh each. Evergy has listed the following as being selection criteria for participants:

- Enrolled in TOU rate
- Seeking to integrate storage with rooftop photovoltaic systems
- Owning an electric vehicle or other smart home devices

Evergy will own and operate the batteries for the duration of the pilot (2025). At the end of the pilot Evergy has 3 options:

1. Make battery available for purchase by the customer at the depreciated cost at the end of the program (estimated 10 year life),
2. Evergy will transfer ownership to the customer under the condition that Evergy is allowed to dispatch the battery for the remaining useful life (estimated 10 years),
3. Evergy will remove the battery and consider re-deployment to another customer site for the remaining useful life of the battery.

Q. What are Evergy's objectives and anticipated benefits of the program?

A. In her direct testimony, Kimberly H. Winslow states that the program will "advance Evergy's operational knowledge of how battery energy storage systems can be utilized to achieve customer savings and grid benefits."[10] Ms. Winslow also states, "the pilot will also provide opportunities to further explore customer behaviors and acceptance of battery energy storage technology."[11] Specific benefits were broken down into operational benefits and customer benefits. Operational benefits listed include:

- Ability to use battery energy storage resources for peak demand reduction
- Ability to use battery energy storage to supports self-consumption of renewable energy which can minimize distribution grid impacts and increase hosting capacity of the existing distribution systems
- Improvement in utility grid operations through the use of battery energy resources to help maintain power quality and reliability of the distribution grid and to address localized distribution constraints[12]

Customer benefits listed include:

- Opportunities to create retail savings for customers on TOU rates
- Ability to integrate storage technology platform with renewable energy or smart technologies to optimize home energy use
- Potential to provide a source of back-up power for customers during grid outages[13]

Q. What is Staff's view of the program?

[10] Direct Testimony of Kimberly H. Winslow page 42, lines 12-14.
[11] Direct Testimony of Kimberly H. Winslow page 44, lines 10-11.
[12] Direct Testimony of Kimberly H. Winslow page 43, line 22 through page 44, line 3.
[13] Direct Testimony of Kimberly H. Winslow page 44, lines 4-9.

A. Staff is opposed to the program as proposed, due to the subsidizing of assets by all ratepayers being used for a small customer group. The operational benefits listed above would theoretically benefit all customers to some extent. However, the battery systems proposed are too small to provide back-up power and reliability for more than one residence. Further, the customer benefits would be limited to the 50 chosen participants at this time. It is not necessary to locate the battery system in a residence to reduce peak demand, reduce grid system impacts or improve reliability.

Q. What is Staff's recommendation regarding the RBES?

A. Staff is opposed to the program as submitted and recommends the Commission reject that proposed program.

Q. What issues does Staff have with the RBES?

A. First, the costs are high for an extremely small portion of customers who will benefit. The total cost of the pilot is estimated to be around ** [redacted].** While the pilot will provide some operational benefits, only the chosen 50 customers will receive the customer benefits.[14] That is close to ** [redacted] ** in free equipment per enrollee plus whatever cost savings and improved reliability that are gained from having the battery system. Further, the customers that are likely to be chosen for the program will most likely be affluent customers, while the program will be funded by all ratepayers. The selection criteria includes owning an electric vehicle or other smart home device, seeking to integrate storage with rooftop photovoltaic systems, and enrolled

[14] ** [redacted] **

in TOU rate. At least two of these criteria would be more common in higher income demographics. Staff has concerns that the program would subsidize battery storage options for a very small portion of customers while charging all ratepayers. Also, there is a high potential for inequity between affluent and low income customers in the selection criteria.

Q. What is Staff's recommendation for the RBES pilot program?

A. Staff recommends the Commission reject the RBES pilot program.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Evergy Metro, Inc. d/b/a Evergy Missouri Metro's Request for Authority to Implement a General Rate Increase for Electric Service	))))	Case No. ER-2022-0129
In the Matter of Evergy Missouri West, Inc. d/b/a Evergy Missouri West's Request for Authority to Implement a General Rate Increase for Electric Service	))))	Case No. ER-2022-0130

AFFIDAVIT OF CEDRIC E. CUNIGAN, PE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW CEDRIC E. CUNIGAN, PE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Rebuttal Testimony of Cedric E. Cunigan, PE*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

Cedric E. Cunigan

CEDRIC E. CUNIGAN, PE

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 12th day of July, 2022.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070

D Suzie Mankin

Notary Public