EXHIBIT

Exhibit No.: 304
Issues: Rate Design and Class Cost of Service Study; Clean Charge Network
Witness: David E. Dismukes, Ph.D
Sponsoring Party: Public Counsel
Type of Exhibit: Rebuttal Testimony
Case No.: ER-2014-0370
Date Testimony Prepared: May 7, 2015

MISSOURI PUBLIC SERVICE COMMISSION

AMENDED REBUTTAL TESTIMONY OF DAVID E. DISMUKES

KANSAS CITY POWER AND LIGHT COMPANY CASE NO. ER-2014-0370

Jefferson City, Missouri
May 7, 2015

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.	)))	Case No. ER-2014-0370

AFFIDAVIT OF DAVID DISMUKES

STATE OF LOUISIANA)
)
PARISH OF EAST)
BATON ROUGE)

David Dismukes, of lawful age and being first duly sworn, deposes and states:

1. My name is David Dismukes. I am an expert witness for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

David E Dismukes

David Dismukes
Expert Witness

Subscribed and sworn to me this 7th day of May 2015.

Elizabeth A Bordelon

Notary Public Elizabeth A. Bordelon
Bar #18127

My Commission expires for life.

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REBUTTAL TESTIMONY
OF
DAVID E. DISMUKES

KANSAS CITY POWER AND LIGHT COMPANY

CASE NO. ER-2014-0370

I. INTRODUCTION

Q. PLEASE STATE YOUR FULL NAME, ADDRESS, AND OCCUPATION.

A. My name is David E. Dismukes. My business address is 5800 One Perkins Place Drive, Suite 5-F, Baton Rouge, Louisiana, 70808. I am the same person that provided pre-filed expert witness testimony on the behalf of the Missouri's Office of Public Counsel ("OPC") on April 16, 2015.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to respond to the direct testimony of the Commission Staff, Department of Energy ("DOE"), Sierra Club, and the Missouri Industrial Energy Consumers ("MIEC") and Midwest Energy Consumers Group ("MECG") regarding the class cost of service studies ("CCOSS") and revenue distribution/rate design issues. I am also responding to the Company's supplemental testimony on the Clean Charge Network proposal.

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. My testimony is organized into the following sections:

- Response to Staff's Class Cost of Service Study Recommendations
- Response to MIEC/MECG's Class Cost of Service Study Recommendations
- Response to the Department of Energy's Class Cost of Service Study Recommendations

- Response to MIEC/MECG's Revenue Neutral Adjustment Recommendations
- Response to Staff and the Sierra Club's Residential Customer Charge Recommendations
- Response to the Company's clean charge network proposal.

II. RESPONSE TO STAFF'S CLASS COST OF SERVICE STUDY RECOMMENDATIONS

Q. PLEASE SUMMARIZE THE RECOMMENDATIONS OF COMMISSION STAFF REGARDING THE COMPANY'S PROPOSED CLASS COST OF SERVICE ALLOCATIONS.

A. Staff recommends a number of modifications to the Company's CCOSS model that includes 1) allocating production plant using the Base, Intermediate, and Peak ("BIP") allocation method; 2) allocating the distribution plant accounts 364-368 on the primary or secondary non-coincidental peak ("NCP) demand factors; 3) using the BIP production capacity allocator to allocate off-system sales revenue; 4) allocating property and real estate taxes on the basis of production, transmission, distribution and general plant; 5) allocating payroll taxes on the basis of payroll expenses; and 6) allocating income taxes on each class' earnings.

Q. WHAT ARE YOUR OPINIONS REGARDING STAFF'S PRODUCTION PLANT ALLOCATION METHODS?

A. The BIP method proposed by the Staff is not unreasonable and, at least from a conceptual perspective is very similar to my production plant CCOSS recommendations.

The mechanics of Staff's proposed BIP methods do differ from my production plant CCOSS proposals since the underlying BIP calculations rests primarily upon generation supply characteristics rather than customer demand measures. The BIP method, for instance, ranks plant operating costs from highest to lowest and assigns these costs to three specified periods: base hours; intermediate hours; or peak hours.[1] Base plant is allocated on average demand (energy), intermediate is allocated using the 12 months coincident peak ("12CP') and peak is allocated using the four highest month coincident peaks ("4CP"). From a conceptual perspective, Staff's proposed BIP method is similar to my production plant CCOSS proposals by recognizing the dual-nature of production plant in serving customers (i.e., production plant both produces electricity and is used to meet peak loads).[2] The primary difference between the two cost allocation approaches rests with the emphasis each takes regarding the importance of the generation, as opposed to the peak load functions of production plant.

III. RESPONSE TO MIEC/MECG'S CLASS COST OF SERVICE STUDY RECOMMENDATIONS

Q. PLEASE SUMMARIZE MIEC/MECG'S THREE CCOSS PROPOSALS.

A. MIEC/MECG's first CCOSS proposal consists of a recommendation to allocate production plant and transmission plant costs using either (1) Average and Excess ("AED") method based on the four highest non-coincident peaks ("AED-4NCP") (2) AED method based on the two highest non-coincident peaks ("AED-2NCP") or (3) a Coincident

[1] National Association of Regulatory Utility Commissioners, Electric Utility Cost Allocation Manual, January 1992, p 60.
[2] National Association of Regulatory Utility Commissioners, Electric Utility Cost Allocation Manual, January 1992, p 49.

Peak ("CP") allocation based on the four highest summer CPs, (referred to as the 4CP method). The AED-4NCP method is MIEC/MECG's preferred production plant allocation choice.

Q. WHAT IS THE DIFFERENCE BETWEEN YOUR PRODUCTION PLANT FACTOR AND THE RECOMMENDATIONS OF MIEC/MECG UNDER THE AED APPROACH?

A. The primary difference between the AED method that I propose and the one offered by MIEC/MECG relates to the method of determining the excess demand. Under the approach that I recommend, the excess demand is calculated using each class's maximum NCP whereas MECG uses an excess demand calculation based upon the NCPs for the four highest summer months.

Q. DO THE TWO AED METHODOLOGIES RESULT IN SIGNIFICANT DIFFERENCES IN THE ALLOCATION OF COSTS BETWEEN THE CLASSES?

A. No. DED-R-1 shows the results of all cost of service models presented in this case. The class allocation factors between the method offered by MIEC/MEGC and the one that I propose under AED approach are quite similar. For example, for the residential class the class allocation factor is 41.03 percent under my recommended AED methodology and its 40.68 percent under MIEC/MEGC's approach. Likewise, the large general service and large power service classes shows an allocation factor of 22.17 percent and 18 percent, respectively, under my recommendation methodology; and 22.05 percent and 17.85 percent, respectively, under MIEC/MEGC's methodology.

IV. RESPONSE TO DOE'S CLASS COST OF SERVICE STUDY RECOMMENDATIONS

Q. PLEASE SUMMARIZE THE DOE'S CCOSS PROPOSAL.

A. The DOE proposes to allocate production plant using a 4CP allocation method using the four highest summer month coincident peaks.

Q. WHAT IS THE DIFFERENCE BETWEEN YOUR PRODUCTION PLANT FACTOR AND THE RECOMMENDATIONS OF DOE UNDER THE 4CP APPROACH?

A. The primary difference between the Average and Peak ("AP") and AED methods that I propose and the 4CP method offered by DOE rests with the overall methodology of determining the allocation factors. Both the AP and AED methods are energy weighting methods that recognize that energy loads also play an important role in contributing to production plant costs. The DOE uses a coincident peak method which does not consider the energy loads of customer classes and focuses simply on a customer class's contribution to the system maximum demand.

Q. DOES THE 4CP METHODOLOGY RESULT IN SIGNIFICANT DIFFERENCES IN THE ALLOCATION OF COSTS BETWEEN THE CLASSES COMPARED TO THE OTHER METHODOLOGIES IN THIS CASE?

