Exhibit No. 100P

Staff – Exhibit 100P Cedric E. Cunigan, PE Rebuttal Testimony File No. EA-2022-0245

Exhibit No.:

Issue(s): Application Requirements,

Renewable Solutions

Program

Witness: Cedric E. Cunigan, PE

Sponsoring Party: MoPSC Staff
Type of Exhibit: Rebuttal Testimony
Case No.: EA-2022-0245

Date Testimony Prepared: December 21, 2022

MISSOURI PUBLIC SERVICE COMMISSION INDUSTRY ANALYSIS DIVISION ENGINEERING ANALYSIS DEPARTMENT

REBUTTAL TESTIMONY

OF

CEDRIC E. CUNIGAN, PE

UNION ELECTRIC COMPANY, d/b/a Ameren Missouri

CASE NO. EA-2022-0245

Jefferson City, Missouri December 2022

1	TABLE OF CONTENTS OF		
2	REBUTTAL TESTIMONY OF		
3	CEDRIC E. CUNIGAN, PE		
4 5	UNION ELECTRIC COMPANY, d/b/a Ameren Missouri		
6	CASE NO. EA-2022-0245		
7	APPLICATION REQUIREMENTS2		
8	RENEWABLE SOLUTIONS PROGRAM5		

1		REBUTTAL TESTIMONY
2		OF
3		CEDRIC E. CUNIGAN, PE
4 5		UNION ELECTRIC COMPANY, d/b/a Ameren Missouri
6		CASE NO. EA-2022-0245
7	Q.	Please state your name and business address.
8	A.	My name is Cedric E. Cunigan and my business address is 200 Madison Street,
9	Jefferson City	, MO 65102.
10	Q.	By whom are you employed and in what capacity?
11	A.	I am employed by the Missouri Public Service Commission ("Commission") as
12	a Senior Profe	ssional Engineer.
13	Q.	Please describe your education educational background and work experience.
14	A.	My credentials and case history are attached to this testimony as
15	Schedule CEC	C-r1.
16	Q.	What is the purpose of this rebuttal testimony?
17	A.	The purpose of this testimony is to respond to Union Electric Company,
18	d/b/a Ameren	Missouri ("Ameren" or "Company") witness Lindsey J. Forsberg and
19	Ameren Misso	ouri's Application regarding the Renewable Solutions Program ("RSP") and the
20	application re	quirements, respectively. While Staff's ultimate recommendation is to not
21	approve the R	SP, I also provide a list of conditions the Commission should consider if they
22	choose to appr	rove the program.
23	Q.	What is Staff's overall position regarding the Boomtown Solar Facility?
	Ĩ	

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

- A. Staff recommends that the Commission deny the Certificates of Convenience and Necessity ("CCN").
 - Q. What is Staff's recommendation regarding the RSP?
- A. Staff is opposing the RSP because the subscribers targeted by this program are large enough to own their own renewable generation or purchase it through other means. The program is not needed for the reasons discussed below as well as the issues discussed in Staff witness Michael L. Stahlman's testimony.

APPLICATION REQUIREMENTS

- Q. Where are the application requirements for CCN to construct an asset found?
- A. The requirements for an application for CCN to construct an asset under RSMo Section 393.170.1 are found in 20 CSR 4240-20.045(6).
- Q. Did Ameren provide the necessary information for the application?
 - A. Ameren included some of the information. The Company believes section B does not apply, and requested a variance from section J. I have listed the requirements and what was included by section in the following table:

Requirements for CCN under 20 CSR 4240-20.045(6)	Company provided
(A) A description of the proposed route or site of construction;	A description of the project and site plan is provided in Schedule SW-D2 of the Direct Testimony of Ameren witness Scott Wibbenmeyer.

