

In the Matter of The Union Electric )  
Company's 2017 Triennial Filing ) **File No. EO-2018-0038**  
Pursuant to 4 CSR 240-22.080(3) )

COMES NOW the Missouri Department of Economic Development – Division of Energy (“DE”) before the Missouri Public Service Commission (“Commission”), and for its comments in the above-captioned matter states as follows:

1. On September 25, 2017, the Union Electric Company d/b/a Ameren Missouri ("Ameren Missouri" or "Company") submitted its *2017 Integrated Resource Plan* ("IRP"), as required by the Commission's Electric Utility Resource Planning rules, 4 CSR 240-22.080. Commission rule 4 CSR 240-22.080(8) grants interveners an opportunity to file comments in response to an IRP, and DE provides the following comments on several topics addressed in Ameren Missouri's IRP.

2. The Company's IRP states that they were unable to identify cost-effective program options for plug-in electric vehicles ("PEVs") in the 2016 Demand-Side Management ("DSM") Market Potential Study.<sup>1</sup> Ameren's ongoing effort to seek viable program options is appreciated, and DE believes the topic deserves full consideration to

<sup>1</sup> See Ameren Missouri IRP, Chapter 8, p. 40, filed September 25, 2017.

ensure that the utility is able to provide adequate supply for future energy needs. DE notes Ameren Missouri's recently filed Efficient Electrification Program may be an approach to address the needs of PEV users.<sup>2</sup> As technological development presents new opportunities, approaches to PEV load management should be evaluated in updates to the plan. In addition, the Company should consider incorporation of time-differentiated rate designs in its demand-side resource planning to promote both off-peak vehicle charging and load shifting of other discretionary uses.

3. The Division of Energy would also like to see more discussion and analysis of storage options, such as batteries and thermal storage, which can address issues with serving customer loads that may not match the output of variable renewable energy resources. Storage is an important means for addressing resiliency, peak shaving, and grid modernization. The Company may want to reconsider batteries for integration analysis in the next annual update, particularly because of the Federal Energy Regulatory Commission's recent vote to remove barriers to the participation of electric storage in wholesale electricity markets. Wholesale market changes may lead to more cost-effective opportunities for battery integration.

4. It is noted that the Company is interested in six-year MEEIA cycles. DE would be supportive of longer cycles in the future.

5. The Company's stated uncertainty in regards to combined heat and power's ("CHP") classification under the Missouri Energy Efficiency Investment Act ("MEEIA")<sup>3</sup>

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<sup>2</sup> See Case No. ET-2018-0132, In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of Efficient Electrification Program

<sup>3</sup> See Ameren Missouri IRP, Chapter 8, p. 28, filed September 25, 2017

is unfounded. In Section 393.1075.2(3), RSMo., a demand-side program is defined as, “... any program conducted by the utility to modify the net consumption of electricity on the retail customer’s side of the electric meter, including but not limited to energy efficiency measures, rate management, demand response, and interruptible or curtailable load ....” The MEEIA statute requires only that a measure “modify” consumption, and does not preclude measures that shift consumption. CHP, like other measures such as those included in interruptible or curtailable load programs, allows the utility system to benefit from increased customer flexibility to shed or shift load. CHP also provides significant resiliency benefits for critical infrastructure such as hospitals, emergency services, and other facilities that ensure public health and safety.

Furthermore, Table 1-18 (“Program RAP Cost-Effectiveness”) in the 2016 DSM Market Potential Study identified the 18-year Total Resource Cost test (“TRC”) ratio for CHP and distributed generation as 1.33. As this would qualify as cost-effective, CHP measures should have been included in the IRP integration analysis.

DE is aware of a number of customers in Ameren Missouri’s service territory that are interested in pursuing the efficiency and resiliency benefits of CHP who would greatly benefit from the development of a standalone rebate structure that would adequately incent CHP projects. While the Commission has approved CHP as a business custom measure in the Company’s current cycle of MEEIA programs, there has not been sufficient development of this option yet. Ameren Missouri should fully consider facilitating CHP deployment as an element of providing safe and adequate service and based on the state policy of pursuing all cost-effective demand-side savings (Section 393.1075.4, RSMo.).

6. The DSM Market Potential Study identifies the overall portfolio benefit-cost ratio using the TRC as 2.04 for energy efficiency programs. Ameren should aggressively implement energy efficiency since it is identified as the lowest-cost component of the studied IRP portfolios and particularly because the TRC results indicate room for additional program expenditures to pursue all cost-effective demand-side resources. DE would like to emphasize, however, that the MEEIA rules do not require the entire portfolio to meet a cost-effectiveness test, as low-income and educational programs do not have to be cost-effective per Section 393.1075.4, RSMo. Importantly, requiring the entire portfolio to meet a cost-effectiveness standard could function as a barrier to low-income and educational programs.