A. No. As shown in DED-R-1 the results of most cost of service models presented in this case are not significantly different. The class allocation factors between the method offered by DOE and the one that I propose under the AED approach are quite similar. For example, for the residential class the class allocation factor is 41.03 percent under my recommended AED methodology and its 41.54 percent under DOE's approach. Likewise, for the remaining Commercial and Industrial classes the allocation factors of the two methodologies only differ by as low as -0.47 percent and as high as 0.57 percent. The only meaningful difference in results relate to the lighting class which under the 4CP approach does not receive any portion of production plant costs because street lights primarily operate during the evening hours and do not contribute to the system peak.

V. RESPONSE TO MIEC/MECG's REVENUE NEUTRAL ADJUSTMENT RECOMMENDATIONS

Q. PLEASE SUMMARIZE MIEC/MECG'S REVENUE NEUTRAL ADJUSTMENT RECOMMENDATIONS.

A. MIEC/MECG is proposing a revenue neutral adjustment that is intended to bring underearning rate classes 25 percent closer to the cost of service—or 2.8 percent of the total of 11.2 percent for the residential class under MIEC/MECG's cost of service study. Under MIEC/MECG's revenue neutral adjustment proposal the residential class would receive a revenue increase of 2.8 percent while all other rate classes would experience a revenue decrease.[3] This adjustment results in a revenue increase for the residential class of about $11.6 million before any additional revenue increase is distributed to the other rate classes.

Q. WHAT DOES MIEC/MECG MEAN BY A REVENUE-NEUTRAL ADJUSTMENT?

A. The "revenue neutral" adjustment shifts revenue among rate classes without changing the utility's total system test year return or total revenue. Revenues are generally shifted among rate classes by taking revenues from over-earning classes and

[3] Maurice Brubaker, Direct Testimony, Schedule MEB-COS-6.

applying those to under-earning classes with the ultimate goal of moving all classes toward a uniform relative rate of return ("RROR").

Q. SHOULD THE COMMISSION UTILIZE MIEC/MECG'S REVENUE NEUTRAL ADJUSTMENT PROPOSAL?

A. No. The Commission should reject MIEC/MECG's proposed revenue distribution. No party to this proceeding, except, MIEC/MECG, is recommending a revenue neutral adjustment. There is no pressing need to make revenue neutral adjustments because the class rates of returns are not substantially different under my recommended CCOSS. MEIC/MECG's proposal appears to be driven in large part by the results of its own CCOSS that estimates residential class rates of return far lower than the system average.[4] Specifically, MEIC/MECG's analysis shows a RROR of 0.50 which differs considerably from my recommended CCOSS-estimated residential class RROR of 0.74. Thus, the need and degree of this revenue allocation, in large part, is driven by different positions on proposed CCOSS methods.

Q. SHOULD THE COMMISSION ALSO CONSIDER ECONOMIC CONDITIONS WHEN CONSIDERING RATE DESIGN MATTERS AND MIEC/MECG'S REVENUE NEUTRAL ADJUSTMENT?

A. Yes. The state of the economy impacts customers and their ability to pay for services. And, while the U.S. economy may show signs of growth, an analysis conducted by the National Association of Counties, shows that recovery in portions of the state of Missouri may still be lagging. According to the study's 2014 County Economic Tracker most of the counties in Missouri have not recovered to the levels seen before the

[4] Maurice Brubaker, Direct Testimony, Schedule MEB-COS-4.

recession.[5] The study analyzes four economic indicators: job growth; unemployment rates; gross domestic product ("GDP"); and median home prices. Each county is measured on a scale of 0 to 4 with zero showing no recovery in any of the four indicators and a value of four shows all indicators have recovered to pre-recession levels. The study shows that primarily all of the counties in which KCP&L operates have not recovered in any of the four categories to the levels experienced before the recession.[6]

Furthermore, a report released by the Missourians to End Poverty Coalition shows a statewide poverty rate in Missouri of 16.2 percent. According to the report, Missouri has been experiencing an increasing poverty rate since 2008.[7] A review of the counties in which KCP&L operate shows that the majority of the counties in the Company's service territory are experiencing poverty rates in the rage of 15 percent to 20 percent, or on average about 16 percent.[8]

Q. COULD THERE BE OTHER CONSEQUENCES ASSOCIATED WITH REVENUE NEUTRAL ADJUSTMENTS AS PROPOSED BY MEIC/MECG THAT THE COMMISSION SHOULD CONSIDER?

A. Yes. Revenue neutral adjustments could cause rate shock if they are made regardless of the impact on rates. Under MECG's proposal, residential customers would see a rate increase of almost 20 percent given the Company's proposed rate increase. This is a significant increase, and could lead to unexpected consequences. Dr. James Bonbright, in his seminal work on public utility ratemaking, described 10 separate criteria

[5] Explorer.naco.org, 2014 County Economic Tracker
[6] According to the Company's website KCP&L Missouri operates in all or portions of the following counties: Carroll, Chariton, Randolph, Howard, Saline, Lafayette, Cass, Jackson, Clay, and Platte.
[7] Missourians to End Poverty Coalition, State of the State Poverty in Missouri, 2014, p. 3.
[8] Missourians to End Poverty Coalition, State of the State Poverty in Missouri, 2014, p. 2.

he believed identified the desirable characteristics of 'sound rate structure.'[9] The first three he noted dealt with ensuring adequate and predicable revenue flows for the utility in question.

> 1. Effectiveness in yielding total revenue requirements under the fair-return standard without any socially undesirable expansion of the rate base or socially undesirable level of product quality and safety.
>
> 2. Revenue stability and predictability, with a minimum of unexpected changes seriously adverse to utility companies.
>
> 3. Stability and predictability of the rates themselves, with a minimum of unexpected changes seriously adverse to ratepayers and with a sense of historical continuity.[10]

Q. HOW WOULD THE REVENUE NEUTRAL ADJUSTMENTS PROPOSED BY MIEC/MECG BE COUNTER TO THE REFERENCED CRITERIA OF SOUND RATE STRUCTURE LAID OUT BY DR. BONBRIGHT?

A. MECG's proposal is counter to the desire to maintain stable and predictable rates for customers and rate continuity. Stability and predictability in rates is important to customers and implementing a significant rate increase for the residential class and other classes could have unintended consequences.

[9] Bonbright, James C., et. al. (1988), "Principles of Public Utility Rates," Public Utilities Reports, Inc., pp. 382-384.
[10] Bonbright, James C., et. al. (1988), "Principles of Public Utility Rates," Public Utilities Reports, Inc., p. 383.

VI. RESPONSE TO STAFF AND THE SIERRA CLUB'S RESIDENTIAL CUSTOMER CHARGE RECOMMENDATIONS

Q. WOULD YOU PLEASE DISCUSS THE STAFF'S AND THE SIERRA CLUB'S RECOMMENDATION TO INCREASE CUSTOMER CHARGES FOR THE RESIDENTIAL CLASS?

A. Yes. Staff and the Sierra Club recommend increasing customer charges for the residential class on an equal percentage basis to the overall class increase.[11] The Staff states that its CCOSS resulted in a monthly residential customer charge of $16.49.[12] However, taking into consideration a number of factors including rate simplicity, stability, customer understandability and public policy, Staff recommended limiting the customer charge increase to the level of the average residential class increase.[13] Under Staff's revenue proposal this would result in an increase of about $1.00 per month for the residential class's customer charge, resulting in a customer charge of 10.00.[14]

Q. DO YOU AGREE WITH STAFF'S AND THE SIERRA CLUB'S CUSTOMER CHARGE PROPOSALS?

A No. As indicated in my direct testimony, the Commission has ordered in other rate cases that customer charges need not be increased, because customers have greater control of their bills when charges are weighted more heavily to variable, as opposed to fixed charges; which also sends better energy efficiency and conservation signals to ratepayers. Specifically, in the Company's last rate case the Commission ordered not to

[11] Missouri Public Service Commission Staff's Rate Design and Cost of Service Report, 34:11-12; Tim Woolf, Direct Testimony, 4:18-20.
[12] Missouri Public Service Commission Staff's Rate Design and Cost of Service Report, 35:20-21.
[13] Missouri Public Service Commission Staff's Rate Design and Cost of Service Report, 35:21-22, 36:1-2.
[14] Missouri Public Service Commission Staff's Rate Design and Cost of Service Report, 34:13-15.

increase the customer charges for the residential class.[15] Moreover, the Company's current customer charges recover nearly 68 percent of the Company's fixed cost, as identified in my direct testimony. Furthermore, my survey of electric utilities operating in the Mid-west shows that over half of the utilities surveyed have customer charges either equal to or lower than KCP&L's current residential customer charge. Therefore, I recommend the Commission reject the Staff's and Sierra Club's recommendations and instead maintain customer charges for customers at their current rates.