(B) A list of all electric, gas, and telephone conduit, wires, cables, and lines of regulated and nonregulated utilities, railroad tracks, and each underground facility, as defined in section 319.015, RSMo, which the proposed construction will cross	The company did not provide this because the project is located in Illinois and the statute is only applicable to Missouri.
(C) A description of the plans, specifications, and estimated costs for the complete scope of the construction project that also clearly identifies what will be the operational features of the asset once it is fully operational and used for service;	The project is an approximately 150 MW-AC solar generation facility located in White County Illinois. The Company provided an estimated project cost of ** in its application. Further details and specifications were included in the Direct Testimony of Scott Wibbenmeyer. Staff recommends the Commission order Ameren to file with the Commission all as built drawings for the project no later than 60 days after the site is commercially operational.
(D) The projected beginning of construction date and the anticipated fully operational and used for service date of the asset;	The Company provided a notice to proceed deadline of May 1, 2023 with construction expected to commence by the third quarter 2023. The project is expected to be fully operational by October 31, 2024.
(E) A description of any common plant to be included in the construction project;	The Company stated project components including fencing, security systems, roads, select transformers, and the control house will be treated as common plant
(F) Plans for financing the construction of the asset;	Initially, the Company intended to use a tax equity partner to assist with financing, however, due to the tax changes in the Inflation Reduction Act of 2022 Ameren Missouri supplemented its application and testimony on October 21, 2022. The Company plans to finance the construction project using its own resources.
(G) A description of how the proposed asset relates to the electric utility's adopted preferred plan under 4 CSR 240-22;	The Company states that the project is contemplated by the Company's new preferred resource plan filed on June 22, 2022 in Case No. EO-2022-0362.
preferred plan under 4 CSR 240-22;	

(H) An overview of the electric utility's plan for this project regarding competitive bidding, although competitive bidding is not required, for the design, engineering, procurement, construction management, and construction of the asset;	The project was selected from a 2020 RFP for solar and wind generation projects
(I) An overview of plans for operating and maintaining an asset;	The Company stated that the project will be operated and maintained in the same manner and fashion as all of Ameren Missouri's existing generation is operated. However, no specific plan was provided. Staff recommends that the Commission order Ameren to provide a site specific plans no later than 60 days after the site is commercially operational.
(J) An overview of plans for restoration of safe and adequate service after significant, unplanned/forced outages of an asset; and	The Company requested a variance from this provision allowing it to submit its plans for restoration until the project is closer to commencing commercial operations. Staff recommends that the Commission condition any approval on the plans being provided prior to operation of the facility.
(K) An affidavit or other verified certification of compliance with the following notice requirements to landowners directly affected by electric transmission line routes or transmission substation locations proposed by the application. The proof of compliance shall include a list of all directly affected landowners to whom notice was sent.	The project is located in Illinois, and this section is not applicable.

2

Q. If the Commission were to grant a CCN for the Boomtown Project, what conditions does Staff recommend related to Application requirements?

3

A. If the Commission grants the CCN, Staff recommends the following conditions:

5

• Ameren Missouri shall file with the Commission all as-built drawings for the project no later than 60 days after the site is commercially operational.

1

- 3
- 45
- 6
- 7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

RENEWABLE SOLUTIONS PROGRAM

Q. Please describe the RSP?

the site is commercially operational.

beginning after the CCN is issued.

A. The RSP is a voluntary program that allows larger customers to purchase renewable energy from a Company resource at a fixed rate. The participants are then credited a portion of the generation of that resource each month. The program is limited to large commercial, industrial, and governmental customers. Participant fees and charges are designed to cover a small portion of the cost of the resource during the first 15 years of the resource.

Ameren Missouri shall file with the Commission the final version of the

plans for restoration of safe and adequate service no later than 60 days after

Progress Reports: Ameren Missouri shall file with the Commission

quarterly progress reports on the plans and specifications for the Project,

and the first report shall be due on the first day of the first calendar quarter

- Q. Is the program needed?
- A. No. Even though the Company cites benefits for non-subscribing customers and benefits to subscribers, the program is not needed at this time. The subscribers targeted by this program are large enough to purchase renewable energy through purchased power agreements ("PPA") or own their own generation sources outright. The subscription model offers a fixed limit to the cost that the participants would be responsible for while exposing all other ratepayers to those costs early on.

