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Sponsoring Party: Union Electric Company

File No.: ER-2021-0240

Date Testimony Prepared: March 31, 2021

MISSOURI PUBLIC SERVICE COMMISSION

FILE NO. ER-2021-0240

DIRECT TESTIMONY

OF

WARREN WOOD

 \mathbf{ON}

BEHALF OF

UNION ELECTRIC COMPANY

D/B/A AMEREN MISSOURI

St. Louis, Missouri

March 2021

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DIRECT TESTIMONY

OF

WARREN WOOD

FILE NO. ER-2021-0240

1		I. INTRODUCTION	
2	Q.	Please state your name and business address.	
3	A.	My name is Warren Wood and my business address is One Ameren Plaza,	
4	1901 Choute	au Avenue, St. Louis, Missouri 63103.	
5	Q.	By whom are you employed and in what capacity?	
6	A.	I am employed by Union Electric Company d/b/a Ameren Missouri	
7	("Ameren M	issouri" or "Company") as Vice President, Legislative and Regulatory Affairs.	
8	Q.	Please describe your duties and responsibilities as Vice President,	
9	Legislative a	and Regulatory Affairs.	
10	A.	I oversee state legislative and regulatory policy development and	
11	compliance f	For the Company.	
12	Q.	Please describe your qualifications.	
13	A.	In December 1987, I received a Bachelor of Science degree in Civil	
14	Engineering	with honors from the University of Missouri at Columbia, Missouri. Upon	
15	graduation, I	accepted employment with Black & Veatch and worked in the Energy and	
16	Environmental Divisions for a little over ten years.		
17	While	e at Black & Veatch, I designed a wide range of power generation and water	
18	treatment fac	cilities, acted as an engineering liaison between the design office and joint	
19	venture partr	ner offices, developed specifications, drafted engineering drawings, designed	

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1 mechanical equipment supports, and wrote customer computer programs to assist in

2 solving many types of engineering problems. My work while at Black & Veatch focused

3 on new and retrofit work on coal, combustion turbine, and nuclear power plant projects.

I worked for Questec Engineering in Columbia, Missouri in 1997 and 1998. While at Questec, I was a project manager in charge of site development and completion of numerous engineering projects for industrial, commercial, and residential customers.

I worked for the Missouri Public Service Commission ("Commission") for a little over eight years. Initially, I was hired as a Regulatory Engineer in the Procurement Analysis Department of the Commission. While working in the Procurement Analysis Department, I investigated the natural gas purchasing practices of Missouri's natural gas utilities and filed testimony in the procurement analysis and actual cost adjustment audit cases. Later, I was employed as the Natural Gas Department Manager, promoted to the newly created Energy Department Manager position, and was later promoted to Utility Operations Division Director. As the Natural Gas Department Manager, I oversaw regular tariff filings at the Commission of the natural gas utilities in the state, the Commission's activities in interstate natural gas pipeline cases at the Federal Energy Regulatory Commission, and the activities of the Commission's natural gas safety section. As the Energy Department Manager, I oversaw the activities of the natural gas department sections listed above in addition to the activities of the engineering and economic analysis sections, which dealt primarily with electric utilities in the state. As the Utility Operations Division Director, I oversaw the day-to-day activities of the Operations Division, regularly participated in Commission policy development efforts, participated in discussions and

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- 1 gave presentations to stakeholder groups and legislative committees, conducted
- 2 roundtables, and facilitated rulemaking workshops.
- While at the Commission and now with Ameren Missouri, I have filed testimony
- 4 in multiple cases. I was employed by the Missouri Public Utility Alliance in 2007 and later
- 5 employed as President of the Missouri Energy Development Association ("MEDA"). I left
- 6 MEDA in 2010 to work for Ameren Missouri as Vice President, Legislative and Regulatory
- 7 Affairs. I have held this position since 2010.

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

- 9 A. The purpose of my testimony is to provide a summary of the Company's
- filing to increase its rates for electric service, outline the main drivers of the filing and why
- an increase is necessary to establish just and reasonable rates, to report on the progress
- 12 Ameren Missouri is making in implementing its Smart Energy Plan ("SEP"), and to discuss
- 13 the status of another important Company initiative to support customer affordability.

