BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service	))))	**File No. ER-2016-0285**

JOINT INITIAL POST-HEARING BRIEF OF RENEW MISSOURI, SIERRA CLUB, AND THE NATURAL RESOURCES DEFENSE COUNCIL

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COMES NOW Sierra Club, Renew Missouri Advocates ("Renew Missouri"), and the Natural Resources Defense Council ("NRDC"), by and through its undersigned counsel, pursuant to 4 CSR 240-2.140 and the Commission's August 10, 2016 Order Adopting Procedural Schedule and Delegating Authority, and for their Joint Initial Post-Hearing Brief in the above-captioned case state as follows:

INTRODUCTION

Kansas City Power & Light Company ("KCPL") filed its request for authority to implement a general rate increase for electric service on July 1, 2016. Sierra Club, Renew Missouri, and NRDC were granted intervention on July 27, 2016. Following surrebuttal testimony, the parties were unable to reach a resolution regarding rate design issues and cost recovery for electric vehicles. The Commission conducted an on-the-record hearing from February 22-24, 2017.

This case represents an opportunity for the Commission to signal the direction the State of Missouri will take in various areas over the coming decade, such as policy toward electric vehicles, rate design, and energy efficiency and conservation.

For the reasons laid out in this brief, Sierra Club, Renew Missouri, and NRDC respectfully request that the Commission take the following actions on the below issues:

The Commission should authorize cost recovery for KCP&L's Clean Charge Network.

The CCN has been reasonably well-designed, carried out at a reasonable cost, and has played a critical role in expanding the market for electric vehicles (EVs) in Missouri, a technology which is in the public interest and which can be leveraged to the benefit of all KCP&L customers.[1]

[1] Exhibit 550, Jester, pp. 7-17.

The Commission should reject KCP&L's request to increase the fixed customer charge.

Sierra Club, Renew Missouri, and NRDC agree with the Division of Energy, the Office of Public Counsel, and Consumers Council of Missouri that KCP&L's proposed increase in its residential fixed customer charge should be rejected because increased customer charges reduce incentives for efficiency contrary to state policy, and because it would adversely affect affordability for low-income customers.

The Commission should order KCP&L to implement the residential rate structure proposed by the Division of Energy.

The evidence in the record shows that the residential rate structure proposed by Division of Energy is just, reasonable, and in the public interest. Moreover, there is no compelling reason to wait for additional studies or data; the Commission has sufficient evidence in the record to order KCP&L to implement the residential rate structure proposed by Division of Energy in this case.

The Commission should require KCP&L to propose widely available time-varying rates for residential customers in its next general rate case.

Numerous parties in this case – including Staff and KCP&L witnesses, in addition to the parties to this brief – have stated the view that time-varying rates or time-of-use rates may better reflect cost-causation and offer customers opportunities to lower their bills. KCP&L has observed that it is currently conducting studies to investigate time-varying rates. The parties to this brief therefore request that the Commission order KCP&L to propose widely available time-varying rates in its next case, after conducting meetings and offering opportunities for input from stakeholders.

LEGAL STANDARD

KCP&L is obliged under Missouri law to provide electric service that is "safe and adequate and in all respects just and reasonable," including just and reasonable rates.[2] Accordingly, the Commission's statutory duty is to set "just and reasonable" rates,[3] where a "just and reasonable" rate is one that considers the Company's financial integrity and the interests of various stakeholders while also protecting the public interest.[4]

The test to determine the propriety of a rate design is whether the rate is just, reasonable, and in the public interest.[5] With regard to just and reasonable rates, Missouri courts have held: "Under the statutory standard of 'just and reasonable' it is the result reached not the method employed which is controlling. It is not theory but the impact of the rate order which counts."[6]

Missouri courts have held that the public interest is a matter of policy to be determined by the Commission.[7] It is within the discretion of the Commission to determine when the evidence indicates the public interest would be served.[8] The Commission has previously held that determining what is in the interest of the public is a balancing process.[9] In making such a determination, the total interests of the public served must be assessed.[10]

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[2] Section 393.130.1 RSMo.
[3] Sections 393.130 and 393.140, RSMo.
[4] *See State ex rel. Union Elec. Co. v. Pub. Serv. Comm'n of State of Mo.*, 765 S.W.2d 618, 625 (Mo. Ct. App. 1988).
[5] *State ex rel. Laclede Gas Co. v. Pub. Serv. Comm'n*, 600 S.W.2d 222, 223 (Mo.App. W.D. 1980).
[6] *State ex rel. Missouri Water Co. v. Pub. Serv. Comm'n*, 308 S.W.2d 704, 714 (Mo. 1957); citing *Federal Power Comm'n v. Hope Nat. Gas Co.*, 320 U.S. 591, 64 S.Ct. 281, 88 L.Ed. 333.
[7] *State ex rel. Public Water Supply District v. Public Service Commission*, 600 S.W.2d 147, 154 (Mo. App.1980).
[8] *State ex rel. Intercon Gas, Inc. v. Public Service Com'n of Missouri*, 848 S.W.2d 593, 597-598 (Mo. App.1993).
[9] *In the Matter of Sho-Me Power Electric Cooperative's Conversion from a Chapter 351 Corporation to a Chapter 394 Rural Electric Cooperative*, Case No. EO-93-0259, Report and Order issued September 17, 1993, 1993 WL 719871 (Mo. P.S.C.).
[10] *Id*.

DISCUSSION

I. THE CLEAN CHARGE NETWORK AND RELATED ELECTRIC VEHICLE ISSUES

a. Introduction

Sierra Club, Renew Missouri, and NRDC ("SC-RM-NRDC") strongly support Commission regulation of, and cost recovery for, KCP&L's Clean Charge Network ("CCN"). The CCN has been reasonably well-designed, carried out at a reasonable cost,[11] and has played a critical role in expanding the market for electric vehicles (EVs) in Missouri, a technology which is in the public interest and which can be leveraged to the benefit of all KCP&L customers.[12]

To maximize the benefits of vehicle electrification, SC-RM-NRDC support rate design that will create opportunities for fuel cost savings relative to conventional fuels and will incent charging behavior that will lead to grid benefits. In the immediate term, this requires removal of the session charge from the proposed CCN tariff[13] and expeditious completion of the Company's time-of-use (TOU) rate studies[14]; in the near term, it requires the development of an EV-compatible TOU rate to be considered in the company's next rate case, if not sooner.[15]

Most critically, the Commission must decide the threshold issue of its jurisdiction over EV charging, which the Commission appears poised to do in ET-2016-0246, the Ameren EV

[11] Exhibit 550, *Direct Testimony of Douglas Jester on Behalf of Sierra Club—Revenue Requirement* at 24-28.
[12] Exhibit 550, Jester, pp. 7-17.
[13] Exhibit 600, *Direct Testimony of Noah Garcia on Behalf of Natural Resources Defense Council* at 20-22.
[14] *See, e.g.*, Exhibit 142, *Direct Testimony of Tim Rush* at
[15] Exhibit 550, *Direct Testimony of Douglas Jester on Behalf of Sierra Club—Rate Design* at 9-11.

Pilot case.[16] SC-RM-NRDC commend the Commission for its commitment to resolving this issue, but are concerned that the Commission's contemplated resolution—which would exempt any and all EV charging stations, including the CCN, from regulation by the Commission[17]—fails to track Missouri law, limits the Commission's ability to meet its core statutory obligations, and will fail to support widespread grid benefits or foster the growth of a sustainable, innovative market for EV services.

SC-RM-NRDC urge the Commission to reconsider this approach, and to limit its denial of jurisdictional only to *non-utility* providers of vehicle charging services, which should not be transformed into public utilities solely by virtue of providing such services. At the same time, the Commission must retain its jurisdiction and oversight over the provision of vehicle charging by regulated entities, like the CCN, in order to meet its core statutory obligations. Specifically, the Commission must regulate to ensure that:

- utility investment and engagement *advances*, rather than hinders, the development of a competitive vehicle charging market;
- end-users of utility-provided vehicle charging services are charged fair electricity prices at charging stations that are partially or fully funded by ratepayers;
- vehicle charging is well-integrated with the power grid, in order to maximize the benefits and minimize the risks of EV charging to the safety and reliability of the grid.