In addition, the resource is not anticipated to be needed for Renewable Energy Standard ("RES") compliance. Under the RSP, renewable energy credits ("REC") would be retired on behalf of the subscribers for the first 15 years of the resource. Even if RECs were needed

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

for RES compliance, they would not be available from this resource while the RSP phase was in effect. Are there other issues with the program? Q. A. Yes. Staff witness Michael L. Stahlman raises additional concerns in his Rebuttal Testimony. Q. What is Staff's recommendation for the RSP? Staff recommends that the Commission reject the RSP program and the tariff A. sheets that would implement the program. In the event that the Commission approves the project and the RSP, Staff strongly recommends the Commission add the following conditions to protect ratepayers: 1. All costs of the renewable generation facilities in the program shall be borne by the subscribers and/or shareholders while the RSP phase is in effect. 2. In addition to an in-service evaluation at the time the facility is initially placed into rates, Ameren Missouri shall demonstrate the facility is fully operational at the time the RSP program ends. 3. The costs of the generation facilities to be placed on ratepayers will be determined at the time the RSP program ends. The valuation of the facility will take into account the current book cost, the state of the facilities, depreciation, degradation over time, and current market prices for similar sized assets. The least cost option will be chosen. Does this conclude your testimony? Q. A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

Case No. EA-2022-0245

Approval of a Subscription-Based Renev Energy Program	vable)))
AFFIDAVIT O	F CEDRIC E. CUNIGAN, PE
STATE OF MISSOURI) ss.	
COUNTY OF COLE)	
	GAN, PE and on his oath declares that he is of sound mind foregoing <i>Rebuttal Testimony of Cedric E. Cunigan, PE</i> ; rding to his best knowledge and belief.
Further the Affiant sayeth not.	
	CEDRIC E. CUNIGAN, PE
9 2	e e e e e e e e e e e e e e e e e e e
	JURAT
Subscribed and sworn before me, a du	ly constituted and authorized Notary Public, in and for the
County of Cole, State of Missouri, at my	y office in Jefferson City, on this day of
December 2022.	

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

In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for

Notary Public O

Cedric E. Cunigan, PE

PRESENT POSITION:

I am a Senior Professional Engineer in the Engineering Analysis Department, Industry Analysis Division, of the Missouri Public Service Commission.

EDUCATIONAL BACKGROUND AND WORK EXPERIENCE:

In May 2011, I earned a Bachelor of Science in Biological Engineering from the University of Missouri, in Columbia. In May 2013, I earned a Master of Business Administration, also from the University of Missouri. I began work with the Missouri Department of Natural Resources Solid Waste Management Program in August 2013. I started as a Technician and was promoted to an Environmental Engineer I in January 2014. I transferred to the Hazardous Waste Program in September 2014. In January 2015, I was promoted to an Environmental Engineer II. I ended employment with the Department of Natural Resources in January of 2017 and began work with the Missouri Public Service Commission as a Utility Engineering Specialist III. I received my professional engineer's license in October 2021.

Summary of Case Involvement:

