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MISSOURI PUBLIC SERVICE COMMISSION

FILE NO. ER-2021-0240

DIRECT TESTIMONY

OF

ANNEMARIE NAUERT

ON

BEHALF OF

UNION ELECTRIC COMPANY

D/B/A AMEREN MISSOURI

St. Louis, Missouri

March, 2021

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DIRECT TESTIMONY

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FILE NO. ER-2021-0240

I. INTRODUCTION

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2

Q. Please state your name and business address.

3

A. Annemarie Nauert, Union Electric Company d/b/a Ameren Missouri ("Ameren Missouri" or "Company"), One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri 63103.

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Q. What is your position with Ameren Missouri?

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A. My position/title is Program Supervisor, Renewable Energy. In this role, I am responsible for internal processes and external customer management for renewable energy programs, like Community Solar.

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Q. Please describe your educational background and employment experience.

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A. I graduated from the University of Missouri – Columbia in 2010 with a degree in Biological Engineering. I have passed the National Council of Examiners for Engineering and Surveying Fundamentals of Engineering Exam in Missouri.

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For five years, I served as a process engineer, project manager, and corporate sustainability team leader at MilliporeSigma (formerly, Sigma-Aldrich). In 2013, I gained certification as a Project Management Professional through the Project Management Institute.

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1 In 2016, I joined Ameren Services Company as a Project Auditor in Ameren
2 Services' Internal Audit department, with responsibility for company-wide oversight of
3 project management practices and internal controls. In 2017, I was promoted and assumed
4 team leadership responsibilities in addition to auditing responsibilities. Throughout this
5 time, I planned, conducted, and/or supervised audits of generation, energy delivery, and
6 transmission projects as well as environmental services strategy, among other areas. In
7 2019, I accepted my current role with Ameren Missouri.

8 **I. PURPOSE OF TESTIMONY**

9 **Q. What is the purpose of your direct testimony in this proceeding?**

10 A. The purpose of my direct testimony is to support expansion of Ameren
11 Missouri's Community Solar program from pilot status to a permanent program and to
12 support the associated tariff for the permanent program.

13 **II. BACKGROUND AND SUBSCRIPTION DEMAND**

14 **Q. Please briefly describe the purpose and history of Ameren Missouri's
15 Community Solar Pilot Program ("the Program").**

16 A. The original purpose of the Program was to conduct a pilot of a voluntary
17 subscription-based solar program for residential and small business (general service)
18 customers. The Program offers an alternative to customer-owned solar for customers
19 unwilling or unable to install or lease their own solar panels.¹ Customers may subscribe up
20 to 50% of their average annual usage in monthly blocks of 100 kilowatt-hours. The
21 Program tariff was originally approved through a settlement between Ameren Missouri,
22 Renew Missouri, the Missouri Public Service Commission Staff, and the Office of Public

¹Accordingly, customers with Net Metering agreements are not/will not be eligible for the Program.

1 Counsel in 2018, File No. EA-2016-0207. The Program's first resource ("Lambert
2 Resource") was one-megawatt in size, built on undeveloped land owned by the City of St.
3 Louis at Lambert International Airport, and placed into service in August 2019.

4 In response to customer demand (discussed at further length in Section III, below),
5 Ameren Missouri proposed, and the Commission approved, a Unanimous Stipulation
6 among parties in File No. ET-2020-0022 to expand the Program to a second resource,
7 effective June 27, 2020. Subsequently, in File No. EA-2020-0371, Ameren Missouri
8 applied for a Certificate of Convenience and Necessity ("CCN") for a second resource in
9 Montgomery County, Missouri. The CCN application for the second resource was
10 approved by the Commission via Order effective April 3, 2021.

11 **Q. Please describe customer demand for the Program in terms of**
12 **subscription requests.**

13 A. Customer demand for subscriptions has been robust throughout the pilot.
14 The Lambert Resource, consisting of 1,302 one-hundred kilowatt-hour blocks, was fully
15 subscribed by December 10, 2018, just 55 days after the original tariff went into effect. As
16 illustrated by Figure 1 below, the waitlist for the Program continued to grow throughout
17 2019 and the first half of 2020, even in the absence of active promotion of an available
18 resource to customers. From June to August 2020, the Company actively promoted the
19 opportunity to subscribe to a second resource, leading to an uptick in demand and
20 approximately 93% of the planned capacity accounted for at the time the CCN application
21 was filed. Through the remainder of 2020 and early 2021, Ameren Missouri did not
22 actively promote the Program to customers, but the waitlist continued to grow. As of March
23 5, 2021, there are 10,391 blocks on the waitlist, which equates to 106% of the second

1 facility's planned capacity of 9,804 blocks. With 587 blocks subscribed above and beyond
2 the second facility's planned capacity, customer demand for the Program continues to grow.

