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MISSOURI PUBLIC SERVICE COMMISSION

FILE NO. EA-2019-0371

DIRECT TESTIMONY

OF

TOM BYRNE

ON

BEHALF OF

UNION ELECTRIC COMPANY

d/b/a Ameren Missouri

St. Louis, Missouri
September, 2019

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I. INTRODUCTION

Q. Please state your name and business address.

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

Q. What is your position with Ameren Missouri?

A. I am Senior Director of Regulatory Affairs.

Q. Please describe your educational background and employment experience.

A. In 1980, I graduated from the University of Missouri-Columbia with Bachelor of Journalism and Bachelor of Science-Business Administration degrees. In 1983, I graduated from the University of Missouri-Columbia law school. From 1983-1988, I was employed as an attorney for the Staff of the Missouri Public Service Commission ("Commission"). In that capacity, I handled rate cases and other regulatory proceedings involving all types of Missouri public utilities. In 1988, I was hired as a regulatory attorney for Mississippi River Transmission Corporation, an interstate gas pipeline company regulated by the Federal Energy Regulatory Commission ("FERC"). In that position, I handled regulatory proceedings at the FERC and participated in some cases at the Missouri

Commission. From 1995-2000, I was employed as a regulatory attorney for Laclede Gas Company. In that position, I handled rate cases and other regulatory proceedings before the Commission. In 2000, I was hired as a regulatory attorney by Ameren Services Company, and I originally handled regulatory matters involving local gas distribution companies owned by operating subsidiaries of Ameren Corporation (now Ameren Illinois Company and Ameren Missouri). In 2012, I was promoted to the position of Director and Assistant General Counsel, and I was assigned to handle both gas and electric cases in Missouri. In 2014, I was promoted to my current position, Senior Director of Regulatory Affairs.

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

A. My direct testimony in this proceeding supports Ameren Missouri's application for three Certificates of Convenience and Necessity ("CCNs") for construction of three solar generating assets as part of the Company's Solar + Storage projects. First, I provide an overview of the projects. Then, I describe how the solar generating assets for which CCNs are sought meet applicable *Tartan* factors, and why two of the *Tartan* factors are not applicable.

II. THE SOLAR + STORAGE PROJECTS

Q. What are the Company's Solar + Storage Projects?

A. The Company's Solar + Storage Projects evaluate opportunities to use solar generation and complementary battery storage to increase reliability at certain of the Company's substations. In this case, Ameren Missouri is requesting authority to construct solar generation to be used for this purpose at three of its distribution substations—the Green City substation (located near Green City, Missouri), the Richwoods substation

(located near Richwoods, Missouri), and the Utica substation (located near Utica, Missouri).

Q. Why were these three substations chosen for this project?

A. All three of these substations are sited in locations that are remote from Ameren Missouri's other facilities, they are served by a single feed radial subtransmission line, and they have experienced reliability issues over the past several years. Due to their remote locations, it is uneconomic to enhance their reliability by installing back-up subtransmission lines to the facilities. Solar generation facilities working in conjunction with battery storage can provide reliability improvements for these substations at a reasonable cost. Although these are the first substations Ameren Missouri has proposed for the Solar + Storage solution, the Company is continuing to examine its system to determine if a combination of solar generation and battery storage can provide economic reliability enhancement for other substations, and it may seek additional CCNs for solar generating assets at other substations in the future.

Q. What is the capacity of the solar and battery facilities that will be installed at each of the three locations that are the subject of this application?

A. The Company proposes to install 10 megawatts ("MW") of solar generating assets and complementary battery storage ranging from 2 MW to 4 MW at each location. Specific details regarding each Solar + Storage project are provided in Ameren Missouri witness Kevin Anders' direct testimony.

Q. How will the solar and battery facilities operate?

A. If there is an outage due to a problem with the subtransmission line serving the substation, or facilities upstream of the subtransmission line, the solar generating

facilities can provide back-up power when they are operating during the day, and the battery storage facilities can provide back-up power when the solar facilities are not operating. The facilities will be capable of providing back-up power for up to 3½ -5 hours during peak periods, and up to 10 hours in non-peak periods. In addition, the batteries will smooth the intermittency of the power provided by the solar facilities. The construction and operation of the facilities at each substation is explained in greater detail in the direct testimony of Ameren Missouri witness Kevin Anders.

Q. Are there other benefits that will be provided by the solar facilities?

A. Yes. In addition to providing reliability benefits, the solar facilities will operate when there are no outages. Power generated by the facilities will increase the amount of Ameren Missouri's off-system sales, which are credited to customers through the Company's fuel adjustment clause. Moreover, the Renewable Energy Credits earned by the facilities can be used to meet Ameren Missouri's Renewable Energy Standard ("RES") requirement, even though the Company is not constructing these facilities for the purpose of meeting RES requirements.

