BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of a Working Case Regarding)	
Electric Vehicle Charging Facilities)	File No. EW-2016-0123

MISSOURI DIVISION OF ENERGY'S RESPONSE TO THE CORRECTED STAFF REPORT REGARDING ELECTRIC VEHICLE CHARGING FACILITIES

COMES NOW the Missouri Division of Energy ("DE"), by and through the undersigned counsel, and for its *Response to the Corrected Staff Report Regarding Electric Vehicle Charging Facilities*, states:

- 1. On December 2, 2015, the Public Service Commission ("Commission") issued an order to open a working docket regarding electric vehicle ("EV") charging facilities. The Commission issued a notice of a workshop in the case (which was subsequently rescheduled) and the opportunity to respond to questions posed by its Staff on January 20, 2016. On August 5, 2016, Staff published its initial report on the working docket, with subsequent corrections on August 9, 2016.
- 2. In addition to responding to Staff's questions (see Attachment A),⁵ DE presented at the May 25, 2016 workshop about supporting EV charging station development (see Attachment B).⁶ DE's response to Staff's questions included legal and policy analyses of how

Electric Vehicle Charging Facilities, Staff Report, August 5, 2016.

¹ Missouri Public Service Commission Case No. EW-2016-0123, *In the Matter of a Working Case Regarding Electric Vehicle Charging Facilities*, Order Opening A Working Case Regarding Electric Vehicle Charging Facilities, December 2, 2015.

² Missouri Public Service Commission Case No. EW-2016-0123, *In the Matter of a Working Case Regarding Electric Vehicle Charging Facilities*, Notice Scheduling Workshop and Requesting Responses, January 20, 2016.
³ Missouri Public Service Commission Case No. EW-2016-0123, *In the Matter of a Working Case Regarding*

⁴ Missouri Public Service Commission Case No. EW-2016-0123, *In the Matter of a Working Case Regarding Electric Vehicle Charging Facilities*, Corrected Staff Report, August 9, 2016.

⁵ Missouri Public Service Commission Case No. EW-2016-0123, *In the Matter of a Working Case Regarding Electric Vehicle Charging Facilities*, Missouri Department of Economic Development – Division of Energy, Responses to Staff Questions in EW-2016-0123, March 1, 2016.

⁶ Missouri Public Service Commission Case No. EW-2016-0123, In the Matter of a Working Case Regarding

and why the Commission has the authority to regulate EV charging stations ("EVCSs"). However, DE's comments are not summarized in the Staff Report. The only direct reference to DE is in the summary of the comments by Earth Island Institute d/b/a Renew Missouri ("Renew Missouri"), in which Renew Missouri makes arguments contrary to DE's position.8 DE asks that the Commission consider DE's legal and policy analyses as a supplement to the Staff's summary of parties' comments.

- 3. DE is in substantial agreement with and has provided analyses supporting Staff's conclusions⁹ about the extent of the Commission's authority to regulate EV charging. EV charging equipment falls within the definition of electric plant; consequently, the Commission has the authority to regulate EV charging where it is offered for sale to the general public. Additionally, the Commission has discretion in allowing or disallowing exclusive utility franchises, as well as the discretion to direct tariff changes by investor-owned utilities to eliminate prohibitions on the resale of electricity. 10
- DE also agrees with Staff¹¹ that rates for charging EVs should, generally, be costbased. 12 However, it is important to recognize three other related considerations:
 - The Commission may determine that differing levels of price regulation and regulatory oversight are appropriate for incumbent utilities, resellers of utility services, and competitive charging providers.

Electric Vehicle Charging Facilities, Barbara Meisenheimer, "Supporting EV Charging Station Development," May 25, 2016. ⁷ DE Response to Staff Questions, pages 1-5.

⁸ Missouri Public Service Commission Case No. EW-2016-0123, In the Matter of a Working Case Regarding Electric Vehicle Charging Facilities, Comments of Renew Missouri, June 8, 2016, pages 1-2. Cited in Corrected Staff Report, page 5.

⁹ Corrected Staff Report, pages 10-12.

¹⁰ DE Response to Staff Questions, pages 1-5.

¹¹ Corrected Staff Report, pages 29.

¹² DE Response to Staff Questions, pages 7-8, and Meisenheimer presentation, slide 5.

- b. To the extent that rates for EV charging are regulated, cost recovery should be flexible in allowing either end-use customers or EVCS host-site customers to pay for electricity used for charging electric vehicles. It is clear that host-sites may have an interest in offering EV charging as a convenience to end users, as evidenced by Kansas City Power & Light Company's ("KCP&L") and KCP&L Greater Missouri Operations Company's ("GMO") Clean Charge Network ("CCN") and the current payments by EVCS host sites (and Nissan) for the electricity used at EVCSs. ¹³
- c. If the Commission determines at some point that there is an unmet public interest need for EVCSs, but cost-based rate recovery from end users would be prohibitive, then the Commission should consider cost recovery for these EVCSs from the general body of ratepayers.¹⁴
- 5. However, DE does not concur with Staff that there should be consideration of, "... mandatory TOU [time-of-use] rates for all public charging stations and for EV owners." While DE supports TOU, time-of-day ("TOD"), critical peak pricing, peak-time rebates (for reducing peak use), and other demand response rates that can encourage charging during off-peak hours, DE is concerned that the mandatory application of such rates to EV charging is a) unduly discriminatory towards a single end use, b) impractical from an infrastructure perspective, and c) not necessarily appropriate. Specifically:
 - a. The Commission generally does not have rates specific to individual end uses
 (with the exception of such tariffs as the generally frozen space heating rates).