As explained further below, this regulatory framework and reading of Commission jurisdiction is in accord with Missouri law and strongly supported by the Commission's core obligations and public policy.

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[16] Agenda Meeting of the Missouri Public Service Commission (March 8, 2017), *available at* https://psc.mo.gov/Archive.aspx (ET-2016-0246 was a "Case Discussion" item on the Agenda) (hereinafter "MPSC Agenda Meeting (March 8, 2017)").
[17] *Id.*

b. Commission Regulation of the Clean Charge Network as a Utility Service Is Required by Missouri Law and Is Necessary to Meet the Commission's Core Statutory Obligations.

The critical, threshold issue before the Commission is the question of its jurisdiction over EV charging. To the detriment of utilities and non-utilities alike, the regulatory status of EV charging stations ("EVCSs") in Missouri has been in limbo since KCP&L first introduced the CCN in its prior rate case.[18] SC-RM-NRDC appreciate that the Commission now appears poised to resolve this issue[19]—which is also live in Ameren's EV Pilot proceeding, Case No. ET-2016-0246[20]—but have several concerns with the Commission's view of jurisdiction and its proposed regulatory framework.

At the Commission's March 8, 2017 Agenda Meeting, a majority of the Commissioners endorsed[21] a regulatory approach that would treat *all* electric vehicle charging stations (EVCSs) as outside Commission's jurisdiction, regardless of their owner or operator. A utility could recover for all infrastructure costs up to, but not including, the EVCS. The Commissioners discussed two rationales for this approach: first, EVCS do not meet the definition of "electric plant," and therefore cannot fall within a utility's regulated operations; and second, the purpose of Missouri's utility laws is to regulate natural monopolies, and EV charging is not a natural monopoly because several companies provide EV charging services. At hearing in this case,

[18] *See Supplemental Direct Testimony of Darren R. Ives*, Case No. ER-2014-0270, In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service (filed February 6, 2015).
[19] MPSC Agenda Meeting (March 8, 2017).
[20] *See, e.g., List of Issues, List and Order of Witnesses, Order of Opening Statements and Order of Cross-Examination,* Case No. ET-2016-0246, In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of a Tariff Setting a Rate for Electric Vehicle Charging Stations (filed January 1, 2017).
[21] MPSC March Agenda Meeting (March 8, 2017) (The Commission did not formally vote, but a poll was taken of each Commissioner's position).

Chairman Hall suggested that ownership of the CCN's stations could be transferred to an unregulated KCP&L affiliate[22], with no tariff to set electricity prices for CCN consumers.

While SC-RM-NRDC agree that *non-utility* providers of EV charging services should not be subject to Commission jurisdiction, and that EVCSs are not "electric plant" *per se*, the Commission's intention to exempt utility-provided vehicle charging services from regulation raises serious legal and policy concerns.

First, by the plain language of the Commission's organic statutes, the Commission's supervision of "electrical corporations" is not narrowly limited to their "electric plant,"—instead, jurisdiction extends broadly to persons or corporations controlling *any* plant, and to persons controlling the manufacture, sale or distribution of electricity. The Commission should not embrace an either/or approach, where *all* EV charging either is or is not a regulated service, as it ties the hands of the Commission and prevents it from fully evaluating proposed utility programs and ensuring market growth in the short run, and limits its ability respond to changes in the long run.

Second, the Commission's regulatory approach will do little to foster competition, because limiting ownership of EVCS to non-regulated entities but allowing utility investment in supporting distribution infrastructure will not limit monopoly power in the context of a utility charging program.[23] In fact, it is likely to exacerbate it. While the EVCSs may need to be owned by an unregulated utility affiliate under the Commission's approach, the utility would still be free to exercise its monopoly market power in the development of a program (e.g., utilizing asymmetric access to information, eminent domain, or customer connections). Moreover, without jurisdiction over the utility-provided EVCSs, the Commission would be unable to fully

[22] Tr. Vol. 12, p. 1394, lines 1–2.
[23] *See* Tr. Vol. 12, p. 1430-1436.

assess utility programs and their inclusion of competitive elements, particularly the method of procurement of the EVCS, which is the locus of innovation in the charging market.[24] Finally, without jurisdiction over end-use transactions at utility-provided EVCSs, the Commission would undermine its ability to maintain the integrity of the grid and protect consumers, while endangering the grid-wide benefits on which utility-driven EV charging programs are premised.

i. The Commission's Jurisdiction Under Missouri Law.

The Commission's jurisdiction lives in several provisions of Missouri law.

Jurisdiction extends first to "the manufacture, sale or distribution of … electricity for light, heat and power, within the state, *and to persons or corporations owning, leasing, operating or controlling the same*…."[25]

Under the same chapter, jurisdiction is also extended to "to all public utility corporations…."[26] A "public utility" is defined to include "every … electrical corporation."[27] An "electrical corporation," in turn, includes persons or corporations "owning, operating, controlling, or managing *any* electric plant."[28]

Critically, by the statute's plain language, the Commission's supervision of electrical corporations is not narrowly limited to their "electric plant"—instead, jurisdiction extends broadly to persons or corporations controlling *any* plant, and to persons controlling the manufacture, sale or distribution of electricity. Moreover, the "Public Service Commission Law

[24] Exhibit 500, *Direct Testimony of Douglas Jester—Revenue Requirement,* p. 16.
[25] Mo. Rev. Stat. § 386.250(1) (emphasis added).
[26] *Id.* at subsection 5.
[27] Mo. Rev. Stat. § 386.020.1(43).
[28] *Id.* at subsection 15 (emphasis added).

… is to be liberally construed with a view to the public welfare, efficient facilities and substantial justice between patrons and public utilities."[29]

Finally, although a "public use" requirement is not expressly stated in the definitions above, the Missouri Supreme Court long ago found that "it is apparent that the words 'for public use' are to be understood and to be read therein."[30] In short, "facilities must be devoted to a public use before they are subject to public regulation."[31]

ii. The Clean Charge Network Is a Regulated Utility Service, Because It is Owned and Operated by an Electrical Corporation and Is Available "For Public Use."

To determine whether jurisdiction exists over KCP&L's CCN, the Commission must consider two questions. First, whether the proposed EV charging stations would be made available for "public use;" and second, whether the proposed EV charging stations are to be clearly owned and operated by a regulated, "public utility," and are thus a regulated utility service. As to both questions, the answer must be "yes."

To the first question, KCP&L has stated that the "KCP&L-owned charging stations [are] available to the public throughout its Missouri service territory."[32] It is plain, therefore, that the stations will be available for public use.

Second, KCP&L manufactures, sells and distributes electricity[33], and, as an entity with control over "*any* electric plant," KCP&L is an electrical corporation[34], and a public utility.[35]

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[29] *State ex rel. Laundry, Inc. v. Public Service Commission*, 327 Mo. 93, 106, 34 S.W.2d 37, 42 (1931).
[30] *State ex rel. M.O. Danciger & Co. v. Public Service Commission,* 275 Mo. 483, 205 S.W. 36, 38 (1918) (citing *ICE CO State v. Spokane & I. E. R. Co.*, 89 Wash. 599, 154 P. 1110 (1916)).
[31] *See, e.g.*, *Hurricane Deck Holding Co. v. Public Service Commission of State*, 289 S.W.3d 260, 264 (Mo. Ct. App. 2009) (citing *State ex rel. M.O. Danciger & Co. v. Public Service Commission,* 275 Mo. 483, 205 S.W. 36, 38 (1918)).
[32] Exhibit 142, *Direct Testimony of Tim M. Rush* at 21.
[33] Mo. Rev. Stat. § 386.250(1).
[34] Mo. Rev. Stat. § 386.020(15).

The CCN stations are therefore presently owned and operated by a regulated entity. Moreover, the CCN stations cap an infrastructure chain that spans generation, transmission and distribution—all owned/operated by KCP&L. EV drivers would be the end-users. This would remain true regardless of whether the Commission found EV charging stations to generally constitute "electric plant" or not.