III. TARTAN FACTORS

Q. What standards has the Commission has traditionally employed in evaluating CCN applications?

A. The Commission has traditionally analyzed CCN applications using factors announced in a 1994 decision. *In Re Tartan Energy*, GA-94-127, 3 Mo.P.S.C.3d 173, 177 (1994). The *Tartan* Factors are as follows:

1. Need for the Project;
2. Economic Feasibility of the Project;

3. Ability of the Applicant to Finance the Project;

4. Qualifications of the Applicant to Construct the Project; and

5. Whether the Project is in the Public Interest.

An affirmative finding on the first four factors generally leads to the conclusion that the final factor, public interest, is satisfied.

Q. Does the Commission have to determine the first two Tartan factors — whether there is a need for the projects for which CCNs are requested in this case, or whether the projects are economically feasible?

A. In my opinion, no. Section 393.1665 RSMo. (2018), which was enacted as part of Senate Bill 564, specifically addresses this issue. Subsection 2 of that statute requires an electrical corporation with one million or more Missouri electric customers to invest in the aggregate no less than fourteen million dollars in utility-owned solar facilities located in Missouri or in an adjacent state during the period between August 28, 2018 and December 31, 2023. Subsection 3 of that statute provides that "[a]n electrical corporation's decision to invest in utility-owned solar facilities consistent with subsection 2 of this section shall be deemed to be prudent." Ameren Missouri is an electrical corporation with more than one million Missouri electrical customers. It is required to invest no less than $14 million in utility-owned solar in Missouri or an adjacent state during the specified time period, which includes these projects. As a consequence, subsection 3 of the statute deems these investments to be prudent. The Commission's traditional practice of assessing the need for a project or its economic feasibility are superseded in circumstances where this statute applies. Nevertheless, the solar generating assets for which CCNs are sought are needed and economically feasible.

Q. What is the need for these assets, and how are they economically feasible?

A. The solar generating assets, which will be paired with batteries, are needed to enhance reliability for the substations where they will be constructed and can provide ancillary benefits of increased off-system sales and Renewable Energy Credits. They are economically feasible because they are less expensive than providing a redundant power source through a second subtransmission radial line. However, the Commission should recognize that Section 393.1665.3 deems these projects to be prudent, and that it is not necessary or even appropriate to make findings about these two *Tartan* factors for such qualifying projects.

Q. Do the other *Tartan* factors apply to these projects?

A. Yes they do. These criteria do not address the decision to invest, so they are not superseded by Section 393.1665.3.

Q. With regard to the third *Tartan* factor, does Ameren Missouri have the ability to finance these projects?

A. Yes. The total cost of constructing these projects is estimated to be approximately $68 million. Ameren Missouri has the financial ability to construct the projects because it can access the equity and debt capital necessary to do so while maintaining strong financial metrics.

Q. The fourth *Tartan* factor is the qualifications of the applicant to construct the project. Is Ameren Missouri qualified to construct these three projects?

A. Yes. Ameren Missouri is an electric utility with a history in Missouri of over 100 years. It owns generation of all types, including solar generation. Ameren

Missouri is qualified to construct the projects, and to operate them, given the financial, technical, and management expertise Ameren Missouri has developed over the course of its long history. As Mr. Anders testifies, Ameren Missouri issued a Request for Proposals and has selected a contractor from those entities that applied. The contractor selected has the experience and knowledge to construct these assets. This more than fulfills this factor.

Q. And finally, factor five is whether the project is in the public interest. Would you please address that question?

A. These three projects are clearly in the public interest. They improve reliability for customers served by the impacted substations and they qualify for treatment under Section 393.1655, which encourages regulated utilities to construct utility-owned solar facilities in Missouri and adjacent states. They provide ancillary benefits of increasing off-system sales and generating Renewable Energy Credits, which will ultimately benefit all customers, and the projects meet all of the other *Tartan* criteria that apply.

Q. Does this conclude your direct testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Permission and Approval and Certificate of Convenience and Necessity Authorizing it to Construct Solar Generation Facility(ies)	)))))	File No. EA-2019-0371

AFFIDAVIT OF TOM BYRNE

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

Tom Byrne, being first duly sworn on his oath, states:

1. My name is Tom Byrne. I work in the City of St. Louis, Missouri, and I am employed by Union Electric Company d/b/a Ameren Missouri as Senior Director of Regulatory Affairs.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Union Electric Company d/b/a Ameren Missouri consisting of 7 pages and Schedule(s) no schedules, all of which have been prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.

Tom Byrne

Subscribed and sworn to before me this 28th day of August, 2019.

Notary Public

My commission expires:

GERI A. BEST
Notary Public - Notary Seal
State of Missouri
Commissioned for St. Louis County
My Commission Expires: February 15, 2022
Commission Number: 14839811