VII. CLEAN CHARGE NETWORK PROPOSAL

Q. PLEASE DESCRIBE THE COMPANY'S CLEAN CHARGE NETWORK PROPOSAL.

A. The Company is requesting that the costs associated with a new electric vehicle ("EV") charging program, which it refers to as the "Clean Charge Network" or "CCN," be included as part of its test year expenses, and recovered through its proposed rates.[16] The Company announced this program, to considerable fanfare, on January 26, 2015.[17] The goal of the program is to install 1,000 EV charging stations that will be capable of serving up to 10,000 EVs.[18] Once the installation of these facilities is complete, the Company claims that the CCN will represent the largest set of utility-owned EV charging stations in the U.S.[19]

[15] 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-2012-0174, Report and Order, Issued January 9, 2013, p. 40.
[16] Supplemental Direct Testimony of Darrin R. Ives, 5: 3-17.
[17] Supplemental Direct Testimony of Darrin R. Ives, 1: 11-13.
[18] Supplemental Direct Testimony of Darrin R. Ives, 1: 15-19.
[19] Supplemental Direct Testimony of Darrin R. Ives, 2: 1-2.

Q. HAS THE COMPANY DISCLOSED ANY DETAILS REGARDING HOW THE CCN WILL BE ROLLED OUT AND HOW EVS WILL BE ABLE TO UTILIZE THIS SYSTEM?

A. No, there are very few details provided by the Company regarding the CCN. In fact, the Company dedicates only one page of pre-filed testimony to discuss the program's roll-out and details. The Company is presumably leaving these details for later since it requests the Commission approve the program now, and open a "working docket" so that parties can "collaboratively discuss issues" associated with the program.[20]

Q. WHAT PROGRAM DETAILS HAS THE COMPANY PROVIDED?

A. The Company outlines only a few aspects associated with the program. Namely that:

- The Company will be collaborating with Nissan Motor Company ("Nissan") in some fashion as a program partner.[21]
- A small subset of the charging stations (15 of the 1,000 stations) will be "fast-charge" stations which will allow an EV to charge from empty to 80 percent of a full charge within 30 minutes.[22] It appears from the press release accompanying the Company's supplemental testimony that these "fast-charge" stations will be provided by Nissan.[23]
- The remaining 985 charging stations will have the capability to provide a 25 mile charge for every hour of EV charging time.[24] It appears from the press release

[20] Supplemental Direct Testimony of Darrin R. Ives, 2: 19-23.
[21] Supplemental Direct Testimony of Darrin R. Ives, 2: 11.
[22] Supplemental Direct Testimony of Darrin R. Ives, 2: 2-4.
[23] Supplemental Direct Testimony of Darrin R. Ives, Schedule DRI-1, p. 2.
[24] Supplemental Direct Testimony of Darrin R. Ives, 2: 4-5.

accompanying the Company's supplemental testimony that these standard charging stations will be provided by ChargePoint.[25]

- The Company will be collaborating with a number of other organizations ("participating organizations") located throughout its service territory.[26]
- Supposedly, these "participating organizations" will be considered "host sites" that will have separate electricity meters for purposes of the program.[27]
- EVs using the CCN will get free electricity that will be paid "through these partnerships and a partnership with Nissan" during some type of "pilot period."[28] The Company indicates that electricity costs not recovered through these partnerships for the program will be paid by the remaining participating organizations at their standard tariffed rates.[29]
- "Participating organizations" serving as hosts will presumably provide the charging station locations to the Company for free.[30]

Q. DID THE COMPANY INDICATE THE OVERALL CAPITAL INVESTMENT THAT WOULD BE NEEDED TO DEVELOP THE CCN?

A. Yes, at least partially. The Company indicates that the total investment cost associated with the CCN is "approximately $20 million" on a total company basis.[31] The Company has not identified any factors that could lead to either a higher or lower investment amount. The Company has not indicated what additional capital investments

[25] Supplemental Direct Testimony of Darrin R. Ives, Schedule DRI-1, p. 1.
[26] Supplemental Direct Testimony of Darrin R. Ives, 2: 9.
[27] Supplemental Direct Testimony of Darrin R. Ives, 2: 12-13.
[28] Supplemental Direct Testimony of Darrin R. Ives, 2: 10-12.
[29] Supplemental Direct Testimony of Darrin R. Ives, 2: 13-16.
[30] Supplemental Direct Testimony of Darrin R. Ives, 2: 16.
[31] Supplemental Direct Testimony of Darrin R. Ives, 5: 7-8.

will need to sustain the CCN outside of the proposed 1,000 charging stations. The Company has not provided the capital budgeting detail associated with this $20 million investment in its testimony nor its exhibits.[i] The Company indicates that the KCP&L-Missouri jurisdictional share of this capital investment will "be in the range of $7 to $9 million at that time if the [CCN] is fully deployed."[32]

Q. WERE THESE AMOUNTS INCLUDED IN THE COMPANY'S ORIGINAL FILING?

A. Yes, at least according to the Company's assertions. The Company indicated that adjustment RB-20 includes the plant in service amount for the jurisdictional share of the CCN capital investment and that Adjustment CS-49 (Miscellaneous Expense) has an amount of $385,947 that was included as a "placeholder" to cover the expenses associated with the CCN program.[33]

Q. ARE THERE ANY PROBLEMS ASSOCIATED WITH THE COMPANY'S CCN PROPOSAL?

A. Yes there are a number of problems associated with the program that include:

- The Company's request puts the proverbial "cart before the horse" since it appears that the program has not benefited from any Commission input or feedback, nor does there appear to be any significant stakeholder input into the CCN program design. The Company requests that the Commission approve a $20 million investment program and then, at some undefined later date, open up a proceeding to "discuss issues" related to the program and "explore potential [program]

[32] Supplemental Direct Testimony of Darrin R. Ives, 5: 16-17.
[33] Supplemental Direct Testimony of Darrin R. Ives, 5: 3-5; and 5: 21-22.

benefits."[34] The Company cannot request ratepayer support for a $20 million public policy program without first seeking input into the public policies that should govern such a program.

- The Company's CCN proposal is also premature since there appears to be no analysis supporting the CCN's need, scope, and costs. The Company is asking the Commission to approve a $20 million public policy program but has failed to provide any information on whether or not the proposed investment amount is prudent or whether the full level of this investment will be used and useful, particularly in the test year.
- The proposal is missing a host of critical program details necessary to ascertain the CCN's potential public benefit and likely success. In particular, the CCN proposal fails to provide any cost-benefit analysis that is specific to the Company's Missouri service territory.
- There are a number of important public policy issues associated with the CCN's details that need close examination, particularly those associated with the unfair competitive advantage the CCN may be affording the Company relative to competitive firms offering EVs or other types of alternative fuel vehicles.

