Exhibit No.: _____ Competition, Private Sector

Charging Market

Witness: Anne Smart Sponsoring Party: ChargePoint, Inc.

Case No.: Case No. ET-2016-0246

CHARGE POINT, INC.

Case No. ET-2016-0246

SURREBUTTAL TESTIMONY

OF

ANNE SMART

Campbell, California December 2016

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

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.)))	Case No. ET-2016-0246
AFFIDAVIT	OF AN	NE SMART

STATE OF CALIFORNIA) ss.
COUNTY OF SANTA CLARA)

ANNE SMART, being first duly sworn on her oath, states:

- 1. My name is Anne Smart. I am the Director of Government Relations and Regulatory Affairs of ChargePoint, Inc.
- 2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony.
- 3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my personal knowledge, information and belief.

ANNE SMART

Subscribed and sworn before me this 19th day of December, 2016.

ALVINA CHRISTINE PELAYO Commission # 2039700

Santa Clara County My Comm. Expires Aug 30, 2017 Notary Public

1		SURREBUTTAL TESTIMONY
2		OF
3		ANNE SMART
4		CASE NO. ET-2016-0246
5	Q.	Please state your full name and business address.
6	A.	My name is Anne Smart. My business address is 254 E Hacienda Ave., Campbell,
7		CA 95008.
8	Q.	Are you the same Anne Smart who filed rebuttal testimony in the case
9		referenced above?
10	A.	Yes.
11	Q.	What is the purpose of your surrebuttal testimony?
12	A.	I will be responding to the rebuttal testimony submitted by Mr. Hyman of the
13		Missouri Department of Economic Development regarding competition in the EV
14		charging market. I will also be responding to the rebuttal testimony submitted by
15		Mr. Rush from Kansas City Power & Light and Mr. Marke from the Office of
16		Public Counsel on the topic of the role of the utility.
17		COMPETITION
18	Q.	On page 4, line 6 of his rebuttal testimony Mr. Hyman states that "no
19		evidence has been presented that there is, in fact, a competitive market that
20		can effectively disciple the rates charged for EV charging" along the route
21		proposed by Ameren. Is there a competitive market for EV charging between
22		Columbia and the St. Louis metropolitan area?

- A. Yes. In response to Data Request DED-DE 200, I provided Mr. Hyman a list of 19 locations offering public charging between St. Louis and Columbia. These 19 locations provide 50 total charging ports for public use. It is unclear from Mr. Hyman's testimony why he interprets this data request response as suggesting that "ChargePoint...has no customers with publicly accessible EVCSs between Columbia and the St. Louis metropolitan area" as he states on page 4, line 9 of his rebuttal testimony. The fact that ChargePoint has sold 50 charging ports to property owners in this area should indicate there is demand and competition between charging station vendors for customers (site hosts). Our ability to expand the ChargePoint network beyond these existing ports and sell charging stations to new customers between Columbia and St. Louis will be threatened by the introduction of the ability for Ameren to offer our potential site hosts highly subsidized charging equipment instead of competing in a normal business as usual market place.
 - Q. Mr. Hyman notes on page 4, line 14 that the majority of ChargePoint's customers who own public charging stations do not charge a fee for use of the station. Does the prevalence of free charging indicate a lack of a competitive market for charging stations in Ameren's service territory?
 - A. No. First it is important to understand why the private sector installs charging stations. Our site host customers install charging stations to offer employees an amenity at their workplace, encourage customers to shop in a retail location while they are charging, or attract tenants in an apartment complex. Pricing for the charging service to drivers is set based on a variety of factors unique to that site

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including the length of time that the driver is expected to stay parked at that location, the type of location (retail, workplace, multifamily housing, etc.), and the need to maximize utilization of the charging stations by encouraging drivers to move their vehicles when fully charged. These factors lead many charging station operators to provide free charging for a period of time. The existence of free charging options between Columbia and St. Louis should not be used to determine that there is a lack of competition when, in fact, the pricing to drivers may be used to compete on other indirect benefits for those sites such as employee retention, increased retail sales, or tenants. Mr. Hyman is erroneously overlooking the competitive issue associated with EV charging station vendors needing to compete to sell and install charging stations. If Ameren is given the ability to develop this charging station project and offer charging stations free of charge to site hosts who would otherwise need to purchase those stations from a vendor like ChargePoint at full cost, this pilot will block competition in the market. It will become very difficult, if not impossible, for ChargePoint and any other vendor not chosen by Ameren in its RFP process, to sell any charging stations between Columbia and St. Louis until Ameren has completed its project because our potential customers, the site hosts, will wait to see if they can receive something free from the utility instead of pay full cost to us for charging equipment.

Q. Does Mr. Hyman indicate that competition could be enabled by Ameren?

A. On page 5, line 6, Mr. Hyman stated "Competition can also be enabled by reexamining Ameren Missouri's tariff sheets to determine how third-party EV

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charging providers could be allowed to sell electricity to drivers, potentially by designing a wholesale service rate." First and foremost, it is not up to Ameren in a tariff sheet to determine if third-party EV charging providers can resell electricity. This is a matter of state law which was described at length in my rebuttal testimony and comments from other parties. Secondly, again, the issue of competition is not solved alone by enabling non-utilities to "sell electricity" to drivers. The issue of competition can only be addressed if Ameren is not permitted to own and operate charging stations selected from a single vendor and installed for free at site hosts in a competitive market where non-utilities, who do not have the same ability to socialize costs across a rate base, are attempting to sell charging equipment at full cost.