This interpretation tracks the judgment of other utility regulators, whose decisions demonstrate that the legal identity of the owner/operator is paramount in determining jurisdiction. In several states, including New York—where the relevant statutory terms[36] are identical to Missouri's[37]—regulators have held that *non-utility* owners of EVCS are excepted from regulation on the grounds that EVCS do not alone constitute "electric plant," while holding that they do have jurisdiction over EV charging stations where the owner or operator *otherwise falls* within the definition of an electrical corporation.[38]

The Massachusetts Department of Public Utilities[39] and California Public Utilities Commission (CPUC)[40] have reached nearly identical conclusions. The CPUC put it bluntly: "To

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[35] Mo. Rev. Stat. § 386.020(43).
[36] NY Public Service Law §2(12) ("The term 'electric plant,' when used in this chapter, includes all real estate, fixtures and personal property operated, owned, used or to be used for or in connection with or to facilitate the generation, transmission, distribution, sale or furnishing of electricity for light, heat or power; and any conduits, ducts or other devices, materials, apparatus or property for containing, holding or carrying conductors used or to be used for the transmission of electricity for light, heat or power.").
[37] Mo. Rev. Stat. § 386.020(14) ("'Electric plant' includes all real estate, fixtures and personal property operated, controlled, owned, used or to be used for in connection with or to facilitate the generation, transmission, distribution, sale or furnishing of electricity for light, heat or power; and any conduits, ducts, or other devices, materials, apparatus or property for containing, holding or carrying conductors used or to be used for the transmission of electricity for light, heat or power.").
[38] *See, e.g., Declaratory Ruling on Jurisdiction Over Publicly Available Electric Vehicle Charging Stations* at 4, Case 13-E-0199, In the Matter of Electric Vehicle Policies (filed November 22, 2013), New York Public Service Commission.
[39] *Order on Department Jurisdiction Over Electric Vehicles, The Role of Distribution Companies in Electric Vehicle Charging and Other Matters* at 16, DPU 13-182-A, Investigation by the

the extent an investor-owned utility provides electric vehicle charging services, provision of such services will not affect the utility's status as a public utility."[41] In a subsequent decision authorizing an expanded utility role in the development of EV infrastructure, the CPUC concluded as a matter of law that utility investments should be evaluated on a "case-specific approach," with "a more detailed, tailored approach to assessing the impacts on competition." In short, the CPUC found that a hands-on, rather than hands-off, approach to utility investments was necessary to foster the market.

To conclude, the provision of EV charging services should not affect KCP&L's status as a public utility, and the Commission should exercise its traditional scope of jurisdiction over the provision of electricity as between public utilities and their end-users.

iii. Commission Oversight of the CCN and other Utility-Provided EV Charging Services is Necessary to Meet its Core Statutory Obligations and Further the EV Market.

1. Utility-provided EV Charging Must be Managed to Ensure "Safe and Adequate Service" and to Avoid Risks to the Grid, Ratepayers, and Consumers of EV Charging Services.

The Commission is charged with setting just and reasonable rates[42], and ensuring its regulated utilities provide safe and adequate electric service.[43] This requires the Commission, in part, to act to maintain the integrity of the grid, to regulate electricity prices to end-users, and to

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Department of Public Utilities upon its own Motion into Electric Vehicles and Electric Vehicle Charging (filed August 4, 2014), Massachusetts Department of Public Utilities (finding that *non-utility* owners and operators of EVCS were not subject to DPU jurisdiction, but that entities otherwise subject to the MA DPU's jurisdiction "may recover costs associated with ownership and operation of electric vehicle supply equipment….").

[40] *Decision in Phase 1 On Whether a Corporation or Person That Sells Electric Vehicle Charging Services To the Public Is a Public Utility* at 21, D.10-07-044, Order Instituting Rulemaking on the Commission's own motion to consider alternative-fueled vehicle tariffs, infrastructure and policies to support California's greenhouse gas emissions reduction goals (filed July 29, 2010), California Public Utilities Commission).

[41] *Id.*

[42] Sections 393.130 and 393.140, RSMo.

[43] Section 393.130.1 RSMo.

protect ratepayer investments. "This system is designed to protect consumers against exploitation where competition is inherently unavailable or inadequate, and to insure that these industries will serve the public interest."[44] Unfortunately, in exempting utility-provided EVCSs from regulation, the Commission will likely limit its ability to meet these core obligations.

First, safe and reliable service may be threatened where the Commission lacks the authority to set end-use prices. New load from EVs must be managed in order to provide grid benefits and limit strain on the grid.[45] However, without jurisdiction over utility-provided EVCSs and end-use prices, the Commission cannot set the time-variant rates necessary to incent the good charging behavior than can "fill valleys" in load without proportionally increasing overall capacity requirements or facilitate the integration of renewables.[46] If new load from large-scale utility EVCS investments is poorly integrated, the Commission may risk the need for costly and avoidable grid upgrades.

Similarly, lack of authority over end-use prices would allow for potentially excessive electricity pricing at utility-provided EVCSs that may be partially funded by ratepayers. There is no public policy justification for this approach.

Finally, the Commission's proposed regulatory approach—which would exempt utility-provided EVCSs from Commission regulation but permit their supportive distribution network to be funded by ratepayers—may fail to adequately protect ratepayer investments. This is because the Commission would lack the oversight to ensure that the EVCSs were maintained, safe, or reliably operable.

2. Commission Oversight of Utility-Provided Charging is Necessary to Further the EV Market.

[44] *State ex rel. Laundry, Inc. v. Public Service Commission*, 327 Mo. 93, 106, 34 S.W.2d 37, 42 (1931).
[45] Exhibit 550, *Direct Testimony of Douglas Jester-Revenue Requirement*, pp. 12-15.
[46] Exhibit 551, *Direct Testimony of Douglas Jester—Rate Design* at 7.

SC-RM-NRDC appreciate that the Commission recognizes that the entry of utilities into the EV services market must be done in a way that fosters competition for third parties.[47] Sierra Club witness Douglas Jester also explained the need for the Commission to support the development of a competitive electric vehicle market. He provided two principal reasons:[48]

> First, it is a well-established conclusion of economics that in the long-run effective competition produces better prices and greater supply of services. Secondly, this is a period of rapid innovation in the electric vehicle and vehicle charging markets and the Commission should avoid locking-in a particular business model or set of technologies for vehicle charging infrastructure.

To meet this goal, the Commission must play an active, hands-on part in ensuring that utility-provided charging programs are carried out competitively.[49] Unfortunately, the Commission appears poised to disclaim the very oversight necessary to foster this competitive market. For several reasons, exempting utility-provided EVCSs from Commission oversight creates risk for the growth of a competitive market.

First, limiting ownership of EVCS to non-regulated entities while allowing utility investment in supporting distribution infrastructure will not curb a utility's monopoly power in the market. Put another way: the fact that the EV charging market may not be a natural monopoly does not mean that a utility could not act to exercise its monopoly market power in the development of a program. This may include: utilizing asymmetric access to grid information or customer connections; side-stepping burdensome or costly interconnection processes; exercising eminent domain; and purchasing stations at scale, all while recovering and even earning a rate of return on part of an investment that a third-party market entrant would pay out-of-pocket.

[47] *See, e.g.,* Tr. Vol. 12, p. 1430-1436.
[48] Exhibit 551, *Direct Testimony of Douglas Jester-Rate Design*, p. 15.
[49] *Id.* at 15-17.