Q. HAS THE COMPANY FILED A REQUEST FOR A WORKING DOCKET?

A. Yes. On February 5, 2015 the Company filed a motion requesting that the Commission open a working case to "examine and review issues" surrounding the proposed CCN. In its filing the Company indicated it sought to recover costs related to

[34] Supplemental Direct Testimony of Darrin R. Ives, 2:19-23; and 3: 17.

the CCN in its ongoing rate case.[35] The Company believes there should be a "bright line distinction" between the cost recovery issues in the rate case and broad discussion of general regulatory policy issues.[36]

> Specifically, issues regarding the impact of the Clean Charge Network pilot project on KCP&L's revenue requirement would be addressed in Case No. ER-2014-0370 ("Rate Case"), and all other general regulatory and public policy issues attendant to electric vehicles and electric vehicle charging stations would be explored on a collaborative basis in the working docket.

The Commission denied this request, sharing Staff's concerns about possible ex parte communication conflicts.[37]

Q. HAS THE COMPANY INDICATED THE DEGREE TO WHICH THE COMMISSION, COMMISSION STAFF, OR OTHER STAKEHOLDERS HAVE BEEN INCLUDED IN THE DEVELOPMENT OF THE CCN?

A. No. The Company has not articulated how the Commission, Commission Staff, or other stakeholders have participated in the development of the CCN. The development of the program, in fact, appears to have been completed over a relatively short time period. The Company notes, for instance, that it included a placeholder for the CCN in its October 30, 2014 filing in the event the program was to "come to fruition."[38] In just 11 weeks, the CCN appears to have gone from an uncertain idea to a full blown $20 million dollar "largest utility-owned electric vehicle charging station installation in the United

[35] In the matter of a working case to review electric vehicle charging stations. Public Service Commission of the State of Missouri. File No. EW-2015-0184. Order Directing Response. February 13, 2015.
[36] In the matter of a working case to review electric vehicle charging stations. Public Service Commission of the State of Missouri. File No. EW-2015-0184. Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company's Response to Commission Order. February 19, 2015.
[37] In the matter of a working case to review electric vehicle charging stations. Public Service Commission of the State of Missouri. File No. EW-2015-0184. Order Regarding a Working Case to Review Issues Surrounding Electric Vehicle Charging Stations. March 4, 2015; and File No. ER-2014-0370, Order Granting Motion for Leave to File Supplemental Direct Testimony. March 11, 2015.
[38] Supplemental Direct Testimony of Darrin R. Ives, 5: 21.

States"[39] program. The Company states that it "included in adjustment RB-20 a budgeted plant in service amount" but a review of the Company's rate model filed in this case shows no specific entry for the CCN program, which is now anticipated to be as much as a $9 million adjustment to plant in service.[40] This rapid and dramatic change in capital cost and scope, over a busy holiday season to boot, suggests few parties outside of the Company had any input into the development of the CCN. The fact that the Company's supplemental testimony fails to identify any corporate partners, (or participating organizations) outside Nissan and ChargePoint, raises considerable questions about the scope of even the private-sector involvement in the Company's proposed program.

Q. WHY IS PUBLIC PARTICIPATION IN A PROGRAM OF THIS NATURE IMPORTANT?

A. The limited information included in the Company's supplemental testimony suggests that it will need to engage a number of participants in order for the CCN to be successful: corporate partners; automobile manufacturers and dealers; automobile drivers; state agencies; and most importantly, ratepayers. Each of these participants will likely be providing some degree of financial support, or subsidy, in order for the CCN to be successful. For instance, Nissan and the participating organizations will supposedly be providing free electricity during the program pilot period, other participating organizations will be providing free space for charging station locations, and ratepayers will be providing a significant if not the overwhelming degree of subsidy for the CCN at least as it is currently proposed by the Company. It is simply unreasonable to ask

[39] Supplemental Direct Testimony of Darrin R. Ives, 2: 1-2.
[40] Supplemental Direct Testimony of Darrin R. Ives, 5: 16.

ratepayers to subsidize a program of this nature without allowing them **upfront** and commensurate input into the program's goals, scope, and design. Denying ratepayer participation in this **public policy program** of this nature is akin to denying a majority investor any operational and management input into the company in which he or she is investing.

Q. WON'T THE COMPANY'S PROPOSED POST-PILOT PERIOD STAKEHOLDER PROCESS SUFFICE IN ATTAINING PUBLIC INPUT INTO THE PROGRAM?

A. No. The post-pilot period stakeholder process will effectively be a "day late and a dollar short," or in this case, $20 million dollars short. First, though in response to discovery the Company indicated its intention for the program to be a three-year pilot program, it has not prohibited the ability for the program to be extended or made permanent if program goals (whatever those may be) are slow in materializing.[41] Second, it is likely that the overwhelming majority of the program's costs and major design decisions will have been locked into place, regardless of any changes proposed through the stakeholder process. While there may be a few opportunities for minor program design modifications, most of the decisions about program scope, costs, and distribution of charging locations will have been made.

Q. DOES THE COMPANY'S PROPOSED STAKEHOLDER PROCEEDING INCLUDE ANY DETAIL, OR ENVISION A HIGH DEGREE OF MUTUAL INTERACTION?

A. No, at least not from the description provided in the Company's supplemental testimony. The Company notes that the purpose of the "working docket' will be for

[41] Company's Response to Williams Nathan Interrogatories, Question 0414.

"interested stakeholders" to "learn more" about the CCN program and "discuss issues" associated with a number of different topics.[42] Having a working docket where parties can "learn" and "discuss" issues is not the same as one where goals will be identified and action items will be defined and executed. It appears that in this working docket, stakeholders will be handed a *fait accompli* in terms of scope, cost, and design of the CCN program and can express some concerns if they have any interest. The process, by which the Company will take recommendations for changes in program design, and how any changes might be made, is undefined and presumably left to another day.

Q. HOW DO YOU KNOW RATEPAYERS WILL BE SUBSIDIZING THE CCN PROGRAM?

A. The Company's originally-filed exhibits and supplemental testimony suggest that ratepayers will be providing a 100 percent subsidy for this proposed program. For instance, the Company indicates an eventual jurisdictional rate base adjustment of up to $9 million for the CCN.[43] The Company also notes annual expenses of around $385,000 per year.[44] The Company also notes that no "meaningful revenues"[45] will be generated in the test year for this program and the Company has provided no forecast regarding when any "meaningful revenues" will be anticipated from this program. Thus, the program will be incurring significant investment costs and expenses and no revenues: the cost of the program, therefore, will be subsidized by ratepayers.

Q. ARE THERE ANY INCOME DISTRIBUTION ISSUES ASSOCIATED WITH A PROGRAM OF THIS NATURE?

[42] Supplemental Direct Testimony of Darrin R. Ives, 2: 20-23.
[43] Supplemental Direct Testimony of Darrin R. Ives, 5: 15-17.
[44] Supplemental Direct Testimony of Darrin R. Ives, 5: 5.
[45] Supplemental Direct Testimony of Darrin R. Ives, 6: 3-4.

A. Yes. The Company is asking Missouri jurisdictional ratepayers to subsidize a program that has an uncertain capital cost but is anticipated to run as high as $9 million. The capital costs associated with the CCN program will be recovered by all customers regardless of household size or income. The CCN program is designed to support EV deployment in order to reduce transportation-related carbon emissions and improve environment quality: yet EVs are expensive. Most commercially-available EV models on the market today are priced some 65 percent higher than their gasoline-fueled equivalent. Some EVs are even more expensive with a Tesla Model S running from $71,000 to over $105,000: clearly a luxury afforded to only the wealthiest households.[46] Indeed, a number of surveys have shown that the household income level associated with an EV purchase was above $100,000,[47] some 111 percent above the Missouri median household income level.[48] The Company's EV program, therefore, will likely be providing a subsidy to relatively wealthier households, using funds derived from the Company's entire customer pool. While there may be a number of offsetting environmental concerns justifying this subsidy, the equity and income distributional impacts of this type of program need to be explored and discussed, particularly given the Company's goals of setting a program scope that is anticipated to be the "largest in the U.S."