3 **III. PILOT PROGRAM LEARNINGS AND FUTURE PLANNING**

4 **Q. Has the Company learned that a voluntary subscription-based solar**
5 **program meets a unique customer need?**

6 A. Yes, in addition to the robust demand discussed in Section II above,
7 customer feedback has demonstrated that this type of program meets a unique need.
8 Through two participant surveys (conducted in July 2019 and July 2020), Ameren Missouri
9 has learned that, for 70% of enrolled customers in 2019 and 84% in 2020, the Program
10 provides interested customers an opportunity to participate in renewable energy that would
11 not have otherwise been possible. Based on these data, there is a need for a voluntary
12 subscription-based solar program.

13 **Q. Does the Company anticipate continuing customer demand for**
14 **subscriptions in the Program?**

15 A. Yes, we anticipate customer demand for the Program to continue to grow.
16 Based on market research conducted in April 2020 and with continued decreases in solar
17 construction costs, we estimate that up to 40 MW of total subscriptions may be possible.
18 In addition to past subscription trends and market research, as Program Supervisor, I also
19 have the opportunity to receive and respond to direct feedback from customers. A theme I
20 have heard in many interactions is enthusiasm for the Program and adding renewable
21 energy to the Company's generation portfolio. Especially as the only other
22 voluntary/subscription-based renewable program previously available to customers (Pure

1 Power) ends, I expect customers will increasingly look to the Program to meet their
2 renewable energy needs and goals.

3 **Q. Please provide more detail on how this filing supports the transition**
4 **from the Pure Power Program.**

5 A. The Commission-approved Corrected Non-unanimous Stipulation and
6 Agreement from the Company's last electric rate case² referenced that the Company will
7 implement a future Community Solar Program of sufficient size that existing Pure Power
8 customers can be transitioned to it. Upon approval of the tariff filed in this current case
9 and subsequent Program resources, Ameren Missouri would be in a position to offer Pure
10 Power customers the opportunity to transition to the Community Solar Program and then
11 execute future filings to formally end Pure Power by late 2023.

12 **Q. Has the Company learned of any ways the Program could be improved**
13 **to better meet customers' needs?**

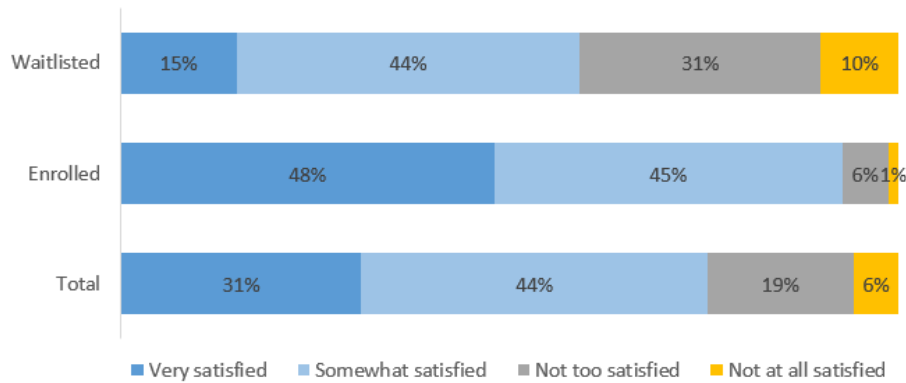
14 A. Yes, there are observable differences in Program satisfaction levels when
15 comparing waitlist customers to enrolled customers.³ As shown in Figure 1 below,
16 customer satisfaction levels drop by 34% for waitlist customers. Some of these customers
17 have been on the waitlist since 2018, and it is clear from these data that wait of 2 years or
18 more is not in line with customer expectations. The primary barrier to faster enrollment for
19 waitlist customers is the 90% pre-construction subscription requirement for any new
20 facility, which I recommend be reset to 50% in order to address the unmet need for more
21 timely facility availability and enrollment of customers interested in the Program.