Moreover, without jurisdiction over the utility-provided EVCSs, the Commission would be unable to fully assess utility programs and their inclusion of competitive elements, particularly the method of procurement of the EVCS. Sierra Club witness Jester has explained that the EVCS is normally supplied by competitive markets and is "the locus of innovation activity in vehicle charging technology and business models.[50] He therefore concluded that the EV Charger Equipment should "be the focus of any effort by the Commission to promote development of a competitive market for vehicle charging."[51]

We urge the Commission to recognize that with utility action in this market, the reality is that fostering competition requires a hands-on approach.

c. Rate Design for Electric Vehicle Charging

SC-RM-NRDC support rate design that will incent "good" charging behavior, drive grid benefits, and create opportunities for fuel cost savings relative to conventional vehicle fuels. In the immediate term, this requires removal of the session charge from the proposed CCN tariff and expeditious completion of the Company's time-of-use (TOU) rate studies; in the near term, it requires the development of an EV-compatible TOU rate to be considered in the company's next rate case, if not sooner.

i. The Session Charge Should be Removed from the CCN Tariff

KCP&L proposed that the charges for use of the Clean Charge Network should consist of an energy charge[52] and a session charge.[53] The session charge, which could be added to the energy charge at the discretion of the site host with a cap of $6.00 per hour, was ostensibly

[50] Exhibit 500, *Direct Testimony of Douglas Jester—Revenue Requirement,* p. 16.
[51] Jester direct, 8 TR 2223-24.
[52] Exhibit 142, Direct Testimony of Tim M. Rush at 21-25; Schedule TMR-5. The energy charge per kWh for a Level 2 charger would be the average price per kWh for KCP&L's residential class, and the energy charge per kWh for a Level 3 charger would be the average price per kWh for KCP&L's small general service class.
[53] Id.

included for two reasons: first, "to incent charging station users to move their vehicles promptly after charging to improve utilization of the stations;[54] and second, to defray the costs of charging equipment.

In testimony, Sierra Club, NRDC, Division of Energy, and Staff opposed the session charge, and for the reasons summarized below, it should be removed from the tariff:

- The company has made no demonstration that the session charge is necessary to incent vehicle turnover and improve CCN utilization[55];
- A measure of recovery for the charging station equipment is already factored into the energy charge[56];
- The session charges have no basis in cost causation[57];
- The session charges, which are time-based, risk significant disadvantage to EV drivers with lower capacity on-board chargers, as these vehicles charge more slowly[58];
- The maximum session charge fees are potentially excessive, as they could raise the cost of fuel on a gasoline-equivalent basis from 1/3 the price of a gallon to over 5 times that price, thereby eliminating fuel cost savings[59];
- The session charge may be applied in market segments that are not functionally public, such as CCN stations at multi-family dwellings, where typical charging behavior (e.g., overnight charging) obviates the need for station turnover and session charges may result in excessive or unfair pricing to electric vehicle drivers[60];

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[54] *Id.*
[55] DE witness
[56] Exhibit 142, *Direct Testimony of Tim M. Rush* at 22, ll. 21-23.
[57] Exhibit 801, *Rebuttal Testimony of Martin Hyman* at 6-7.
[58] Exhibit 600, *Direct Testimony of Noah Garcia*, p. 21.
[59] *Id.*
[60] Exhibit 550, *Direct Testimony of Douglas Jester—Rate Design* at 6.

- Site host control of session charges may violate Missouri law by permitting unregulated third parties to set a portion of electricity rates.[61]

ii. KCP&L Should Develop an EV-compatible TOU Rate To Be Considered in its Next Rate Case.

The Company should be required to develop time-of-use energy charges in order to better integrate electric vehicle charging with the electric power system, consistent with the Commission Staff's Final Report in EW-2016-0123, the *Working Case Regarding Electric Vehicle Charging Facilities*. In testimony, Douglas Jester explained the need for time-of-use rates in vehicle charging:[62]

> In the near term, the key step to integrate electric vehicle charging with the electric power system is to encourage charging that "fills valleys" in utility load and does not add to capacity requirements. Time-of-use rates are the best means to signal drivers the best times to charge their vehicles, while still enabling drivers to obtain charging services that match their vehicle operations requirements.

To incent electric vehicle charging behavior that results in system-wide benefits, time-of-use energy pricing and rates should be applied to stations within the Clean Charge Network and made available for residential customers.[63]

In developing a time-of-use rate for residential customers, SC-RM-NRDC recognize that an "EV-only" rate may require the installation of a second meter or other require metering upgrades. In order to ease access to EV-only rates in Missouri, the Commission may wish to pilot lower-cost metering options, like sub-metering or the use of charging stations' internal metrology.

The use of "whole home" TOU rates, which SC-RM-NRDC recommend for general residential use below, can obviate the need for metering upgrades but may introduce uncertainty

[61] Mo. Rev. St. 393.130.
[62] Exhibit 551, *Direct Testimony of Douglas Jester—Rate Design* at 7.
[63] Exhibit 550, *Direct Testimony of Douglas Jester—Rate Design* at 7.

regarding net benefits in the context of EV charging. In testimony, Sierra Club witness Douglas Jester cited a 2015 study that concluded that whole-home TOU rates should be evaluated for EV owner net-benefits and, if necessary, re-tailored to consistently provide benefits. A whole home TOU rate should be designed, the study concluded, to be revenue neutral for the majority of customers when compared to the standard rate, but result in a lower bill for the EV driver who charges during off-peak hours but does not shift any non-EV load.

A strong model for a whole home rate that supports vehicle charging may be the Georgia Power PEV rate identified by the Commission[64], which appeared to witness Jester to have a sufficient off-peak period to allow for charging, a relatively simple structure, with just three periods during the summer on-peak months and two periods during the remainder of the year, and a strong enough off-to-on peak ratio to incent behavior (3:1).[65]

In sum, SC-RM-NRDC urge the Commission to consider both options, but with a focus on cost effectiveness, ease of access, and near term implementation.

II. THE COMMISSION SHOULD REJECT KCP&L'S REQUEST TO INCREASE THE FIXED CUSTOMER CHARGE.

In its Application, KCP&L proposes to increase the customer charge for residential general use customers from $11.88 to $13.18, an increase of $1.30.[66] However, at the hearing the Company's witness on rate design and cost of service, Marisol Miller responded to Chairman Hall that once expenses for MEEIA and the "RESRAM solar rebates" were removed from the

[64] *Order Directing Consideration of Certain Questions in Testimony,* Case No. ER-2016-0285 (filed August 24, 2016) (In this Order, the Commission requested consideration of certain issues in direct testimony, including analysis of a Plug-in Electric Vehicle time of use electricity rate ("PEV") offered by Georgia Power).
[65] Exhibit 551, *Direct Testimony of Douglas Jester—Rate Design*, at 10-12.
[66] Exhibit 136, Direct Testimony of Marisol Miller at Sched. MEM-3. The customer charge for other residential tariffs will increase similarly. *Id.*

customer charge, consistent with the Commission's previous orders, the Company's proposed customer charge would "probably be in line with Staff's calculation of $12.62."[67] Her statement leaves the record unclear as to what customer charge the Company actually believes it is entitled to in this case.

KCP&L's direct case does not provide any specific rationale for increasing the customer charge; rather the Company seeks a proportional increase to all billing components. However, its request purports to reflect an intention that the customer charge recover what the Company has determined are the customer-related costs of service.[68]

Cost of service studies calculate unit costs, which can be used as a point of reference when designing rates. Cost causation, however, is just one of many factors that inform rate design.[69] Other factors, including rate stability, equity, and efficiency, also play a role.[70] Indeed, three recent Commission orders make clear that the Commission is not bound to set the customer charge based solely on CCOS studies, as there are strong public policy considerations in favor of not increasing the fixed customer charge.[71] An approach to ratemaking that considers customer opinion and the impact of rate design on customer behavior is consistent with Missouri precedent that the impact of the rate design is the primary consideration when determining whether the rate is just and reasonable.

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[67] Tr. 941:14 to 942:12.
[68] Exhibit 137, Rebuttal Testimony of Marisol Miller at 14:10-14.
[69] Tr. 890:9-13 (Marisol Miller testimony that the cost of service study is one "data point" the Company considers in allocating costs across classes and designing rates, but that "[the Company] considered more than one data point" in deciding by how much to increase the customer charge); Tr. 893:11-16 (Miller testimony that it is appropriate to deviate from class cost of service study results); Tr. 902:10-15 (Miller testimony that the Commission does consider factors other than cost of service when designing rates) .
[70] *See* Exhibit 138, Miller Rebuttal at 10:10-11.
[71] *See* File No. ER-2012-0166, Dkt. No. 553, Report and Order at 110:¶11; File No. ER-2014-0258, Dkt. No. 742, Report and Order at 76:¶7; ER-2012-0174 and ER-2012-0175, Dkt. No. 703, Report and Order at p.40.