II. SUMMARY OF AMEREN MISSOURI'S FILING

Q. Can you summarize Ameren Missouri's filing in this case?

- A. As is set forth in detail in the direct testimony of Ameren Missouri witness
- 17 Mitchell Lansford, the Company has filed tariffs that reflect an increase of \$299 million or
- 18 12% in its overall revenue requirement. This amount reflects significant capital
- investments in our system as part of our SEP and the addition of two major wind generation
- facilities in 2020 and 2021. The SEP investment is designed to maintain and improve the
- 21 reliability of our system and to also provide customers additional convenience, choice and
- 22 control over the way they use energy and, ultimately, in how that energy usage impacts
- 23 their total electric bill. This investment has been successful in addressing specific

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1 reliability concerns in certain areas of our system. Ameren Missouri customers have

2 experienced fewer interruptions on stormy and non-stormy days since the implementation

of our SEP. Specifically on individual circuits where distribution automation switches were

4 installed, customers have seen up to a 40% reliability improvement.

5 The wind investment is likewise beneficial and low cost. The two wind facilities

6 will provide 700 megawatts ("MW") of wind generation capacity, providing additional

diversity in the Company's generation portfolio and enabling compliance with Missouri's

Renewable Energy Standard ("RES"). Because of production tax credits and the benefit of

additional energy sales, this renewable generation is being added in a manner that is a low

cost to our customers, especially when viewed over the lifetime of the facilities.

In addition, consistent with our Preferred Resource Plan filed in the Company's 2020 Integrated Resource Plan ("IRP") filing, ¹ this revenue requirement also sets depreciation rates for our Sioux and Rush Island coal generation facilities so that they align

with the now earlier expected retirement dates of those plants.

Finally, because our Meramec generation facility will be retired within ten months of the expected effective date for new rates in this case, we have reduced the revenue requirement by \$55 million through the removal of prudent capital and operating and maintenance costs (including depreciation expense, non-labor maintenance, return on rate base and other costs related to the facility). This reduction in the revenue requirement reflects our request to recover the expected remaining costs over a five-year period, starting with the effective date of new rates in this case. This helps to mitigate the rate increase

¹File No. EO-2021-0021.

- 1 requested in this case and to ensure that our rates reflect no more and no less than the actual
- 2 remaining operation and ownership costs associated with the Meramec facility.

Q. What initiatives is the Company advancing in this case with respect to rate design, tariff issues, and customer programs?

A. As the Commission is aware, modernization of our residential rate offerings was a major theme of our last electric general rate proceeding. In that case, we introduced innovative new time of use ("TOU") rate offerings for residential customers, along with a robust plan to provide customers with education and information regarding TOU rates. The Company is currently investing in new digital tools that are enabled by our deployment of Automated Metering Infrastructure ("AMI") to empower customers to take more control of their energy usage and bills. The greater level of choice and control we are providing to customers with our TOU rate options is reflected in this filing as well, with a continuation of all of the new TOU rate plans, and a few minor updates to rate parameters to continue to ensure that the rates reflect costs and feature appropriate price signals to encourage customers to make changes to their usage that provide benefits to the system, including helping to integrate the higher level of renewable generation reflected in our IRP. Company witness Steven Wills further discusses this dynamic in his direct testimony.

Our filing also features a request for a new tracker related to revenue changes that may arise from residential customer rate switching. This tracker helps ensure that customers' adoption of new rates that better reflect cost and match their lifestyle does not negatively impact Company revenues between rate filings. This tracker is an important policy tool to align the incentives of the Company with its customers to help them find the

²File No. ER-2019-0335.

1 most attractive rate, and its approval is a critical element in a successful long-term

2 transition to modern rates.

On the renewable energy front, the Company is proposing to move its successful Community Solar program from pilot status into a permanent and scalable program offering. While the program concept is grounded firmly in the already successful pilot model, there are enhancements to the program that allow customers to choose to enroll up to 100% of their load, whereas the pilot limited subscription to 50% of a customer's historical usage level. Further, the updates to the program enable it to be compatible with the new TOU rate offerings, such that enrolling customers may now still elect any rate option, including advanced TOU rates, for billing of any usage that is not being covered by the program. Company witnesses Annemarie Nauert and Nick Bowden provide more details on the updated Community Solar program in their direct testimonies.