² File No. ER-2019-0335, Corrected Non-Unanimous Stipulation and Agreement, p. 14, paragraph 38, filed February 28, 2020.

³ "Enrolled customers" refers to those that are assigned to an in-service facility and are being actively billed for Community Solar subscriptions each month.

1 **Figure 1:** The Program's overall customer satisfaction rating from July 2020 participant
2 survey data.

Overall Satisfaction with the Community Solar Program



3

4 **Q. Please discuss the potential for under-subscription by lowering the pre-**
5 **construction subscription requirement.**

6 A. The brisk pace of subscriptions during the pilot, even in the absence of
7 active promotion, and ample waitlist have demonstrated that the risk of under-subscription
8 is not high. Ameren Missouri's 2020 Integrated Resource Plan ("IRP") further alleviates
9 this concern since any potentially under-subscribed portion of a Program resource could
10 be integrated into the IRP's renewable generation commitments, displacing additional
11 future resource development otherwise needed. In this case, Renewable Energy Certificates
12 ("RECs") associated with the under-subscribed portion of the facility would be managed
13 as part of Ameren Missouri's Renewable Energy Standard compliance targets.

14 **Q. Please identify and describe other limitations or challenges of the**
15 **Program design that have impacted customers.**

16 A. In addition to dissatisfaction with wait times between facilities, over half of
17 customers surveyed in 2020 expressed a desire for the ability to subscribe to a higher

1 percentage of their energy usage through the Program. The current block-based design
2 requires a 50% usage enrollment cap to prevent over-subscription in lower usage months.
3 Therefore, an important proposed change is taking subscriptions as a percent of energy
4 usage in order to allow subscriptions up to 100% of usage, as desired by customers. This
5 has the added benefit for customers of eliminating any risk of over-subscription and over-
6 payment in low usage months as subscriptions would be applied as a percentage of each
7 month's usage.

8 **Q. Please summarize what Ameren Missouri has learned from**
9 **administering the Program and the impact to planning for the future of the Program.**

10 A. The Company's understanding of customers and how to meet customer
11 expectations has informed our proposed tariff for the future of the Program. Please see
12 Table 1 below for a summary of proposed design versus existing design and how this
13 impacts customers.

1

Table 1: Summary of Proposed Design and Impact to Customers

Pilot Design	Proposed Design	Impact to Customers
Solar blocks of 100 kWh	Fixed percentage of kWh	Eliminates risk of over-subscription
Customers can subscribe to replace up to 50% of last 12 months' average annual energy usage, in whole block increments (rounding down)	Customers can subscribe to replace up to 100% of monthly usage, in 1% increments	Responsive to desire for 100% subscriptions
Resource construction cannot begin until 90% subscription level	Resource construction cannot begin until 50% subscription level	Responsive to declining satisfaction levels while waiting for next resource
SRECs owned by Ameren Missouri and are to be retired on participants' behalf	Unchanged	Unchanged
Participation fee of \$25/block for new resource (not replacement from waitlist) enrollments only	Fixed participation fee of \$25 for all enrollments	Responsive to desire for 100% subscriptions
Two year commitment; waived if replacement from waitlist is possible	Unchanged	Unchanged
Solar Generation Charge Cap	Unchanged (terminology changed to Rate)	Unchanged
Total Facilities Charge tied to general rate cases	Unchanged (terminology changed to Rate)	Unchanged
New resource(s) levelized costs averaged with existing resource(s), with new pricing applying to all participants (averaging method unspecified)	Unchanged	Unchanged

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Q. What action do you recommend the Commission take in this case?

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A. I recommend that the Commission approve the Company's proposed tariff

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to extend the Program beyond the pilot status.

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Q. Does this conclude your direct testimony?

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A. Yes, it does.

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

In the Matter of Union Electric Company)
d/b/a Ameren Missouri's Tariffs to Adjust) Case No. ER-2021-0240
Its Revenues for Electric Service.)

AFFIDAVIT OF ANNEMARIE NAUERT

STATE OF MISSOURI)
) ss
CITY OF ST. LOUIS)

Annemarie Nauert, being first duly sworn on her oath, states:

My name is Annemarie Nauert and on her oath declare that she is of sound mind and lawful age; that she has prepared the foregoing *Direct Testimony*; and further, under the penalty of perjury, that the same is true and correct to the best of my knowledge and belief.

/s/ Annemarie Nauert
Annemarie Nauert

Sworn to me this 29th day of March, 2021.