Sierra Club, NRDC and Renew Missouri therefore agree with the Division of Energy, OPC, and Consumers Council of Missouri that KCP&L's proposed increase in its residential fixed customer charge should be flatly rejected.[72]

a. Increased customer charges reduce incentives for efficiency and are therefore inconsistent with state policy and will increase costs.

The 2009 Missouri Energy Efficiency Investment Act ("MEEIA") sets a statutory goal for electric utilities of "achieving *all* cost-effective demand-side savings."[73] Because customers must pay the customer charge no matter how much electricity is consumed, increasing the customer charge signals to customers that actions to reduce their electric bills will be less effective and encourages increased consumption.[74] At the hearing, the Company conceded that a higher customer charge would decrease the incentive for conservation.[75]

Although the customer charge increase sought by the Company in this case is small relative to the increase it sought in its last rate case, it is important for the Commission to recognize the cumulative impacts of customer charge increases. Three years ago, the customer

[72] Exhibit 311, Rebuttal Testimony of Geoff Marke (OPC), at 3:15-22; Exhibit 801, Rebuttal Testimony of Martin Hyman (Division of Energy); at 3:6 to 4:17; File No. ER-2016-0285, Dkt 249, Statement of Positions of the Consumers Council of Missouri, at 5. Staff opposes any increase in the customer charge because it does not support any increase in the residential class's revenue requirement. Exhibit 202, Staff Rate Design and Cost of Service Report, at 34:18-20.
[73] Section 393.1075.4, RSMo (emphasis added).
[74] *See* Exhibit 400, Direct Testimony of Douglas Jester at 7:21-23, 10:5-15; Exhibit 801, Hyman Rebuttal at 4:3-8; Exhibit 202, Staff's Rate Design and Class Cost-of-Service Report, at 34:20-22 ("Staff is concerned that the impact of increasing the Residential Customer charge would decrease the Residential energy charges, sending a price signal that does not support residential energy consumption.").
[75] Tr. 931:8-15 (Miller); *Cf.* Exhibit 137, Direct Testimony of Marisol Miller, at 15 (noting the "consumption disincentive inherent" in the Division of Energy's proposal to move towards inclining block rates). In addition to this concession by Ms. Miller, the Company did not file any testimony rebutting arguments that increasing the customer charge would dampen a customer's incentive to engage in energy efficiency. See Tr. 904:16-21.

charge was only $9.00.[76] As the portion of revenue collected through the fixed portion of the bill increases, customers' incentives to save energy correspondingly diminish. By encouraging customers to use more electricity (via relatively lower energy charges) the Company "lock[s] in [its] fixed cost investment[s]," which is contrary to the core objective of MEEIA to "reduce some of these fixed cost investments."[77] By contrast, recovering more of the Company's costs through the energy charge sends a "signal that greater use incurs greater investment."[78] The impact of rate design on energy usage is also illustrated in a 2012 study by Christensen Associates, which found that residential summer energy usage by Kansas City Power & Light's Kansas residential customers would increase by *three percent* as a result of a fixed charge just under $20.[79] This study demonstrates the impact one might see from KCP&L's proposed increase in this case, though to a smaller degree given the relatively smaller increase in the customer charge.[80]

Accordingly, KCP&L's proposal runs contrary to MEEIA's statutory goals. Indeed, KCP&L's proposed rate design will work at cross-purposes with the Company's efforts to promote energy efficiency.[81] As this Commission has stated, "[r]ate design should encourage the efficient use of energy and recognize and reward customers who choose to conserve."[82] Whether rates incentivize energy efficiency is closely tied to another policy implication of rate design: the

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[76] Missouri Public Service Commission Tariff No. YE-2013-0325, Kansas City Power & Light Company, Schedule of Rates for Electricity, Residential Service – Schedule R, January 26, 2013, Sheet No. 5A.
[77] Tr. at 1252:12-18 (Hyman).
[78] Tr. at 1258:21-24 (Hyman).
[79] Exhibit 400, Direct Testimony of Douglas Jester at 10:8-16, and Exhibit DJ-RD-4 to that testimony.
[80] Tr. at 1156:1-4 (Jester testimony that patterns of usage by KCP&L's Kansas customers are likely similar to those of the Company's Missouri customers).
[81] Although the Company implements programs to comply with MEEIA, at the hearing its witness, Marisol Miller, expressed some skepticism as to whether all energy efficiency would provide benefits for customers. Tr. 964:12-17 (disagreeing with the notion that "any conservation [i]s a good thing").
[82] *See* Exhibit 803, Direct Testimony of Sharlet E. Kroll, at 15:11-13 (quoting File No. 18,626, Report and Order (1976)).

degree of control that customers have over their bills. In its Report and Order on the 2012 general rate case filed by KCP&L and KCP&L-GMO, the Commission rejected the Companies' proposed increase to the customer charge, noting that "Because volumetric charges are more within the customer's control to consume or conserve, the volumetric rate is the more appropriate to increase."[83] We agree that customers should retain control over a large portion of their bill so that they have the ability to reduce those bills through efficiency, conservation, or distributed generation.

b. Increased customer charges adversely affect affordability for low-income customers.

Because electricity is an essential service, affordability of service for low-income customers is an important consideration in ratemaking. The unrebutted evidence in this case demonstrates that low-income customers will be adversely affected by the increase in the fixed charge.[84] First, as a matter of mathematics, low-usage customer bills will increase disproportionately as a result of the customer charge increase. Second, low-income customers are more likely to use less than the average amount of electricity, as shown by both data collected directly on KCP&L customers[85] and average data for the state of Missouri.[86] The Company did not dispute that low-income customers tend to have below-average energy usage.[87] The Commission should reject a rate change that places more burden on low-income households that already face a higher energy burden than the average customer.[88] At the public hearing held in December 2016 in this matter, numerous members of the public spoke in opposition to the fixed

[83] File Nos. ER-2012-0174 and ER-2012-0175, Dkt. No. 703, Report and Order at 40.
[84] *See, e.g.*, Tr. at 1174:2-25 to 1175:1 (Marke).
[85] Exhibit 311, Rebuttal Testimony of Geoff Marke (NP) at 4.
[86] Exhibit 400, Direct Testimony of Douglas Jester, at 8:9-17, 9:1 and Attachment DJ-RD-2 (data gathered by the U.S. Energy Information Administration for Missouri which shows a direct and substantial correlation between median electricity consumption and annual household income).
[87] Tr. 909:15-19 (Miller).
[88] Exhibit 803, Direct Testimony of Sharlet E. Kroll, at 12:3-12.

charge increase, in part because of the impacts on energy efficiency, but especially due to concerns about those on fixed incomes.[89]

In summary, given the Commission's duty to balance factors in order to determine whether rates promote the public interest, SC-RM-NRDC asks the Commission to reject KCP&L's proposal to increase the fixed charge, which results in a rate design that offers customers less control, provides fewer incentives for energy efficiency, and disproportionately increases the burden on low-income customers.

III. THE RESIDENTIAL BLOCK RATE STRUCTURE PROPOSED BY THE DIVISION OF ENERGY IS JUST, REASONABLE, AND IN THE PUBLIC INTEREST.