Q. IS THE COMPANY PROPOSING TO DEVELOP A SEPARATE EV TARIFF AND CUSTOMER CLASS?

[46] See: http://www.caranddriver.com/tesla/model-s.
[47] See, Hirsch, Jerry (August 27, 2014), "Clean autos get boost in 3 bills," Las Angeles Times; see also, Gorzelany, Jim (April 22, 2014), "Electric-Car Buyers Younger and Richer than Hybrid Owners," Forbes.
[48] See, State & County QuickFacts, Missouri, United States Census Bureau, http://quickfacts.census.gov/qfd/states/29000.html.

A. No. The Company is not proposing a separate tariff nor rate class for its EV program despite what appears to be a relatively large program, with 1,000 charging stations capable of charging up to 10,000 vehicles.[49] The Company's supplemental testimony simply notes that participating organizations (those hosting the charging sites) will be charged at their "standard tariff rate."[50]

Q. DO OTHER UTILITIES HAVE SEPARATE TARIFFS AND CUSTOMER CLASSES FOR ALTERNATIVE VEHICLE SERVICE?

A. Yes. A recent annual survey prepared by Northeast Group shows that there are 25 utilities across 14 states with EV tariffs.[51] These states include Alabama, Alaska, Arizona, California, Georgia, Hawaii, Indiana, Kentucky, Maryland, Michigan, Minnesota, Nevada, Texas and Virginia.[52]

Q. HAVE OTHER UTILITIES ASSESSED THE EFFECTIVENESS OF THEIR EV PROGRAM DESIGNS BEFORE PUTTING THEM INTO PLACE?

A. Yes. Many of the tariffed EV programs offered by utilities are first set up as experimental or pilot programs and while the Company's proposal is technically being initiated on a pilot basis, its scale and scope are not commiserate with the scale and scope of other utility EV pilot programs. Further, many other utility EV programs attempt to test their programs on a smaller market subset, prior to full-scale roll-out. The Company appears to be rolling out all 1,000 of its charging stations concurrently with its

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[49] Supplemental Direct Testimony of Darrin R. Ives, 1: 16-19.
[50] Supplemental Direct Testimony of Darrin R. Ives, 2: 15-16.
[51] PR Newswire. 2014. Benchmark reveals 25 electric utilities across 14 states offering electric vehicle rates and tariffs to boost customer engagement. Available at: http://www.prnewswire.com/news-releases/benchmark-reveals-25-electric-utilities-across-14-states-offering-electric-vehicle-rates-and-tariffs-to-boost-customer-engagement-267355001.html.
[52] See: http://www.northeast-group.com/research.html.

pilot program: in other words, there is little difference (in terms of scope) of the pilot program and the full program.

Q. CAN YOU LIST SOME EXAMPLES OF OTHER UTILITY EV PILOT PROGRAMS?

A. Yes. Arizona Public Service ("APS") offers an experimental time-of-use ("TOU") rate for its residential customers. The three-year pilot (recently extended to four years) was approved in 2011 and is actually a "study project," at the end of which APS would assess the effectiveness and success of the study and recommend options including continuation or modification.[53] APS designed the study "so that customers who enjoy the benefits of the Study will largely support its costs."[54] It is noted that EV drivers who participate in the APS EV rate schedule "would pay a substantial percentage of the costs associated."[55] Similarly, both Kentucky utilities offer EV rates as a three-year pilot program, open to a maximum of 100 customers.[56] In Michigan, Consumers Energy offers two residential EV charging rates on an experimental basis.[57] In Virginia, Dominion Virginia Power ("Dominion") has two experimental EV charging rates, each available to 750 participants (1,500 total) over a three-year pilot period under the rationale that:

[53] In the matter of Arizona Public Service Company's application for approval of proposed electric vehicle readiness demonstration project. Arizona Corporation Commission. Docket No. E-01345A-10-0123, Decision No. 72582. September 15, 2011. ¶5.

[54] In the matter of Arizona Public Service Company's application for approval of proposed electric vehicle readiness demonstration project. Arizona Corporation Commission. Docket No. E-01345A-10-0123, Decision No. 72582. September 15, 2011. ¶6.

[55] In the matter of Arizona Public Service Company's application for approval of proposed electric vehicle readiness demonstration project. Arizona Corporation Commission. Docket No. E-01345A-10-0123, Decision No. 72582. September 15, 2011. ¶6.

[56] See, https://lge-ku.com/environment/electric-vehicles/low-emission-vehicle-pilot.

[57] Consumers originally offered residential customers three different pricing options, however the third option was not utilized and terminated in 2013. In the matter of the application of Consumers Energy Company for authority to amend its tariffs governing its experimental residential plug-in electric vehicle charging program. Michigan Public Service Commission. Case No. U-17518. January 17, 2013.

> ...limiting the proposed level of participation to 1,500 customers will help contain the costs of the program, while still providing a suitable level of customer feedback and data to measure the adoption of EVs, to understand customer charging patterns, to enhance [Dominion's] ability to offer services, and to evaluate the customer's willingness to charge off-peak. Additionally, [Dominion] asserts that by limiting participation, [it] will be able to balance costs and enrollment, while ensuring a sufficient level of data is generated to enable [Dominion] to develop EV rates, programs, and policies to serve its service territory in Virginia in the future.[58]

Q. HAVE ANY OTHER COMMISSIONS EXPRESSED ANY CONCERNS, OR EVEN PROHIBITIONS FOR SUBSIDIZING ALTERNATIVE VEHICLE SERVICE?

A. Yes. While many Commissions have actively supported EV programs and unique EV tariffs, a number have also noted that this new customer class needs to pay its own way on a cost-of-service basis. For instance, in 2012, the Oregon Public Utility Commission ruled that investor-owned utilities may employ rate recovery practices if, and only if, they make a compelling argument to OPUC that rate recovery benefits all ratepayers. The extent to which a utility's case is compelling will depend on whether its request for rate recovery meets each of the following criteria: (1) the utility's cost in EV charging stations meets the same net benefit test as other utility investment; (2) the EV charging infrastructure is essential at the location to facilitate EV adoption in the area; (3) there is no likelihood that a third-party EVSP or utility affiliate to provide the same services at the location or a nearby location; and (4) the utility has a separate EV rate class.[59]

Q. HAVE OTHER STATE COMMISSION'S RECOGNIZED THE IMPORTANCE OF UP-FRONT PUBLIC PARTICIPATION IN THE DEVELOPMENT OF EV PROGRAMS?

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[58] Application of Virginia Electric and Power Company for approval to establish an electric vehicle pilot program pursuant to § 56-234 of the Code of Virginia. Virginia State Corporation Commission. Case No. PUE-2011-00014. February 17, 2011.

[59] In the matter of Public Utility Commission of Oregon's investigation of matters related to electric vehicle charging. Oregon Public Utility Commission. Docket No. UM 1461, Order No. 12-013, Issued January 19, 2012.

A. Yes. Many states have addressed policy issues and roll outs of EV programs through working groups and formal proceedings. For instance, the Illinois Commerce Commission Initiative on Plug-In Electric Vehicles was formed in 2010. The purpose of this initiative is to "guide the Commission in understanding and beginning to consider future regulatory issues necessary to accommodate this new era of transportation."[60] Similarly, in 2012, the District of Columbia Public Service Commission opened Formal Case 1096 to conduct an investigation into the regulatory treatment of electric vehicles and related services in the District of Columbia.[61] And, in Michigan, a Plug-in Electric Vehicle Preparedness Taskforce was established by the Public Service Commission in 2010. The taskforce includes members of "regulated and unregulated utilities, nonprofit organizations, government groups, electrical contractors and inspectors, automotive manufacturers, and local clean energy organizations."[62] This group addresses issues such as "education and communication, incentives, rates, infrastructure issues, building code changes to streamline the installation of charging equipment, among others."[63]

Q. SHOULD THE COMMISSION APPROVE THE COMPANY'S CCN COST RECOVERY REQUEST GIVEN THE PREMATURE NATURE OF THE PROGRAM?

A. No. The Company appears to have developed the CCN in a relatively independent fashion with little input from the primary stakeholder being asked to provide the financial support for this program: ratepayers. The Company is certainly within its rights to develop

[60] See Illinois Commerce Commission Initiative on Plug-In Electric Vehicles: https://www.icc.illinois.gov/electricity/pev.aspx.
[61] Formal Case No. 1096, in the matter of the investigation into the regulatory treatment of providers of electric vehicle charging stations and related services. Public Service Commission of the District of Columbia. Order No. 16713. February 16, 2012.
[62] See MPSC Plug-in Electric Vehicle Preparedness Taskforce: http://pluginmichigan.org/about-us.
[63] See MPSC Plug-in Electric Vehicle Preparedness Taskforce: http://pluginmichigan.org/about-us.

an independent EV program without stakeholder input; but in doing so, it should pay for that program itself, not ask that it be substantially supported with ratepayer subsidies. The Company has not provided any information upon which the Commission can rest assured that the total capital investment and annual operating expenses are in the public interest. The Company's failure to provide any convincing evidence that the CCN is in the public interest, coupled with a host of other problems and issues with the program (that I will discuss in the following sections of my testimony), is the basis for my recommendation that the Commission reject cost recovery for the CCN at this time.