The Company is also proposing, in the direct testimony of Mr. Lansford, to eliminate the additional fees customers currently incur when paying their bills with credit cards. This change provides more flexibility for customers to choose the payment channel that is best for them without incurring additional costs, and aligns with practices that consumers expect based on the way they interact with other vendors and service providers.

III. ECONOMIC CONDITIONS

- Q. As this case is filed, Ameren Missouri's service territory has not fully recovered from the impacts of the COVID-19 pandemic. Has this had an impact on Ameren Missouri and upon its request in this case?
- A. As the Commission is likely aware, Ameren Missouri indicated, as its last rate case concluded in early 2020, that it planned to file another case shortly so it could

- 1 place the costs and benefits of its wind generation facilities into its cost of service. The
- 2 multiple and immediate impacts of the pandemic, however, caused the Company to rethink
- 3 its plans. Rather than filing another rate case in 2020, Ameren Missouri shifted its filing
- 4 until March of 2021 to delay the impact of new rates until 2022.

5 Q. How has the pandemic impacted Ameren Missouri's relationship with

6 its customers?

A. Ameren Missouri has earnestly endeavored to be a good corporate citizen during these difficult times. We sought a balanced approach to help our customers keep the power on without accumulating unmanageable arrearages. We have focused much of our effort on assisting low-income customers and those directly impacted by COVID-19. None of our actions were required by the Commission; they were all voluntarily undertaken, with support from the Commission Staff and the Office of the Public Counsel (as well as the Commission) as needed for variances and waivers. Schedule WW-D1 attached to my testimony is a fact sheet laying out the different actions the Company has taken on behalf of its customers in light of the pandemic.

In mid-March, swiftly after recognition of the pandemic situation emerging in our area, Ameren Missouri enacted a disconnection moratorium for all customer accounts, waived late fees, and reconnected recently disconnected customers at no charge. While the voluntary disconnection moratorium was in place, we worked to develop additional ways to help our customers. We recognized that a disconnection moratorium without a means to help keep arrearages under control could cause our customers more harm in the long run. We met regularly with the social service agencies to discuss their ideas of how to help our customers. We began aggressive outreach, using email, letters, telephone calls, press

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releases, and social media to inform customers of programs available to assist them. We provided various types of energy assistance to help mitigate accumulating customer arrearages. We moved funding between programs in order to increase the available amount of bill assistance funding. We modified existing assistance programs to increase the number of customers who could participate. We made changes to our low-income energy efficiency programs to reach more customers in need, which also kept the program vendors working. Ameren Missouri has been thoughtful and deliberate in its efforts to help our customers and communities deal with the financial impacts of COVID-19. And that initial disconnection moratorium gave us the time to develop and implement all of these measures. Ameren Missouri lifted its disconnection moratorium in stages beginning in July. At the same time, we offered payment plans with more generous terms, allowed additional time for Low Income Home Energy Assistance Program applications to be processed, and provided additional funding through our Clean Slate program. The success of our actions is demonstrated by Figure 1, which depicts the number of accounts in arrears from February of 2019 through February of 2021. Figure 1 shows a definite increase in the first half of 2020, but also shows that number going back to the pre-COVID-19 level towards the end of 2020 and into early 2021.

Customer Accounts in Arrears (Electric) 350 Thousands 300 Feb-19 Feb-20 Feb-21 250 200 150 100 Feb-20 50 Feb-19 Feb-21 Commercial/Industrial Residential

Figure 1

Q. Beyond the measures you mention above, did the pandemic cause

Ameren Missouri to change the way it operated its business?

- 3 A. There have been many changes made to the way we operate our business.
- 4 Many of our employees have been working remotely since mid-March of 2020. For those
- 5 employees who cannot work remotely, we have installed additional protective measures:
- 6 we have installed Plexiglas at work stations, required masks to be worn, brought in trailers
- 7 at facilities where there was no room to socially distance, and conducted contact tracing
- 8 for all known cases. Our efforts appear to have been successful, as we do not believe there
- 9 have been any cases of COVID-19 transmission that occurred at Ameren Missouri
- 10 facilities.