In his Direct Testimony, Division of Energy ("DE") witness Martin Hyman proposed an alternate block rate structure for the residential general use tariff.[90] Mr. Hyman's proposed rates would incline slightly in the summer months, and during the non-summer months would decline less steeply than under the Company's existing and proposed rates.[91] These rates would not apply to residential customers on a space heating tariff.[92] This proposal is a moderate step toward a superior rate design that would protect low-income customers, encourage conservation and energy efficiency, better reflect cost causation, and ultimately lower costs for all ratepayers. The

[89] *See* Tr. at 6:22 to 9:11 (comments of KCP&L customer James Turner); 19:8 to 20:6 (comments of KCP&L customer Robert Moore); 232:8-13 (comments of KCP&L customer Jim Fitzpatrick); 23:12 to 24:8 (comments of KCP&L customer Zay Fitzpatrick).
[90] See Exhibit 800, Hyman Direct, at 20:5-11 (Table 2. DE's proposed residential general use rate design).
[91] Although Mr. Hyman does not propose an inclining rate in the winter for reasons of gradualism, this brief will occasionally refer to Mr. Hyman's proposed rate design generally as an "inclining block rate" or "IBR."
[92] Tr. at 1237:3-11 (Hyman testimony that proposed block rate changes would not apply to space heating customers).

undersigned parties request that the Commission order KCP&L to implement DE's proposed rate structure for the reasons stated below.

The test for determining the propriety of a rate design is whether the rates are just, reasonable, and in the public interest.[93] The Commission has previously concluded that a utility has the burden of proof to show that its proposed tariffs are just and reasonable, *including* the reasonableness of its rate design.[94]

The evidence presented in this case establishes that DE's proposed residential rate structure is just, reasonable and in the public interest. While it is also true that previous Commission decisions establish that the current rate structure also meets this minimum threshold, that fact is not enough to perpetuate its use when a superior rate structure is available. Justice, reasonableness and public interest determinations are not binary; rather, there are gradations of each. The evidence demonstrates that DE's proposed rate structure is *more* just, *more* reasonable and *more* in line with the public interest than the Company's proposed residential rate structures, and therefore should be preferred. Moreover, there is no need for further delay in moving toward an inclining block rate structure. Although further studies on time-varying rates may help the Company develop an even better rate for inclusion in the next rate case, that does not change the evidence in the record in this case.

The burden falls on KCP&L to prove that its proposed rate structure is superior to the one proposed by DE and supported by Renew Missouri, OPC, NRDC, and the Sierra Club. In *State ex rel. Missouri Gas Energy v. Pub. Serv. Comm'n,*[95] the Missouri Court of Appeals, quoting the

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[93] *See State ex rel. Laclede Gas Co. v. Pub. Serv. Comm'n*, 600 S.W.2d 222, 223 (Mo.App. W.D. 1980).
[94] *In the Matter of Missouri Gas Energy & Its Tariff Filing to Implement A Gen. Rate Increase for Nat. Gas Serv.,* 280 P.U.R.4th 107 (Mo. P.S.C. Feb. 10, 2010), citing *State ex rel. Monsanto Company v. Public Service Commission*, 716 S.W.2d 791 (Mo. 1986).
[95] 86 S.W.3d 376 (Mo. Ct. App. 2005).

seminal case, *Fed. Power Comm'n v. Hope Nat. Gas Co.*[96] stated that the Commission is not "bound to the use of any single formulae or combination of formulae in determining rates" and that it is "the result reached and not the method employed which is controlling."[97]

The evidence shows that under DE's proposed rate structure, the effects would be as follows: reduced peak, reduced demand, costs more fully aligned with causation, conservation better incentivized, and more equitable treatment of low-income customers. Because KCP&L fails to refute this evidence for why its proposed declining block rate is preferable, the Commission should order KCP&L to implement DE's proposed residential rate structure.

a. DE's Proposed Rate Structure is Just.

The evidence in the record shows that DE's proposed rate structure will lead to more just outcomes than KCP&L's proposed rate structure because it provides sufficient revenue stability, benefits to low-income customers, and better reflects cost causation.

Revenue Stability

Much caselaw exists regarding just and reasonable rates in terms of the economic effects on the utility.[98] Rates should not be set so as to be confiscatory.[99] This is a high bar however, and there is a difference between the utility not receiving as much revenue as it would like and those rates being so low as to be unjust.

KCP&L and Staff have expressed concerns about revenue volatility as a result of DE's proposed rates.[100] These concerns are purely conjecture. KCP&L witness Marisol Miller admits

[96] 320 U.S. 591 (1944).
[97] *Fed. Power Comm'n v. Hope Nat. Gas Co.* 320 U.S. 591, 596 (1944).
[98] See, *State ex rel. Missouri Gas Energy v. Pub. Serv. Comm'n*, 186 S.W.3d 376, 388 (Mo. Ct. App. 2005).
[99] *Id*. at 383.
[100] See Exhibit 210, Rebuttal Testimony of Robin L. Kliethermes, at 5:9-11.

that KCPL made no efforts to study revenue volatility as a result of the proposed rate design.[101] The only quantitative evidence in the record on revenue volatility was provided by Sierra Club and Renew Missouri witness Douglas Jester, who calculated that DE's rate design would likely increase volatility by only 0.1% of the Company's Missouri revenue.[102] Considering that the standard error in electricity sales in Missouri is about 3%, the increased volatility that may result from an inclining block rate is incredibly small.[103] This de minimis impact on volatility is the predictable result of the gradual shift in rate design proposed by DE, which is structured to limit bill impacts to no more than 5% for 95% of customers.[104]

Staff witness Robin Kliethermes does not oppose moving toward flat or inclining block rates, but also expressed some concerns about revenue volatility based on the broad definition of winter months in the Company's current tariff.[105] However, the evidence shows that Ms. Kliethermes did not have the correct understanding of the rate structure proposed by Mr. Hyman and supported by Renew Missouri and Sierra Club's witness Douglas Jester. Contrary to Ms. Kliethermes' assertion in rebuttal testimony,[106] Mr. Jester does *not* advocate that the non-summer months be changed to an inclining block rate. Instead, Mr. Jester advocates for the rate proposed by DE witness Martin Hyman, that is: an inclining block rate in the four summer months and a less declining block rate during the eight non-summer months.[107] During cross examination at hearing, Ms. Kliethermes again demonstrated an inaccurate understanding of DE's proposed

[101] Tr. 917:5-9(Miller).
[102] See Exhibit 401, Surrebuttal Testimony of Douglas Jester, at 7:3-19.
[103] Tr. at 1117:1-5 (Jester); see also 1186:14-18 (Marke testimony regarding relative volatility associated with residential tail block and other sources of volatility such as weather).
[104] *See* Exhibit 800, Hyman Direct, at 21:10-18.
[105] See Exhibit 210, Rebuttal Testimony of Robin Kliethermes, at 7:7-12.
[106] *Id.* at 3:4-6.
[107] See Exhibits 400 and 401.

rate.[108] Ms. Kliethermes' concerns about revenue volatility should be viewed with these misunderstandings in mind.

Even if the Company's revenue were to fluctuate as a result of small adjustments to the residential rates structure, this does not necessarily mean that the net effect of the fluctuation would be significant, and the Company has introduced no evidence showing that the overall level of volatility would be troubling. Additionally, as Douglas Jester points out in his surrebuttal testimony, this analysis does not account for changes in customer behavior in response to changing rate design, which would tend to reduce revenue volatility.[109] After all, modifying customer behavior is one of the reasons IBR is such a valuable tool. In sum, the many benefits that would result from DE's proposed rate more than offset the predicted small increase to volatility.

Benefits for Low-Income Customers

When deciding which rate structure is the more just, the Commission should consider the likely impacts on customers who will be affected the most. Although the financial impact on the utility is an important consideration, the Commission must balance it against other objectives in assessing whether the rates are just. Black's law dictionary defines "just" as "Legally right; lawful; equitable."[110] *Hope* references the need for "pragmatic adjustments" and a "balancing act" between investor and consumer interests.[111] Therefore, any discussion of rate structure must include consideration of the effect on the consumer, particularly those low-income consumers who would benefit most from ability to lower their bills. As stated above, energy costs comprise

[108] See Tr.at 1024-1025.
[109]Exhibit 177, Rebuttal Testimony of Douglas Jester at 7:4-8..
[110] Black's Law Dictionary (10th ed. 2014).
[111] *Fed. Power Comm'n v. Hope Nat. Gas Co.* 320 U.S. 591, 603 (1944).

a higher portion of the living expenses of low-income customers, causing rate increases to affect them disproportionately.