Case Number	Utility	Type	Issue
EO-2017-0267	Empire District Electric Company	Memorandum	RES Compliance Report and Plan
EO-2017-0270	KCP&L Greater Missouri Operations Company	Memorandum	RES Compliance Report
EO-2017-0272	KCP&L Greater Missouri Operations Company	Memorandum	RES Compliance Plan
EO-2018-0111	Macon Electric Cooperative & City of Marceline	Memorandum	Change of Supplier
EC-2018-0089	Union Electric Company d/b/a Ameren Missouri	Staff Report	Complaint Investigation
EO-2018-0285	Empire District Electric Company	Memorandum	RES Compliance Report and Plan
EO-2018-0289	KCP&L Greater Missouri Operations Company	Memorandum	RES Compliance Report

continued Cedric E. Cunigan, PE

Case Number	Utility	Type	Issue
EO-2018-0291	KCP&L Greater Missouri Operations Company	Memorandum	RES Compliance Plan
ER-2018-0145 & ER-2018-0146	KCPL & KCP&L Greater Missouri Operations Company	Cost of Service Report, Rebuttal, & Surrebuttal	Renewable Energy
WR-2018-0328	Middlefork Water Company	Depreciation Workpapers	Depreciation
EA-2018-0202	Union Electric Company d/b/a Ameren Missouri	Staff Report	Certificate of Convenience and Necessity Application Requirements
EC-2018-0376	Union Electric Company d/b/a Ameren Missouri	Staff Report	Complaint Investigation
EA-2019-0010 & EA-2019-0118	Union Electric Company d/b/a Ameren Missouri	Staff Report	Certificate of Convenience and Necessity Application Requirements
EA-2019-0021	Union Electric Company d/b/a Ameren Missouri	Staff Report	Certificate of Convenience and Necessity Application Requirements
EE-2019-0305	Empire District Electric Company	Memorandum	RES Compliance Report and Plan
EO-2019-0320	Union Electric Company d/b/a Ameren Missouri	Memorandum	RES Compliance Report and Plan
EO-2019-0371	Union Electric Company d/b/a Ameren Missouri	Staff Report	Certificate of Convenience and Necessity Application Requirements
EE-2020-0411	Union Electric Company d/b/a Ameren Missouri	Memorandum	RES Compliance Plan
ET-2020-0259	Empire District Electric Company	Memorandum	Renewable Energy Tariff
EO-2020-0323	Empire District Electric Company	Memorandum	RES Compliance Report and Plan
EO-2020-0328	Union Electric Company d/b/a Ameren Missouri	Memorandum	RES Compliance Report and Plan
EA-2020-0371	Union Electric Company d/b/a Ameren Missouri	Staff Report	Certificate of Convenience and Necessity Application Requirements
WR-2020-0344	Missouri American Water Company	Cost of Service Report, Rebuttal, and Surrebuttal	Depreciation

continued Cedric E. Cunigan, PE

Case Number	Utility	Type	Issue
SA-2021-0017	Missouri American Water Company	Staff Report	Depreciation
EO-2021-0032	Evergy	Staff Report	Solar Requirements 393.1665 RSMo
SA-2021-0120	Missouri American Water Company	Staff Report	Depreciation
EO-2021-0344	Empire District Electric Company	Memorandum	RES Compliance Report and Plan
EO-2021-0352	Union Electric Company d/b/a Ameren Missouri	Memorandum	RES Compliance Report and Plan
ER-2021-0240	Union Electric Company d/b/a Ameren Missouri	Cost of Service Report, Rebuttal, and Surrebuttal	Depreciation
ER-2021-0312	Empire District Electric Company	Cost of Service Report, Direct, Rebuttal, and Surrebuttal	Depreciation
SR-2021-0372	Mid MO Sanitation, LLC	Disposition Agreement	Depreciation
WA-2021-0391	Missouri American Water Company	Staff Report	Depreciation
ER-2022-0129	Evergy Missouri Metro	Direct, Rebuttal, Surrebuttal	Renewable Energy Tariff
ER-2022-0130	Evergy Missouri West	Direct, Rebuttal, Surrebuttal	Depreciation, Renewable Energy Tariff
EO-2022-0282	Empire District Electric Company	Memorandum	RES Compliance Report and Plan
EO-2022-0283	Union Electric Company d/b/a Ameren Missouri	Memorandum	RES Compliance Report and Plan
WA-2022-0311	Missouri American Water Company	Memorandum	Depreciation