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Q. Did the pandemic have other impacts upon the Company?

- 12 A. It did. The two wind generation facilities that were constructed for Ameren
- 13 Missouri experienced delays associated with the pandemic, as is discussed below. This has

- 1 resulted in a delay of the in-service date for some of the turbines and also played a role in
- 2 Ameren Missouri deciding to delay this rate filing until this spring.

3 IV. CUSTOMER AFFORDABILITY

Q. Given the impact of the pandemic, why is Ameren Missouri filing to increase its rates at this time?

A. Ameren Missouri has filed this rate case because its prudently incurred costs to serve customers have increased since its rates were last set. Many of the reasons for the rate request are set forth below – to recover capital investments in our SEP and wind generation facilities, as examples. At the same time, the Company believes it must work to keep rates affordable, consistent with delivering safe and adequate service while also transitioning to more renewable power as set forth in Ameren Missouri's IRP. To help us achieve that balance, we have launched an initiative to ensure that during this time of major system investment, we don't forget to focus on customer affordability.

Some of this effort has already come before the Commission, including recent examples such as our new Efficient Electrification and Surge Protection programs. These programs are designed to bring in additional revenues, which will ultimately be offsets against the overall revenue requirement needed to provide service to our customers. At the Missouri legislature, Ameren Missouri is seeking legislative changes that, if passed, would greatly facilitate its ability to capture value for its customers from available capacity in its fiber network in the form of new revenues that will offset its revenue requirement and lower customer bills.

Ameren Missouri is also working to hold costs level, and to decrease those expenditures when it makes sense to do so. As an example, technological advances in

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mechanized trimmers allow Ameren Missouri to use these devices in previously 1 2 inaccessible spaces. The use of these trimmers has decreased annual vegetation 3 management costs by \$5 million as compared to amounts in our previous rate case. As 4 another example, our digital group has automated highly repetitive, rules-based tasks that 5 would otherwise be performed manually. The team automated more than 40 processes, 6 saving a cumulative 50,000 annual labor hours, which allows us to redeploy those hours to 7 other efforts. We recognize this must be a continual effort and that it will take time to 8 achieve our desired result, but we believe this effort is the best way to ensure the Company

V. WIND GENERATION FACILITIES

can invest as it needs and still provide affordable service for our customers.

- Q. You stated earlier that this case includes the Company's investment in two wind projects that the Company now owns for the purpose of compliance with the Missouri RES. Please tell us about those facilities.
- A. Ameren Missouri is very happy to have added these wind resources to its generation mix, as part of its efforts to comply with the Missouri RES, which also contributes to its goal of achieving net-zero carbon emissions by 2050.

As the Commission knows, in 2018-2019, the Company obtained certificates of convenience and necessity from the Commission giving it permission to construct both the High Prairie wind project ("High Prairie") and the Atchison (formerly referenced as Outlaw) wind project ("Atchison"), each via a Build Transfer Agreement ("BTA") with a project developer.³ Under the BTAs, the project developers were to construct the facilities to the agreed-upon specifications; when complete, Ameren Missouri was to purchase the

³See File Nos. EA-2018-0202 and EA-2019-0181.

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1 "project companies" (both of which were limited liability companies) that owned the wind

2 farm assets and then merge the project companies into Ameren Missouri. The result would

be that Ameren Missouri would own the entirety of the wind farm assets directly, the same

as if Ameren Missouri had built the projects itself. Originally, it was expected that by the

5 end of 2020, both projects would be complete and that Ameren Missouri would own them.

The timing of the purchases was to allow Ameren Missouri to obtain the maximum

available federal production tax credits ("PTCs") on each megawatt-hour of energy the

facilities would produce and pass the benefit of those PTCs back to our customers under

the Renewable Energy Standard Rate Adjustment Mechanism ("RESRAM") approved by

the Commission in File No. EA-2018-0202.