As Douglas Jester states in his Direct Testimony, an inclining block rate structure will generally "reduce bills for customers with low usage and increase bills for customers with higher usage…"[112] In addition, Mr. Jester states that "low-income customers tend to be lower usage customers."[113] Therefore, low-income customers are less likely to benefit from a declining block rate in the winter, or a flat rate in the summer, as most of their usage is located in the first block. As explained by OPC witness Dr. Marke, the first 500-600 kilowatt hours is considered the "minimum amount . . . to survive for a typical home," and is sometimes referred to as the "lifeline block."[114] DE's proposed rate structure lowers the rates in this lifeline block in both summer and non-summer periods, relative to what the Company has proposed, and therefore will ease some of the burden on low-income customers. Low-income customers, who generally use less energy than the average KCP&L residential customer, will benefit from DE's inclining block rate structure, regardless of whether they change their behavior in response.[115]

In contrast, KCP&L's proposed residential rate design will disadvantage low-income customers, while benefitting high-income and high-usage customers who are already less affected by bill increases.

In sum, DE's proposed rate structure is superior to KCPL's proposed rates as it will immediately reduce the energy burden of low-income customers. In addition, because inclining block rates incentivize conservation, all customers will benefit from avoided utility investments as a result of lower peak loads.

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[112] Exhibit 400, Direct Testimony of Douglas at 15: 4-5.
[113] Id. at 16:7.
[114] Tr. at 1164:20-25, 1165:1-11.
[115] Tr. at 1196:6-17 (Marke).

Cost Causation

The Commission has long espoused the belief that rates should consider principles of cost causation, in conjunction with other public policy objectives. As Mr. Jester explains in his Direct Testimony: "[t]he core reason that the Commission should migrate away from declining and toward inclining block rates for residential rates is to better reflect cost causation."[116] Testimony by Dr. Marke and Mr. Hyman confirms that DE's proposed rate structure better reflects cost causation than the status quo.[117] While each customer's usage profile is different, higher usage customers create higher costs than lower usage customers in general.[118] They contribute more to base load and peak than do their lower usage counterparts. An IBR structure makes rates higher as consumption increases, commensurate with the higher costs placed on the system.[119] This better reflects the principles of cost causation.

b. DE's Proposed Rate Structure is Reasonable

Gradualism and Preventing Rate Shock

Inclining block rates are not a new concept. As discussed by Douglas Jester, Michigan, New Hampshire, British Columbia, California and Oregon currently use IBR structures.[120] Department of Energy witness Michael Schmidt – who has extensive experience in rate design across a wide array of jurisdictions – stated that he was not aware of any case in which there had been "push-back by consumers" to an inclining block rate structure.[121]

It is important to note that DE's proposed rate structure only calls for an inclining block in the four summer months. While this serves to limit the conservation effects of IBR, as

[116] Exhibit 400, Direct Testimony of Douglas Jester at 13:0-11.
[117] Tr. at 1182:11-21 & 1184:4-19 (Marke); 1258:2-24 (Hyman).
[118] Tr. at1145:1-15(Marke), 1182:11-21 (Marke); 1196:6-18 (Jester).
[119] Exhibit 400, Direct Testimony of Douglas Jester at 13:10-14.
[120] Exhibit 400, Direct Testimony of Douglas Jester at14:10-11.
[121] Tr. at 1105:1-5.

discussed in the following section, it conforms to the Commission's espoused principle of gradualism and avoidance of rate shock.

DE's proposed rate structure limits rate impacts to 5% for all but those above the 95th percentile in usage. Mr. Jester noted that the ratio of price increase from the base block in DE's proposed IBR is "more modest . . . than is typical."[122] DE's proposed rate structure for the winter is modest by comparison as well; Michigan has entirely flat rates in the winter, while those in British Columbia also incline in the winter.[123] Therefore, the vast majority of residential general use customers will not see their bill change drastically. DE's proposed rate structure is also a gradual change, in that it maintains a slightly declining block rate in the non-summer months and it applies only to general use customers and not those on the space heating tariff.[124]

Although the Company questioned the adequacy of the sample size that Mr. Hyman used for his bill impact analysis, Mr. Hyman used data provided by the Company which was based on a random (and therefore statistically representative) sample of residential general use customers.[125] Tellingly, the Company made no effort to independently assess the bill impacts of DE's proposed rate.[126]

c. DE's Proposed Rate Structure is in the Public Interest

The Commission has long considered energy efficiency, conservation, and reduction in peak demand as key policy objectives and concerns that serve the public interest. DE's proposed rate furthers each one of these objectives, where KCP&L's current rate fails to do so.

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[122] Tr. at 1113:5-7.
[123] *Id.* at. 1113:8-15.
[124] It may be that there are some space heating customers on the general use tariff, but the number is likely small, and DE's proposed rate would incentivize such customers to move over to the space heating tariff if they find the change to the nons-summer rates adverse.
[125] Tr. at 1251:13-18; Tr. at 1241:13-18 (Hyman testimony regarding nature of the sample).
[126] Tr. at 917:5-9 (Miller).

By sending appropriate price signals to energy users, DE's proposal to move toward an inclining block rate structure in the summer and away from a declining block in the winter will encourage conservation and incentivize investment in energy efficiency strategies. As discussed by DE witness Kroll, "[r]ate design should encourage the efficient use of energy and recognize and reward customers who choose to conserve."[127] Mr. Jester calculated that DE's proposed rates would reduce annual energy consumption by 0.88%, and by nearly 2% during the Company's peak month of August.[128] Mr. Jester's calculation of energy savings incorporated an estimate of the elasticity of customer demand that the Brattle Group employed for a study of Missouri residential customers,[129] which was consistent with elasticity ranges reported in numerous studies from a variety of jurisdictions.[130] Mr. Jester's estimates of customer response are generally consistent with the results reached in other studies, including the study by Christensen Associates for KCP&L's Kansas customers, which Mr. Jester described in his direct testimony. That study showed that introducing an inclining block rate would reduce summer energy sales by 2.3%.[131] While this study was of a different set of customers and involved a rate design different in some details from that proposed here, it demonstrates the kind of efficiency savings that rate design can achieve.

KCP&L witness Marisol Miller concedes that "moving from a declining block rate towards a flatter rate or towards an inclining block rate creates a disincentive for customers to

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[127] Exhibit 803, Charlet Kroll Direct Testimony, citing, Missouri Public Service Commission Case No. 18,626. (1976). *In the Matter of the Complaint of St. Joseph Light & Power Company as to Unreasonableness of Electric, Gas, Steam Heating and High Pressure Steam Rates Now on File and in Effect, and Application to Establish New Rates and Charges for Such Services.* Report and Order, pp 22-23.
[128] Exhibit 401, Douglas Jester Surrebuttal Testimony at 4:12-16.
[129] Tr. 1244:17-20 (Hyman).
[130] Tr. at 1140:7 to 1141:20 (Jester testimony discussing the source of his estimates for elasticity).
[131] Exhibit 400, Douglas Jester Direct Testimony at 10:Table 5:1.

consume electricity." [132] In addition, KCP&L's own commissioned study (performed by AEG) predicts that significant energy and demand savings would result from an inclining block rate structure.[133]

One of the goals of the Missouri Energy Efficiency Investment Act is to ensure that energy is used more efficiently. An inclining block rate, as well as a flatter rate in the non-summer months, would complement the Company's MEEIA programs and help achieve the objectives of that statute,[134] likely at much less capital expense. As DE witness Martin Hyman testified, "by incenting energy efficiency and by incenting demand response, you are helping to avoid these long run costs."[135] Energy savings and peak demand reduction reduces costs both to the utility and ultimately to the consumer.[136]

d. The Commission Should Act Now and Not Wait Until Future Cases

The record in this case supports a determination that DE's proposed block rates are just, reasonable, and in the public interest. Although KCP&L witness Marisol Miller believes the commission should wait until the conclusion of ongoing studies before considering an inclining block structure, we urge the Commission not to endorse this delay tactic. While more data is always helpful, it is long past time for the Commission to move the state's utilities away from declining block rates and toward inclining block rates.