The MEEIA statute has to be given effect when it says, “Programs targeted to low-income customers or general education campaigns do not need to meet a cost-effectiveness test, so long as the commission determines that the program or campaign is in the public interest.”<sup>4</sup> Low-income and educational program approval is explicitly singled out as being based on a “public interest” standard, not a cost-effectiveness standard. If these programs were factored into the cost-effectiveness determination of the residential portfolio, that would defeat, or severely undermine, the key point of the cost-effectiveness exemption by putting them back under the realm of cost-effectiveness. For example, lowering the TRC of a portfolio by including low-income and educational programs in an overall portfolio TRC calculation (thereby pressuring the Company to reduce or modify

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<sup>4</sup> Missouri Revised Statutes, 393.1075.4.  
(<http://revisor.mo.gov/main/OneSection.aspx?section=393.1075&bid=34794&hl=> )

these programs' offerings to boost portfolio TRC) gives undue weight to the cost-effectiveness of said programs when designing the overall portfolio. The clear standard for low-income and educational programs is "public interest," and any requirement for cost-effectiveness at the portfolio level is inconsistent with the MEEIA statute and could lead to the marginalization of these programs based on cost.

7. While Ameren Missouri incorporates some distribution planning in its current IRP, DE has noted an increased focus on grid modernization and investments in distributed energy resources ("DER") (e.g., distributed solar energy) as evidenced by the currently pending legislation and DER workshop. In response to this interest, Ameren Missouri (and other investor-owned utilities) will need to direct additional attention towards distribution system planning. Enhanced distribution system planning should include considerations such as the integration of renewable energy and storage, fuller use of smart meter technology, and enabling customer-focused programs as methods to optimally address energy needs.

8. While it is similar to the definition found in MEEIA statute, the Total Resource Cost test definition found in Chapter 8 is questionable. Section 393.1075.2(6), RSMo. defines the TRC test as, "...a test that compares the sum of avoided utility costs and avoided probable environmental compliance costs to the sum of all incremental costs of end-use measures that are implemented due to the program, as defined by the commission

in rules.” The National Standard Practice Manual indicates that participant benefits should be included as well, e.g., participant savings on natural gas and water bills.<sup>5</sup>

It is worth noting the apparent discrepancy between the TRC test definition in the MEEIA statute and the definition in the National Standard Practice Manual – the latter explicitly includes participant benefits apart from and in addition to avoided utility costs, whereas the former does not. However, the additional participant benefits should be included in order to symmetrically account for not just participant costs, but participant benefits;<sup>6</sup> this could be accomplished through a clarification of the Commission’s rules (i.e., “... as defined by the commission in rules”), and Ameren Missouri should recalculate its TRC values based on this best practice. The inclusion of avoided utility non-energy benefits in the TRC test is not sufficient to remedy this imbalance.

9. DE is encouraged that Ameren Missouri is taking the initiative to include more renewables in its generation portfolio. DE recognizes that the company is taking advantage of favorable economic conditions around renewable energy and that timely action is necessary to capitalize on the availability of tax credits. DE requests serious consideration of investing in wind resources within Missouri, which would provide local economic development benefits such as jobs, lease payments, and local tax revenues. Renewable energy generation is the fastest growing clean energy job sector in Missouri.<sup>7</sup> Ameren Missouri could capitalize on the availability and interest of Missouri’s workforce to have a positive impact on the state’s economy and create goodwill towards the Company.

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<sup>5</sup> [https://nationalefficiencyscreening.org/wp-content/uploads/2017/05/NSPM\\_May-2017\\_final.pdf](https://nationalefficiencyscreening.org/wp-content/uploads/2017/05/NSPM_May-2017_final.pdf) p. 113

<sup>6</sup> [https://nationalefficiencyscreening.org/wp-content/uploads/2017/05/NSPM\\_May-2017\\_final.pdf](https://nationalefficiencyscreening.org/wp-content/uploads/2017/05/NSPM_May-2017_final.pdf) p. 113

<sup>7</sup> See <https://www.cleanjobsmidwest.com/state/missouri>.

WHEREFORE, DE submits these comments for consideration by the Commission.

Respectfully submitted,

*/s/ Marc Poston*

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### **CERTIFICATE OF SERVICE**

I hereby certify that copies of the foregoing have been served electronically on all counsel of record this 28th day of February, 2018.

*/s/ Marc Poston*

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Marc Poston