Q. Has the Company purchased the two facilities?

A. Yes. Ameren Missouri closed on its purchase of the project company that developed the High Prairie Renewable Energy Center on December 22, 2020, and on its purchase of the project company that developed the Atchison Renewable Energy Center on January 14, 2021. While the Atchison facility was not acquired until 2021, I should note that changes in federal law adopted by Congress, in part due to delays in wind farm development caused by the COVID-19 pandemic, mean that Ameren Missouri will still obtain the full value of the PTCs for the benefit of its customers. I should also note, however, that not all of the turbines that will ultimately comprise the Atchison facility are yet in service due to construction delays caused by the pandemic and other construction delays encountered by the developers. There is also one turbine (2.2 of the 400 MW) at High Prairie which is also undergoing additional work to meet the required specifications. We expect that work to be completed shortly. However, the developer continues to finish

- those turbines and as work is completed, Ameren Missouri will pay for them and put them
- 2 in service. It is also important to emphasize, as I noted earlier, that the delay in completing
- 3 all the turbines has no impact on their ability to qualify for the full PTC value they would
- 4 have received had they been completed in 2020.
- 5 Q. Did the BTAs address the possibility of construction of some turbines
- 6 not being completed when Ameren Missouri purchased the project company?
- 7 A. Yes, they did. The terms of the BTAs were designed to hold Ameren
- 8 Missouri customers harmless from a delay in completion of any wind turbine.
- 9 Q. When does the Company expect all of the turbines at both projects to
- 10 be complete?
- 11 A. At High Prairie, the remaining turbine is being repaired and is expected to
- be completed in early April 2021. At Atchison, construction of the remaining turbines is
- expected to be complete by the end of September 2021.
- Q. Does the addition of this new renewable generation significantly
- increase the amount Ameren Missouri's customers will pay for electricity?
- 16 A. No. While we are investing \$1.1 billion in two new wind facilities, the
- impact on the revenue requirement is only \$8 million. We have successfully timed these
- additions in a manner that provides additional, clean renewable power at an affordable cost
- 19 for our customers. First, we made sure that these facilities would obtain the benefit of the
- 20 PTCs which are available for wind generation. This alone decreases the cost to customers
- of these facilities by around \$81 million. Then there is the fact that the plants will increase
- 22 Ameren Missouri's overall energy production, with the excess power being sold into the
- 23 market. We anticipate these additional energy sales will increase revenues by \$57 million,

- 1 which is credited back to customers in base rates and through the fuel adjustment clause
- 2 ("FAC").

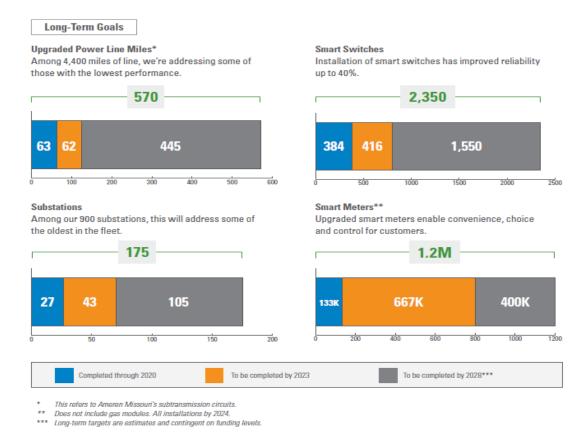
3 VI. SMART ENERGY PLAN

- 4 Q. Earlier you mentioned that Ameren Missouri was making progress on
- 5 its SEP. Can you describe that undertaking?
- 6 A. The SEP stems from Senate Bill 564, which became law in August of 2018.
- 7 This law allows Ameren Missouri to use Plant-in-Service Accounting ("PISA") to offset a
- 8 portion of the negative lag associated with utility capital investments; at the same time, the
- 9 law requires the Company to limit the growth of its rates to a compound annual growth rate
- 10 of two and eighty-five hundredths percent.⁴ The negative lag inherent in capital
- investments made it difficult to invest at the level that electric utilities, including Ameren
- 12 Missouri, needed to in order to accelerate modernization of the grid for the benefit of its
- 13 customers. Reducing that disincentive has allowed Ameren Missouri to increase
- investment in its distribution system and other plant with the goal of improving system
- reliability, resiliency, and security. The SEP is the investment plan for Ameren Missouri
- 16 enabled by PISA.
- Q. Can you provide some examples of investments that are part of the
- 18 Company's SEP?
- 19 A. There are many, and they occur across the Company's operations. As the
- 20 Commission is aware, Ameren Missouri and other participating utilities file a five-year
- capital investment plan each February. Ameren Missouri's plans can be found in File No.