Q. HAS THE COMPANY PROVIDED ANY DOCUMENTATION SUPPORTING THE NEED FOR THE CCN PROGRAM OR ITS SCOPE?

A. No. The Company has provided no information in its supplemental testimony supporting the need or the scope of the CCN investment. The Company's testimony includes two technical reports assessing the potentials for electric vehicle deployment in California.[64] The Company has not explained what relevance this report has to implementation in Missouri nor has it explained the degree to which the California technical reports influenced the development of this CCN initiative. The Company also provides two economic impact analyses associated with EV deployment in California,[65] but once again, fails to explain the relevance these reports have to Missouri or the Missouri economy. Lastly, the Company has provided two confidential schedules that appear to be marketing materials and the statistics on current number of charging stations and utilization figures (e.g., kWh consumption, average charging duration). While these

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[64] Supplemental Direct Testimony of Darrin R. Ives, Schedule DRI-2 and DRI-3.
[65] Supplemental Direct Testimony of Darrin R. Ives, Schedule DRI-4 and DRI-5.

last two pieces of information appear to have more program-specific or Missouri-specific information, the Company has failed to explain how this information was utilized in developing CCN program details and scope.

Q. HAS THE COMPANY PROVIDED ANY INFORMATION ON PROJECT GOALS?

A. No, the Company has provided no explicit information on how any public policy goals, or even corporate goals, will be met through the implementation of the CCN. The clear and likely benefit associated with the CCN program is the reduction in transportation-related air emissions. But the Company has not defined or estimated level of emissions reductions anticipated to arise from the CCN. The Company has not explained how the CCN has been developed to assist the state in reducing non-attainment challenges under current and proposed new National Ambient Air Quality Standards ("NAAQS"). The Company references potential benefits that could arise with the Environmental Protection Agency's ("EPA's") regional ozone standards,[66] but does not discuss how EVs would fit into any attainment goals. In fact, the Company's supplemental testimony provides no details on how it has sought input, or has been coordinating any CCN program implementation details with state environmental regulators to maximize the placement of EV charging stations relative to geographically concentrated air emissions locations despite its past coordination with the Kansas City Regional Clean Cities Coalition to bring ten charging stations to that area.[67]

Q. HAS THE COMPANY PROVIDED ANY INFORMATION ON LIKELY EV CUSTOMER PARTICIPATION?

[66] Supplemental Direct Testimony of Darrin R. Ives, 3: 7-10.
[67] See Raletz, Alyson (June 24, 2011), "KCP&L plans 10 new electric vehicle charging stations around Kansas City," Kansas City Business Journal.

A. No. The Company's supplemental testimony has provided no information on likely EV participation or any market research it has conducted justifying the scope and placement of its EV charging stations. This is an important and critical shortcoming in the Company's request. Without this information, there is little way the Commission can ascertain whether the assets for which the Company is seeking cost recovery are used and useful: a conclusion that is difficult to reach just on the scant information provided by the Company. The Company's supplemental testimony also fails to address the fact that retail gasoline prices have fallen by almost 35 percent in Missouri,[68] compressing the differential in the gas gallon equivalent ("GGE") between EV and gasoline to a level of only $1.35 per gallon, raising even further questions about future EV deployment and the potential capacity utilization level, and used and usefulness of the Company's CCN investment.

Q. HAS THE COMPANY PROPOSED ANY PERFORMANCE-BASED MEASURES ASSOCIATED WITH MEASURING ITS SUCCESS IN MEETING CCN PROGRAM GOALS?

A. No. The Company has not proposed any performance-based goals in meeting EV adoption levels or emissions reductions. The Company notes that it will "gather information" during the course of the pilot period,[69] but has provided no details, nor made any commitments regarding any periodic reports or analyses it will conduct or make available to the commission and stakeholders measuring program participation, usage, and success, at least outside the working docket proposal. The Company also fails to

[68] Weekly Retail Gasoline and Diesel Prices, Energy Information Administration, http://www.eia.gov/dnav/pet/pet_pri_gnd_dcus_r20_m.htm; Figure denotes price change in Midwest "Regular" retail gasoline prices from April 2014 to April 2015.
[69] Supplemental Direct Testimony of Darrin R. Ives, 2: 18-19.

identify any benchmarking or comparative analysis it will conduct to ascertain how well its program is performing relative to other large electric utility EV programs.

Q. DOES THE COMPANY'S CCN SHIFT ANY RISKS TO RATEPAYERS?

A. Yes. If the Commission approves the CCN in this rate case, then ratepayers will bear a good part, if not the entire performance risk associated with the CCN program. Ratepayers, for instance, will bear the performance risk of the CCN program if it ultimately proves too large relative to the EV market. Ratepayers will bear the risk if the market proves to be slow in developing. Ratepayers will also bear the program performance risk of other exogenous changes impacting EV adoption such as changes in tax policy (and incentives) or changes in relative fuel costs. Consider that just over the past year, retail gasoline prices have fallen by approximately 35 percent,[70] something that can clearly impact EV adoption, but something that appears to not be considered in the Company's CCN program scope.

Q. HAS THE COMPANY PROVIDED ANY COST-BENEFIT ANALYSIS TO SUPPORT ITS CCN COST RECOVERY REQUEST?

A. No. The Company has provided no cost-benefit analysis nor any other Missouri or service-territory-specific cost-benefit analysis ("CBA") to support its CCN cost recovery proposal. The Company provides general statements of benefits (with no quantification) and identifies a range of costs likely to be included in the test year for ratemaking purposes, but has no comprehensive analysis supporting what it claims will be the largest EV charging program in the U.S.

[70] Weekly Retail Gasoline and Diesel Prices, Energy Information Administration, http://www.eia.gov/dnav/pet/pet_pri_gnd_dcus_r20_m.htm; Figure denotes price change in Midwest "Regular" retail gasoline prices from April 2014 to April 2015.

Q. SHOULD THE COMMISSION APPROVE COST RECOVERY FOR THE CCN GIVEN THIS LACK OF BASIC PROGRAM INFORMATION?

A. No. The Company's CCN proposal includes scant details about the need and scope of the program. The proposed CCN has not been offered with any type of cost-benefit analyses. While there may be an argument for promoting a program of this nature, even with a subsidy, the Company has not clearly articulated that argument nor has it identified the degree, scope, and duration of any proposed subsidy for the CCN. The Company's current proposal also shifts considerable performance risk away from itself and onto ratepayers and should be rejected at the current time.

Q. HAS THE COMPANY PROVIDED AN ADEQUATE LEVEL OF INFORMATION ASSOCIATED WITH MANY OF THE CCN'S IMPLEMENTATION DETAILS?

A. No. The Company's supplemental testimony provides very few details about many important CCN implementation details including those associated with the nature of the Company's proposed pilot program, the relationship and obligations between the Company and its corporate partners, as well as the relationship and obligations between the Company and the organizations participating in the program.