¹³ Missouri Public Service Commission Case No. EW-2016-0123, *In the Matter of a Working Case Regarding Electric Vehicle Charging Facilities*, Response of Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company to Commission Questions, March 1, 2016, page 17.

¹⁴ DE Response to Staff Questions, pages 7-8.

¹⁵ Corrected Staff Report, page 30.

However, there is a public policy interest in reducing or shifting peak demand from all end-uses which can appropriately be addressed through the broader use of demand response rates. ¹⁶ Consequently, TOU and/or other demand response rates should be applied to all end-uses during designated off-peak periods to encourage more efficient system utilization, starting with opt-in rates for residential customers. Such rates can consider the benefits and costs to the wider electric system from peak versus off-peak system utilization.

- b. It is impractical to require the use of a separate EVCS rate for customers. Doing so would require that EVCS charging be separately metered, which would be prohibitively expensive, especially for residential customers.
- c. While lower TOU rates should be used to encourage shifting load to off-peak periods, non-residential EVCSs will not necessarily be used at times when load is flexible. For instance, a long-distance traveler will not generally be encouraged to shift charging to an off-peak period if they require a charge during peak hours.
 Rates for on-peak use by EV drivers may reasonably be set higher in order to recover higher cost during peak hours; however, peak EV charging should not be subject to discriminatory treatment compared to electric service provided for other end-uses such that EV charging would be charged a penalty in excess of cost.
 Requiring the use of TOU rates for non-residential EVCSs is, in the near-term, unlikely to be necessary or effective, and the application of TOU rates to residential users without their application to non-residential users with similar usage characteristics raises additional concerns regarding discriminatory

¹⁶ See: Missouri Department of Economic Development – Division of Energy. 2015. "Missouri Comprehensive State Energy Plan." https://energy.mo.gov/energy/docs/MCSEP.pdf. Page 135.

treatment. However, it may make sense to investigate other demand response measures and the potential for "vehicle-to-grid" applications (similar to Staff's fourth recommendation at the end of its report). ¹⁷

- 6. DE disagrees with Staff's characterization of the potential benefits of EV use. Rate design that encourages off-peak charging, coupled with the increased adoption of EVs, can work to spread cost recovery for electric plant over greater usage, thereby reducing rates for all. In reviewing Staff's report, DE requests that the Commission consider the evidence available in the record in support of this benefit.
- 7. DE also has concerns with Staff's characterization of the environmental benefits of EVs. Despite the numerous sources cited as to emissions reductions from EV use, the section of Staff's report regarding environmental impacts begins with a discussion of the large demand requirements of EVs. ¹⁸ DE requests that the Commission review Staff's report in the context of the evidence in the record regarding the environmental benefits of EVs, including the evidence provided in the docketed presentations of the Natural Resources Defense Council ¹⁹ and the Sierra Club. ²⁰ This includes evidence that even with Missouri's coal-reliant electric portfolio, EV use results in lower greenhouse gas emissions. ²¹
- 8. Lastly, DE is concerned that Staff's discussion of potential "stranded assets" from the rise of wireless EV charging ²² is not supported by the record. Staff's discussion ²³ of this

¹⁷ Corrected Staff Report, page 30.

¹⁸ *Ibid*, page 13.

¹⁹ Missouri Public Service Commission Case No. EW-2016-0123, *In the Matter of a Working Case Regarding Electric Vehicle Charging Facilities*, Noah Garcia, "Environmental Impacts of Electric Vehicle Charging," May 25, 2016.

²⁰ Missouri Public Service Commission Case No. EW-2016-0123, *In the Matter of a Working Case Regarding Electric Vehicle Charging Facilities*, Joe Halso, "Electric Vehicles & Environmental Impacts," May 25, 2016.

²¹ Garcia presentation, slide 3, and Halso presentation, slide 6.

²² Corrected Staff Report, page 21.

²³ *Ibid*, pages 21-24.

technology indicates a need for new infrastructure to implement it;²⁴ however, it is unclear why wired EVCSs could not be retrofitted with the technology or why non-residential EVCSs (such as the CCN) would become entirely obsolete. DE requests that the Commission be cognizant of the dearth of evidence on the record from other parties regarding wireless charging.

WHEREFORE, DE respectfully files its *Response to the Corrected Staff Report Regarding Electric Vehicle Charging Facilities* for the Commission's and stakeholders' information and consideration.

Respectfully submitted,

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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 5th day of October, 2016.

/s/ Alexander Antal

Alexander Antal

²⁴ *Ibid*, page 22.