⁴Section 393.1655.4. All rates, base and under riders, are included in the 2.85% compound annual growth rate limitation except those arising from Commission-approved demand-side management programs.

- 1 EO-2019-0044. Focusing on the distribution portion of the Company's business, Ameren
- 2 Missouri has tailored its investment to target several long-term goals, including:
- the installation of over 2,350 smart switches to improve reliability;
- the upgrading of power lines and the use of stronger composite poles to protect
 during bad weather;
- the construction of 175 new or upgraded substations to address aging infrastructure
 and serve communities; and,
- the installation of approximately 1.2 million smart meters to provide our customers
 more options.
- Ameren Missouri believes it has made progress on all of these goals, which provide our customers with a stronger, smarter, and more resilient and secure electric grid.
- Figure 2 below illustrates the types of distribution investments the Company has completed and those planned to be installed in the future.

Figure 2



- 1 These investments have improved the quality of service that we provide for our customers.
- 2 A few examples of the system improvements that have occurred since Ameren Missouri
- 3 implemented the SEP are set forth below:

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Florissant/North St. Louis County (Substation)

A new substation with automated sensors and smart technology equipment will create a self-healing system that more rapidly detects and isolates outages, speeding power restoration. This is among a number of new substations planned for North St. Louis County residents, which will provide improved reliability to thousands of customers. This will upgrade an existing substation, which is more than 50 years old, with more modernized equipment and technology.



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Cape Girardeau (System Hardening)

- 2 We upgraded one mile of overhead line with new wood
- and composite poles, overhead conductors, and smart 3
- 4 switches. These upgrades mean 3,400 families and
- businesses in Cape Girardeau will see fewer outages 5
- and faster service restoration. 6



Franklin County (Grid Resiliency)

- 8 We upgraded a substation with automated sensors and
- 9 smart technology to increase energy capacity and
- improve reliability for a growing community, 10
- 11 including industrial businesses, over 3,000 residential
- customers, and an area hospital. 12



Jefferson County (Smart Grid)

- 14 Crews replaced four manual switches with smart
- 15 switches on two circuits in High Ridge. This will
- reduce frequency and duration of outages for more 16
- 17 than 2,400 customers in an area that has experienced
- frequent outages. In addition, these types of grid 18
- 19 enhancements can reduce outage time up to 40%.



Des Peres (Smart Grid)

- 21 The installation of two smart switches prevented an area
- 22 hospital and more than 150 customers in Des Peres
- from losing power during the COVID-19 pandemic. 23
- 24 Thunderstorms caused an interruption to the line that
- 25 supplies St. Luke's Hospital, which also has an
- exclusive alliance partnership with the Cleveland 26 27 Clinic's Heart and Vascular Institute. Thanks to the
- 28 smart switches, the hospital and area customers
- 29 experienced only a momentary outage.



Overall, these investments have meant that Ameren Missouri customers have experienced fewer interruptions, whether the weather is stormy or not. For the individual circuits where distribution automation switches have been installed, customers have seen up to a 40% improvement in reliability of service.

Q. What is the best example of investments being made to improve service

for customers?

A. Installation of an AMI system accomplishes a number of service enhancements that benefit customers. As the Commission is aware, we have been installing AMI meters at customer locations since July of 2020. These meters do so much more than our previous meters were capable of doing and will, especially over time, provide customers with many benefits. AMI meters enable quicker restoration after outages and faster connection when moving or starting service. They provide customers options to choose a rate that fits their lifestyle. Many of those choices were enabled in Ameren Missouri's last rate case. The roll out of AMI meters allows for broader participation and benefit from those options. Finally, a significant benefit to all customers, whether they enroll in a TOU rate or not, smart meters allow for customers to reduce their energy costs by providing customers with more precise energy usage information to allow them to shift their energy usage and potentially save on their bills.