Q. PLEASE DISCUSS THE MISSING DETAILS ASSOCIATED WITH THE COMPANY'S PROPOSED PILOT PERIOD.

A. An important aspect of this program is the Company's intention to facilitate "free electricity" for EVs participating in the program that will be paid through a partnership with Nissan during some type of "pilot period."[71] The Company indicates that electricity costs not recovered through Nissan for the program will be paid by the remaining participating

[71] Supplemental Direct Testimony of Darrin R. Ives, 2: 11-12.

organizations at their standard tariffed rates.[72] The Company's cost recovery request does not provide important information about this pilot period including, but not limited to:

- Why the Company is not asking for Commission input or approval for a pilot process or program.
- Why the Company is not asking for Commission input or approval for a program that will be facilitating free electricity service for EVs.
- The terms and conditions under which the pilot program will be extended and whether the Company will seek approval from the Commission if the pilot is to be extended.
- The level of financial support (in total dollars or dollars per EV) that Nissan will commit to the pilot program and the time period (duration) for which it is willing to provide this support.
- The degree of financial support (in total dollars or dollars per EV) that other participating organizations will be expected to contribute to CCN participants during the pilot program.
- Any written agreements between the Company and any participating organizations outlining their respective obligations and liabilities for participation in the EV program including (but not limited to) the terms and conditions for the space utilized for charging stations and the maintenance and upkeep of the stations and surface areas upon which the stations are located.

Q. DISCUSS THE MISSING PROGRAM DETAILS ASSOCIATED WITH THE COMPANY'S CHARGING STATION DEPLOYMENT.

[72] Supplemental Direct Testimony of Darrin R. Ives, 2: 15-16.

A. The Company notes that a small subset of the charging stations (15 of the 1,000 stations) will be "fast-charge" stations which will allow an EV to charge from empty to 80 percent of a full charge within 30 minutes.[73] It appears from the press release accompanying the Company's supplemental testimony that these "fast-charge" stations will be provided by Nissan.[74] The Company does not indicate what analysis was utilized to determine that 15 was an appropriate number of "fast-charge" stations, and what other public policy factors were considered in determining the number and location of these facilities. Further, there is some small discrepancy between the press release, which notes 16 fast-charge stations, and the Company's testimony which identified only 15 fast-charge stations.[75]

Q. WHAT ABOUT THE STANDARD CHARGING STATION DEPLOYMENTS?

A. The Company notes that the remaining 985 charging stations will have the capability to provide a 25 miles charge for every hour of EV charging time.[76] It appears from the press release accompanying the Company's supplemental testimony that these standard charging stations will be provided by ChargePoint.[77] However, there are no details regarding why particular locations were established, and whether they are consistent with the Company's overall market research and program goals. The Company's testimony suggests that organizations can volunteer to participate in the program.[78] However, the Company has not explained whether locating ratepayer-subsidized charging stations at locations on a volunteer basis is the most effective means

[73] Supplemental Direct Testimony of Darrin R. Ives, 2: 2-4.
[74] Supplemental Direct Testimony of Darrin R. Ives, Schedule DRI-1, p. 2.
[75] Supplemental Direct Testimony of Darrin R. Ives, 2: 4; and Schedule DRI-1, p. 3.
[76] Supplemental Direct Testimony of Darrin R. Ives, 2: 5.
[77] Supplemental Direct Testimony of Darrin R. Ives, Schedule DRI-1, p. 3.
[78] See, Supplemental Direct Testimony of Darrin R. Ives, 2: 9-10.

of maximizing EV deployment potential. The Company has not explain what types of "screens" will be conducted to ascertain whether a potential participating location is consistent with its overall goals. Further, the press release accompanying the Company's supplemental testimony suggests that individuals can "nominate" locations: something not discussed directly in the testimony.[79] The Company has provided no information on how this nomination process will work, despite the fact that it will likely have some bearing on how certain standard charging stations that will be financially supported by ratepayers will be supported.

Q. DISCUSS THE MISSING PROGRAM DETAILS ASSOCIATED WITH THE ANTICIPATED RELATIONSHIPS BETWEEN THE COMPANY AND ITS PARTICIPATING ORGANIZATIONS.

A. The Company notes that it will be collaborating with a number of other organizations ("participating organizations") located throughout its service territory.[80] The Company does not indicate (a) how many organizations will be participating in this effort; (b) the nature of their participation in the CCN program; (c) the degree to which these organizations will sharing in the costs of the program; (d) the degree to which the organizations will be providing any in-kind contributions to the program; (e) any contractual terms and arrangements the Company has secured with these organizations as participants in the program.

Q. HAS THE COMPANY IDENTIFIED ANY PROGRAM DETAILS ASSOCIATED WITH THE HOST SITES?

[79] Supplemental Direct Testimony of Darrin R. Ives, Schedule DRI-1, p. 4.
[80] Supplemental Direct Testimony of Darrin R. Ives, 2: 9.

A. No. Supposedly, these "participating organizations" will be considered "host sites" that will have separate electricity meters for purposes of the program and will presumably provide the charging station locations to the Company for free.[81] No details on how stations will be sited, maintained, liability issues, etc. have been identified by the Company. The Company has provided no model or templates for written agreements that will be used with participating organizations or any agreements that have been executed with these participating organizations to date.

Q. DOES THE LEVEL OF MISSING INFORMATION DISCUSSED ABOVE JUSTIFY EXCLUDING THE COSTS OF THE CCN IN RATES?

A. Yes. The CCN program, as currently proposed, leaves a host of program-specific details open. The CCN program should be rejected for cost recovery, at the current time, until ratepayers fully understand and have an opportunity to fully respond to the nature of the programs and the obligations and requirements that will be imposed on program participants, particularly the participating organizations. Failure to identify these participating organization obligations shifts performance risk away from the Company and these participating organizations and onto ratepayers since ratepayers will be required to cover the costs of the program if these entities individually, or collectively, fail to act in a fashion that pushes the CCN into becoming a success.

Q. ARE THERE ANY POTENTIAL COMPETITIVE MARKET ISSUES ASSOCIATED WITH THE COMPANY'S CCN PROPOSAL?

A. Yes. There are a number of potential competitive market issues that need to be explored and addressed prior to approving the CCN. First, the Company, through its

[81] See, Supplemental Direct Testimony of Darrin R. Ives, 2: 16, and Schedule DRI-1, p. 4.

corporate and participating partners, will offer free electricity to early participants in the CCN pilot program. Second, the Company will likely be using its status as a regulated utility to subsidize EV charging stations and their operation and maintenance: an opportunity not afforded to other alternative and energy efficient vehicles, much less traditionally-fueled vehicles.

Q. WHY IS THE FREE ELECTRICITY OFFER IN THE COMPANY'S CCN PILOT PROGRAM PROBLEMATIC?

A. Offering free electricity and distribution service to participating EVs, even in the short run, affords those participants, and the Company's program partners, a competitive advantage not common for other competing energy efficient, low-emissions, and other alternative transportation vehicle types. While many alternative-fueled vehicles get a variety of tax incentives and other subsidies, these are typically offered across a range of alternative vehicle types provided they meet certain qualifying or public policy standards. For instance, Missouri currently offers two incentives related to alternative fuels and advanced vehicles: the Alternative Fueling Infrastructure Tax Credit and the Alternative Fuel Vehicle Emissions Inspection Exemption. However, neither incentive applies solely to natural gas or electric vehicles. The Alternative Fueling Infrastructure Tax Credit[82] provides an income tax credit for the cost of constructing a qualified alternative fueling station.[83] Fuels eligible for the tax credit include any mixture of biodiesel and diesel fuel, as well as fuel containing at least 70 percent of the following alternative fuels: ethanol,

[82] Mo. Rev. Stat. § 135.0710

[83] The credit may be used towards the cost of constructing qualified alternative fueling station and is 20 percent of the costs directly related to the purchase and installation of any alternative fuel storage and dispensing equipment or electric vehicle supply equipment (up to $15,000 for individuals or $20,000 for businesses).

compressed natural gas (CNG), liquefied natural gas (LNG), liquefied petroleum gas or propane, hydrogen, and electricity. Additionally, per the Alternative Fuel Vehicle Emissions Inspection Exemption[84], vehicles powered exclusively by electricity, including low-speed vehicles, hydrogen, or fuels other than gasoline that are exempt from motor vehicle emissions inspection under federal regulation, are exempt from state emissions inspection requirements.