Q. What is the useful life of a charging station?

On page 3, line 8, Mr. Hyman, referencing direct testimony from Mr. Nealon, notes that Ameren claims there will be a net of \$1.9 million by the 15th year of operating the charging stations. However, there is no known warranty or product in the charging station market at this time known to last 15 years. Furthermore, given the changes to vehicle technology, charging speeds, cooling technology, and other factors, expected as the market continues to grow, it is likely that these stations will be obsolete long before ratepayers see a net benefit. Allowing a site host or third party, rather than Ameren, to own these charging stations ensures that the site has the ability to change out the equipment to receive newer technology and relieves ratepayers of the burden of a stranded asset if this equipment becomes obsolete prior to the fifteenth year of operation.

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ROLE OF THE UTILITY

Q. Mr. Rush from KCP&L states on page 4, lines 6-7, of his rebuttal testimony that utilities, rather than the private industry, are "best situated to develop and deploy an extensive EV charging network." Do you agree with this statement?

The use of the phrase "best situated" suggests that KCP&L believes that utilities are the only entity situated for developing an extensive EV charging network. I do not agree that utilities alone are best situated for achieving the scale and innovation required to develop the EV charging services that drivers need. Utilities do have a role in supporting the development and deployment of charging stations and ChargePoint is pleased to be a partner to utilities in this effort. KCP&L has deployed a network of EV charging stations called the Clean Charge Network that depends on technology developed by ChargePoint including our hardware, software, and network capabilities. This technology has taken years to develop, more than 30 patents, participation in national and international standards making, and tens of millions of dollars in private investment in manufacturing, business development, sales, marketing, and engineering. National charging station networks like ChargePoint are successful due to the scale at which they can expand and connect drivers well beyond the borders of one utility's service territory. ChargePoint is a partner to utilities around the country and appreciates the opportunity to work with utilities, including KCP&L, with their unique expertise, relationship with customers, and ability to leverage capital, to deploy successful and extensive charging networks. But utilities alone cannot

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possibly be the sole entities creating "extensive" EV charging networks, the long term undertaking is too expensive for utilities, the technology moves too fast to be in a regulated environment and the price drivers are charged is much too fluid to be constrained by rate cases. Utilities should be working in collaboration with the private EV charging industry in addition to the other stakeholders Mr. Rush sites in his rebuttal testimony.

- Q. Mr. Rush states on page 5, line 1 of his rebuttal testimony that utilities are obligated to provide electric to EV drivers through public charging stations.

 Do you agree?
 - No. Utilities can and should have a role in supporting the deployment of charging stations by providing incentives for charging equipment or installation costs, and in setting rates to owners of charging stations that enable effective operation and utilization of the stations, as KCP&L has notably done successfully throughout its territories in Kansas and Missouri, but the obligation of a monopoly utility to provide electricity to its customers should by no means dictate how that electricity is used beyond the utility meter. Utilities are no more obligated to provide public charging stations than they are to provide refrigerators, computers, and lamps to their customers. The argument of "obligation" should not be the basis for determining whether or not the Commission approves a utility proposal. This proposal should be reviewed on the impact to ratepayers and on competition in the EV charging industry.
- Q. Mr. Marke from the Office of Public Counsel recommends on page 5, lines 5-6 that "non-regulated services" from investor-owned utilities should be

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allowed to participate in the EV charging market but that Ameren's "regulated services" be limited to promoting EV adoption and offering rates that support EV charging. Do you agree?

ChargePoint agrees that non-regulated utility services can be allowed to participate in the EV charging market, however we are also not opposed to the ability of regulated investor-owned utilities to support the installation and deployment of charging stations if programs are designed to support competition, customer choice and innovation in the EV charging market. As Mr. Marke points out throughout his rebuttal testimony, Ameren has not designed a pilot that protects competition in Missouri. There are several excellent examples of regulated IOUs supporting EV charging and competition including three in California: Southern California Edison, San Diego Gas and Electric, and a program recently approved for Pacific Gas and Electric Company, Puget Sound Energy in Washington, and a pilot proposed by Rocky Mountain Power in Utah.. These utility programs protect competition by qualifying multiple vendors and allowing site hosts to choose the equipment and network services that they want on their own properties. By qualifying multiple vendors rather than creating a winner takes all RFP as Ameren has done, the utility could support competition by having these multiple vendors compete to win the site hosts, which better replicates a normal market for selling charging stations. This competition will continue to drive innovation in the market, unlike a utility RFP which freezes technology based on the specifications defined by the utility in the RFP. Most of these utility programs also limit the utility role to providing "make ready" up to

by not including the charging station itself or by providing rebates to the site host 1 2 so that the site owns and operates the equipment rather than the utility. These 3 different business models could lead to a better designed proposal by Ameren that 4 would better support competition. 5

- Q. Does this conclude your Surrebuttal Testimony?
- 6 A. Yes, it does.