BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of a Working Case to Explore)File No. EW-2017-0245Emerging Issues in Utility Regulation)

EMPIRE'S RESPONSE TO COMMISSION ORDER

COMES NOW The Empire District Electric Company ("Empire" or "Company"), by and through counsel, and submits this response to the *Order Seeking Responses Regarding Distributed Energy Resource Issues, and Scheduling a Workshop Meeting* issued herein on September 6, 2017, by the Missouri Public Service Commission ("Commission").

Empire appreciates the Commission taking a heightened interest in these important and emerging issues and appreciates having the opportunity to provide input on these issues. Empire's initial responses to the Commission's questions regarding distributed energy resources ("DERs") are set forth below. Empire intends to continue to closely monitor and actively participate in this docket. Empire will participate in the scheduled DERs workshops, and any other proceedings that may be scheduled in this docket. As details are added to the DERs issues identified by the Commission for consideration, Empire may provide more detailed comments in the future.

1. What are the current levels of distributed energy resources (energy efficiency, distributed generation, demand-response, etc.) in Missouri?

Empire has 1,149 customers actively utilizing the Company's Net Metering Rider (Rider NM). For all of these customers, solar is the applicable renewable fuel source. There are 17 MWs of solar generating capacity connected to Empire's system.

Empire's current Demand Side Management tariffs were agreed to in the Company's most recent rate case, File No. ER-2016-0023. The parties agreed that Empire should have four programs: a Residential HVAC, a C&I custom rebate, a low-income multi-family, and either a non-low-income multi-family, single family low-income or an on-bill financing program targeted

at low-income families. An annual amount of \$1.25 million is budgeted for DSM/energy efficiency programs in Empire's service territories.

Empire is actively researching the option of residential battery storage. Empire intends to further study this imminent trend and is interested in proposing pilot projects. The deployment of battery technology allows Empire to maintain an additional source of power that is easily distributed through the grid for tariff optimization, peak load shaving, energy shifting, and demand response.

2. Should previous Commission policy decisions regarding demand-response aggregation be reconsidered?

Empire supports further consideration and evaluation of this topic. Empire believes it was prudent for the Commission to issue its order temporarily prohibiting the operation of aggregators of retail customers ("ARCs") in March of 2010 in File No. EW-2010-0187. Many questions regarding ARCs remained to be answered at that time.

3. Should a model state tariff be designed?

Empire supports further consideration and evaluation of this topic. Investor-owned electric utilities each face disparate circumstances in regards to service area, physical assets, and customer dynamics; therefore, uniform tariff designs may prove to be inefficient at preserving safety, service reliability, and long-term affordability. Accordingly, flexible approaches bound by guiding principles may be most beneficial for all stakeholders. Long term and balanced perspectives should be central to this exercise.

4. Should changes be made to the Integrated Resource Planning (IRP) process to accommodate increased use of distributed energy resources?

Empire believes more study is needed on this point. New assumptions regarding the forecasting of customer demand may be necessary. Empire understands the need to identify

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necessary policy developments and rate design modifications to accommodate the needs of their customers and provide the most accurate load forecast possible. Pairing distribution system planning with integrated resource planning may be a useful tool in ensuring the efficiencies gained from the use of DERs are not lost.

5. What information about distributed energy resources do the Regional Transmission Organizations need? What information do the utilities have? And what information are the utilities providing to the Regional Transmission Organizations?

SPP is aware of DERs as an emerging issue. For planning purposes, RTOs need to know the load reduction and what that does to the load forecast. As SPP continues to modernize the electric grid in its region, we will continue to see a need for continued investment in affordable and reliable electricity. Studies continue to prove the valuable benefits of the integration of renewable resources like wind and solar energy.

6. Is any new behind-the-meter technology or hardware needed to accommodate or facilitate the development of distributed energy resources?

This is an unknown for Empire at this time. Further study is needed to determine the level of customer interest. Empire recognizes that utilizing technology to turn DER into a resource that can be counted on and dispatched may open up new value streams to Empire and its customers.

7. Will any distribution system upgrades be required to accommodate or facilitate the development of distributed energy resources?

This is an unknown for Empire at this time. Further study is needed to determine the level of customer interest. Empire's goal is to have a distribution system that can interact, engage, and utilize DERs in an effective and efficient manner.

8. What process should be developed to provide for resource accreditation, including consideration of capacity factors?

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Resource accreditation is currently required by the Commission as a requirement for compliance with the Missouri Renewable Energy Standard ("MoRES"). Empire generally supports this accreditation process for compliance purposes. Additional factors such as temporal, locational, and net efficiency should be considered in developing a resource accreditation process to be applied to all DERs, as the value of each MW generated is not equal.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that the above and foregoing document was filed in EFIS on this 20th day of October, 2017, with notice of the same being sent to all counsel of record.

Diana C. Carter