Q. WILL THE COMPANY BE PROVIDING THIS ELECTRICITY FOR FREE?

A. No, it appears that the free electric commodity and distribution service for EV service within the CCN pilot program will be financed in part by Nissan, and in part by other participating organizations. At this point, the degree to which the Company will contribute to the free electricity aspects of the pilot program appears to be restricted. However, what is not clear is the entire nature of the "free electricity" offer in terms of its focus, duration, and scope. Lastly, while the Company appears to not be planning on providing free electricity service under the currently-proposed CCN pilot program, it does not appear to be ruling out potentially participating in such an offer in the future.

Q. WHAT OTHER TYPES OF ALTERNATIVE-FUELED VEHICLES WILL LIKELY BE COMPETING WITH EVS?

A. There are a variety of other alternative-fueled vehicles that could serve as competitors or potential competitors to EVs participating in the Company's CCN program. Alternative fueled vehicles can include biodiesel, ethanol (E85), hydrogen, natural gas (CNG), propane and electricity.[85] According to the U.S. Department of Energy's Office of

[84] Mo. Rev. Stat. § 643.315
[85] Alternative Fuels Data Center, U.S. Department of Energy. See: http://www.afdc.energy.gov/.

Energy Efficiency and Renewable Energy, there are over 540,000 alternative-fueled vehicles on the road.[86] Over 36 percent of these alternative-fueled vehicles are fueled by E85; another 19 percent are fueled by biodiesel; and 11 percent are fueled by CNG.[87] Electric vehicles account for slightly less than 30 percent of the total. In fact, the Kansas City Regional Clean Cities Coalition reports annual petroleum savings from alternative fueled vehicles of over 4.5 million gasoline gallon equivalents. The majority of these savings come from CNG (53 percent); and propane (25 percent).[88]

Q. DOES THE COMPANY'S CCN PROPOSAL INCLUDE ANY OTHER POTENTIALLY ANTI-COMPETITIVE SUBSIDIES?

A. Yes. The Company appears to be subsidizing the complete cost of the EV program including the charging station and additional equipment as well as any incremental operations and maintenance costs ("O&M costs"). As noted earlier, the Company anticipates little to no near-term revenue generation from the program for cost-of-service purposes. Thus, 100 percent of the program's costs will be subsidized by ratepayers and it is not clear how any revenues associated with the program that materialize between this rate case and any subsequent rate case will be treated. Other types of alternative-fueled vehicle programs are not offered such competitively-privileged provisions. The fueling station equipment and costs for other alternative-fueled vehicles, while also subsidized, are not completely subsidized, particularly to the extent being proposed by the Company. These other competing alternative-fueled vehicle fueling station/delivery

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[86] See, Clean Cities Alternative Fuel Vehicle Inventory, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, http://www.afdc.energy.gov/data/#10345.
[87] Clean Cities Alternative Fuel Vehicle Inventory, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, http://www.afdc.energy.gov/data/#10345.
[88] Kansas City Regional Clean Cities Coalition, See: http://www.afdc.energy.gov/cleancities/coalition/kansas-city.

costs must be recovered through fueling charges and other fees paid for by the vehicles using this equipment: this is not a cost that will be imposed on EVs under the CCN proposal. The Company's proposal, therefore, will afford EVs a competitive advantage relative to other alternative, as well as traditionally-fueled vehicles.

Q. WHAT ARE YOUR RECOMMENDATIONS REGARDING THE PUBLIC POLICY ASPECTS OF THE COMPANY'S CCN PROGRAM?

A. The Commission should reject the Company's CCN proposal until such time that a number of public policy issues are addressed. Earlier, I noted two important public policy concerns including (1) the risk-shifting nature of the proposal and (2) the potential income distributional impacts of the proposal. The competitive ramifications represent an additional important public policy consideration that needs to be addressed in further detail before the costs of the CCN can be recovered in rates.

Q. PLEASE SUMMARIZE YOUR CCN RECOMMENDATIONS.

A. I recommend that the Commission reject the Company's request to recover the costs of its CCN in the current rate case for the following reasons:

- The Company appears to have developed the CCN in a relatively independent fashion with little input from the primary stakeholder being asked to provide the financial support for this program: ratepayers. The Company is certainly within its rights to develop an independent EV program without stakeholder input; but in doing so, it should pay for that program itself, not ask that it be substantially supported with ratepayer subsidies. The Company has not provided any information upon which the Commission can rest assured that the total capital investment and annual operating expenses are in the public interest. The

Company fails to provide any convincing evidence that the CCN is in the public interest.

- The Company's CCN proposal includes scant details about the need and scope of the program. The proposed CCN has not been offered with any type of cost-benefit analyses. While there may be an argument for promoting a program of this nature, even with a subsidy, the Company has not clearly articulated that argument nor has it identified the degree, scope, and duration of any proposed subsidy for the CCN. The Company's current proposal also shifts considerable performance risk away from itself and onto ratepayers and should be rejected at the current time.
- The CCN program, as currently proposed, leaves a host of program-specific details open. The CCN program should be rejected for cost recovery, at the current time, until ratepayers fully understand the nature of the programs and the obligations and requirements that will be imposed on program participants, particularly the participating organizations. Failure to identify these participating organization obligations shifts performance risk away from the Company and these participating organizations and onto ratepayers since ratepayers will be required to cover the costs of the program if these entities individually, or collectively, fail to act in a fashion that pushes the CCN into becoming a success.
- The Company's CCN will provide subsidies for free electricity and virtually free charging station costs for participating EVs. The Commission should reject the Company's CCN proposal until such time that the competitive market ramifications of the program are addressed in further detail.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY ON MAY 7, 2015?

A. Yes.

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[i] For instance, the detail on how much of this investment will be utilized for charging stations versus other equipment has not been identified in any detail RB-20.

Comparison of Production Plant Allocation Factors by Party

Party	Residential (RES)	Small General Service (SGS)	Medium General Service (MGS)	Large General Service (LGS)	Large Power Service (LPS)	Lighting
Company						
AP-4CP	35.22%	5.14%	12.90%	24.10%	22.09%	0.56%
DOE						
4CP	41.54%	5.58%	12.86%	21.70%	18.32%	0.00%
MIEC/MECG						
AED-4NCP	40.68%	5.36%	13.00%	22.05%	17.85%	1.06%
AED-2NCP	41.27%	5.27%	13.03%	22.09%	17.31%	1.04%
4CP	41.54%	5.58%	12.86%	21.70%	18.32%	0.00%
OPC						
AP-4CP	35.22%	5.14%	12.90%	24.10%	22.09%	0.56%
AED-NCP	41.03%	5.01%	12.53%	22.17%	18.00%	1.25%
Staff						
BIP Capacity Allocator	35.33%	5.22%	13.26%	24.39%	21.29%	0.51%
BIP Fuel for Energy Allocator	30.25%	4.88%	13.40%	26.19%	24.08%	1.20%
BIP Fuel in Storage Allocator	34.31%	5.10%	13.04%	24.94%	21.77%	0.85%
BIP O&M Allocator	30.73%	4.95%	13.25%	26.65%	22.75%	1.67%

Sources: Company's CCOSS, Schedule TMR-7; MEB-COS-3, MEB-COS-Appendix; MPSC Staff's Rate Design and Cost of Service Report; WP-AED-NCP Calculation KCL v2 restored