The studies referred to by Ms. Miller will not be available until long after this rate case is completed, postponing consideration of these issues to the next rate case or even later. If past behavior is any indication of future intent, KCP&L will likely have another ongoing study that

[132] See, Tr. 917-918.
[133] Exhibit 402, KCP&L DSM Potential Study (AEG), Presentation from Sept. 16, 2016, at slide 65; (Note: at Transcript Vol. 11, at 932:23-24, Exhibit 402 was admitted into evidence).
[134] Tr. at 1176:20-23 (Marke).
[135] Tr. at 1252:19-21.
[136] Exhibit 800 Martin Hyman Direct,30:1-9, Tr. at 920:6-10 (Miller).

will serve to justify delay. In the meantime, KCP&L's residential customers would continue to take service under rates that fail to incentivize energy conservation and disproportionately recover fixed costs from low-usage customers. That is not to say that KCP&L's ongoing studies are without value. Rather, KCP&L should utilize these ongoing studies to suggest necessary modifications and updates in a subsequent rate case.

The Commission has previously expressed a view of declining block rates (i.e. the rate structure currently advocated by KCPL) as a "promotional rate structure," "an anachronism which rationally fails to meet changing circumstances."[137] The Commission now has before it a fully developed and ready-to-implement block rate structure that will move residential general use customers toward a rate that better reflects cost causation and promotes energy efficiency, while respecting gradualism and preventing against rate shock.

Relatedly, several witnesses expressed the view that time-varying rates or time-of-use ("TOU") rates are preferable to IBR. While the undersigned parties believe that time-varying rates should be available to all residential customers, this is not a reason to reject DE's proposed rate in this case. As counsel for DE stated in his opening, the Commission should not let the great be the enemy of the good. Additionally, as explained by Douglas Jester, TOU and IBR can coexist in the same, albeit slightly more complex rate structure.[138] Although a TOU may exist for residential customers in the future, that rate will likely involve an opt-in or opt-out structure of some kind. Accordingly, a block rate will be needed as an alternative. The parties to this brief assert that the rate proposed by DE is by far the superior choice.

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[137] Missouri Public Service Commission Case No. EO-77-56. *In the Matter of the Investigation of the Rate Design and Transit Department*
Subsidy of St. Joseph Light & Power Company. Order dated September 14, 1976.
[138] Exhibit 177, Rebuttal Testimony of Douglas Jester at 8:6-12.

The time to pursue this rate structure is now. Sufficient evidence has been presented showing that IBRs protect low income customers, reduces system cost, reduces peak, and encourages conservation, to justify the Commission ordering implementation of DE's proposed residential rate structure.

IV. THE COMMISSION SHOULD REQUIRE KCP&L TO PROPOSE WIDELY AVAILABLE TIME-VARYING RATES FOR RESIDENTIAL CUSTOMERS IN ITS NEXT RATE CASE.

Numerous witnesses, including the Company's, note that time of use rates (also known as demand response rates), better reflect cost causation than the current rate design and would create beneficial incentives for customers to reduce usage during system peak times.[139] Although, KCP&L has already rolled out smart meters to over 90% of its residential customers,[140] it doesn't yet have in place the tariffs that allow customers to realize the savings that these rates can bring.

In an order issued almost two years ago, the Commission granted KCP&L's request to freeze its residential time-varying rates. In doing so, however, it noted the need for KCP&L to promptly offer effective time-of-use rates to residential customers:[141]

> However, it is clear that all of these rates need to be redesigned, and at least the time-of-use tariff is far too important in meeting the goals of MEEIA and

[139] Exhibit 400, Direct Testimony of Douglas Jester at 19:2-11; Exhibit 138, Surrebuttal Testimony of Marisol Miller at 9:20-22 ("The Company agrees that if the policy includes a desire to offer price signals to customers to encourage efficient energy use and potentially reduce costs, time differentiate rate may be a better answer."); Exhibit XX, Rebuttal Testimony of Robin Kliethermes at 7:2-6; *see also* Tr. 1104:3-6 (DOE witness Michael Schmidt testimony that "going to AMI meters and smart meters and that sort of thing, it will provide an opportunity to go to time -- time of use rates. And that's the ideal.").
[140] Exhibit 207, Direct Testimony of Natelle Dietrich at 4:8-9.
[141] File No. ER-2014-0370, Dkt. 592, Report and Order at 92 ¶217.

> providing customer choices for energy efficiency and bill savings to redesign at an unknown time in the future.

The Commission then ordered KCP&L to complete a study "regarding all of these issues" within "two years of the effective date of this order." That study must be completed by September 15, 2017.[142] The urgency to develop residential tariffs that promote the goals of MEEIA has not diminished in the last two years, yet the Company continues to demur on requests that it offer time of use rates for residential customers in the near future.[143]

The Company cites to "multiple studies . . . underway within the KCP&L and GMO companies to explore dynamic rates and demand side efforts," including studies in direct response to Commission orders in general rate cases and studies within the Integrated Resource Planning process.[144] In the most recent rate case for KCP&L-GMO, the Company committed to undertake a study of time-of-use rates and to "propose rates based on this study no later than its next rate case or rate design case."[145] The Company has therefore indicated that it is capable of proposing time-varying, or demand response, rates for its affiliated utility in that utility's next rate case. KCP&L has not offered any reason in this matter that it cannot do so for its customers. The Company's rate design witness, Ms. Miller, acknowledged that there are "numerous other utilities in the country that offer time differentiated rates to their residential customers."[146] The Company has had many years to undertake analysis related to time-varying rates, including under the auspices of stakeholder working groups.[147] The study ordered in ER-2014-0370 will be

[142] Exhibit 137, Rebuttal Testimony of Marisol Miller at 16:20-23.
[143] Exhibit 137, Rebuttal Testimony of Marisol Miller at 17:12-18; *see also* Tr. 925:20-24 (Miller declining to commit that the Company will offer time of use rates in its next rate case).
[144] Exhibit 137, Rebuttal Testimony of Marisol Miller at 16:18 to 17:11.
[145] *Id.* at 17:5-7. In ER-2016-0156, the Commission entered an order on September 28, 2016 approving various stipulations and agreements among the parties, including one in which the Company agreed to undertake a comprehensive study of time-varying rates and propose such rates in its next case.
[146] Tr. at 924:13-16 (Miller).
[147] Tr. at 1169:1-14 (Marke).

complete within six months, providing adequate time for KCP&L to seek input from other stakeholders on critical factors in the design of time-varying rates.

We therefore ask the Commission to require KCP&L to propose widely available time-varying rates in its next case, or at a minimum, if further data needs are specifically substantiated by the Company, to propose a binding schedule to propose such rates in the rate case after next. We respectfully suggest that the Commission's order on this issue reflect the recommendation made by several witnesses that significant or structural rate design changes are best proposed following Commission-initiated, non-adversarial meetings among stakeholders to discuss design and implementation questions.[148]

CONCLUSION

Sierra Club, NRDC and Renew Missouri appreciate the opportunity to participate in this matter and to submit this post-hearing brief. For the aforementioned reasons, our organizations request that the Commission adopt our positions on Issues XXI(C) (residential customer charge), XXI(D) (block rate proposal), XXI(E) (time-varying rate offerings), and XXII (Clean Charge Network).

[148] Exhibit 400, Direct Testimony of Douglas Jester at 26:11 to 28:3; Tr. at 1104:7-19 (Schmidt); Tr. at 1169:22 to 1170:2 & 1170:20 to 1171:3 (Dr. Marke testimony). Mr. Jester expressly stated that he did not consider the "fairly routine adjustment of an existing block rate structure," such as that proposed by DE, to be "the kind of structural change that warrant[s] that kind of more discursive process." Tr. at 1144:7-15; *see also* Tr. at 1154:5-8.

Respectfully Submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing document was mailed, faxed, or emailed to all counsel of record on this 22nd day of March, 2017.

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