Finally, it should be noted that of the SEP work contracted out externally, approximately 57% of that work went to Missouri-based companies. Further, 32% of those dollars were spent with diverse venders. This keeps Ameren Missouri's investment in our state, helps with Missouri's overall employment levels, and keeps the economic multiplier benefit of this spend within Missouri.

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by the Commission.

- 1 Q. You spoke earlier of the Company's focus on customer affordability.
- 2 With all of this investment, is there concern about the impact on customer bills?
- 3 A. Absolutely. And, as stated above, the law reducing the disincentives to 4 make these investments directly addresses that concern by including a limit on how much 5 rates can increase. Implementation of the full rate increase reflected in the Company's filing 6 in this case will still result in rates that are below the referenced cap. Mr. Wills provides 7 details in his direct testimony, but relative to the baseline rate, which is the rate that took 8 effect in April of 2017, offset by one half of the 2018 rate decrease associated with the 9 federal corporate tax rate reduction, Ameren Missouri's proposed rates represent an 10 approximately 7.0% increase, or a compound annual growth rate of 1.4% since April of 2017. Given the cap allows for a 2.85% compound annual growth rate in the level of 11

14 VII. WITNESS RESPONSIBILITIES

Q. Please introduce the other witnesses who will be providing testimony in this proceeding.

rates, the Company will still be well within the cap if the full request were to be authorized

17 A. Certainly. The following witnesses provide testimony to support this rate 18 review:

Witness	Title and Company	Testimony Subject
Mitchell Lansford	Director, Regulatory Accounting Ameren Missouri	Revenue Requirement, including Lead-Lag Study
Laura Moore	Controller Ameren Missouri	Affiliate Transactions

⁵Calculation is based on FAC and RESRAM rates in effect as of the date of this filing and presumes the full requested revenue requirement is granted.

Witness	Title and Company	Testimony Subject
Tom Byrne	Senior Director – Regulatory Affairs Ameren Missouri	Rate Case Expense
Darryl T. Sagel	Vice President and Treasurer Ameren Missouri and Ameren Services Company	Capital Structure; Cost of Debt, and Overall Rate of Return
Mark Peters	Manager Load Forecasting & Market Analysis Ameren Services Company	Production Cost Model
Andrew M. Meyer	Senior Director – Energy Management & Trading Ameren Missouri	Fuel Adjustment Clause
Steven M. Wills	Director – Rates & Analysis Ameren Missouri	Rate Design, Revenues, Rate Cap, RESRAM Rebase
Tom Hickman	Regulatory Rate Specialist Ameren Missouri	Class Cost of Service Study
Nick Bowden	Regulatory Rate Specialist Ameren Missouri	Weather Normalization, Billing Units, Community Solar tariffs
Mike Harding	Manager, Rates & Analysis Ameren Missouri	Tariff changes, AMI - related issues, Rates
Annemarie Nauert	Program Supervisor, Renewable Energy Ameren Missouri	Community Solar
John Reed	Chairman and Chief Executive Officer Concentric Energy Advisors, Inc.	Affiliate Transactions
	and CE Capital Advisors, Inc.	
Anne Bulkley	Senior Vice President Concentric Energy Advisors, Inc.	Return on Equity
John J. Spanos	President Gannett Fleming Valuation and Rate Consultants, LLC	Depreciation Study

Witness	Title and Company	Testimony Subject
Ahmad Faruqui	Principal The Brattle Group	Rate Design – Industry trends and the need for residential tariff reforms

- 1 Q. Does this conclude your direct testimony?
- 2 A. Yes, it does.

Customer Assistance - Pandemic Onset: March 13, 2020

Temporary Emergency Credit Policy Changes due to COVID 19

Suspend Disconnections – residential and commercial customers

Reconnection of recently disconnected accounts

New COVID 19 Payment Agreement – 12% down/spread balance over 12 months

Allow Keeping Current customers to remain on the program with 2 missed payments

7	Ameren Misso April 28 at 9:00 A			•••
strugg	gling to pay their	tance program was receivenergy bills because of the plication at dss.mo.gov/fs	he coronavirus. Find m	
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LIHEAP Extension - Social Media

16K+ impressions

3 New Energy Assistance Programs by 3/19/2020 **Program Target** Implementation Outcome Name Partner Income Customers with United Way 2000 customers Relief income interruption received \$250 **Program** due to COVID19; each - \$500K \$30K - \$60K total Heat Up Elderly, disabled and 3696 customers Heat Up COVID 19 Missouri low-income received Relief customers; assistance; \$0 - \$29 999 \$480K total Assistance for 135 customers Internal Ameren **Pandemic** customers calling Missouri received 11,693 Hardship into the contact **Customer Care** in assistance Relief Fund center with hardships Advisors



Mail. Email. or Fax

Agency Finder

Ameren Account

LIHEAP Extension – New Flyer Coming soon to the Easy Button Distributed to 350 Agencies and Community Partners



If your income has been affected by the coronavirus, you may be eligible for financial assistance for your electric and/or gas service.

If you need help paying your Ameren Missouri electric or gas bill, you may be eligible for help through the Low Income Home Energy Assistance Program (LIHEAP) and the Emergency Crisis Intervention Program (ECIP).

These programs are available through the Missouri
Department of Social Services. Customers can apply for help
with their gas and/or electric service through May 31, 2020.
From June 1 — September 30, 2020, customers can apply
for help with their electric service only.

To be eligible, customers must

accounts or investments

- Be responsible for paying home heating costs,
- Have \$3,000 or less in bank accounts, retirement
- Have a household income less than 135 percent of the federal poverty level (a monthly income of \$2,400 for a family of three or \$2,897 for a family of four) and,
- Be a U.S. citizen or legally admitted for permanent residence.

You'll need the following documents to apply:

- A letter from your employer on company letterhead with details about how your employment and wages have been impacted by the coronavirus.
- Recent home energy bill to qualify for LIHEAP (electricity, natural gas or propane).
- To qualify for ECIP, a disconnection letter or payment reminder letter is needed, or ask your energy assistance agency to contact the utility to confirm your account status.
- ☐ Copies of social security cards for all household members
- ☐ Copies of income documentation such as paystubs (for the current month), current award letters or current pension statements (if your household currently receives food stamps, income documentation is not required).

Visit dss.mo.gov/fsd/energy-assistance to apply.

Learn more about other assistance options and account management tools by visiting AmerenMissouri.com/EnergyAssistance or calling 800.552.7583.



Launching New and Improved
Dollar More site

Easier ways to donate including new credit card option

2020: Ameren Missouri Customers received \$27,687,417 in funding from Energy Assistance Programs, including over \$5M in COVID-19 Relief

Coronavirus Income Relief Programs - \$1M



5936 customers with income reduced due to the pandemic crisis received up to \$250 in assistance

\$3.5M COVID-19 Clean Slate Program



6518 customers paid 25% and Clean Slate funds covered the remaining

balance in phase 1 (summer) and up to \$500 phase 2 (fall/winter)

Internal Pandemic Relief Program



Summer Relief Efforts



Ameren Missouri donated 1000 air conditioners and 1000 packs of LEDs to elder and disabled customers through Cool Down Missouri.

LIHEAP increased it's summer program benefit from \$300 to \$600 and temporarily increased the income eligibility from 135% of the federal poverty level to 150%

COVID-19 Small Business Relief Program - \$500K



1703 eligible small businesses and non-profits received up to \$250 in bill credits

Internal Joy of Giving Campaign



During the holidays, Customer Care Advisors received \$250 each to grant to 231 customers needing assistance (\$20,889)

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Union Electric Compar d/b/a Ameren Missouri's Tariffs to Increase Its Revenues for Electric Servi) Case No. ER-2021-0240		
AFFIDAVIT OF WARREN WOOD			
STATE OF MISSOURI)			
CITY OF ST. LOUIS) ss			
Warren Wood, being first duly sworn on his oath, states:			
My name is Warren Wood and or	h his oath declare that he is of sound mind and lawful age;		
that he has prepared the foregoing Direct Testimony; and further, under the penalty of perjury, that			
the same is true and correct to the best of	f my knowledge and belief. Warren Wood		
Sworn to me this 30th day of March	, 2021.		