



## ENVIRONMENTAL LAW & POLICY CENTER

Protecting the Midwest's Environment and Natural Heritage

### INFORMAL COMMENTS OF ELPC, CUB, THE PEOPLE OF THE STATE OF ILLINOIS, AND THE ILLINOIS ENERGY OFFICE (DCEO)

**To:** John Sagone, Illinois Commerce Commission Staff

**Re:** ICC Rulemaking Docket 12-0212

**Date:** June 8, 2012

Thank you for soliciting informal input regarding the 12-0212 Electric Vehicle (EV) Charging Station Installer Certification rulemaking. The Environmental Law & Policy Center (ELPC), Citizens Utility Board (CUB), the People of the State of Illinois (AG), and the Illinois Energy Office (DCEO) believe the Commission should seek to adopt or incorporate certification requirements that meet the requirements of the law without erecting unnecessary barriers that could hinder economic development or stifle the electric vehicle industry in Illinois.

Electric vehicle charging stations are already being installed across the country pursuant to existing codes and standards, such as state electrical licensing requirements and the National Electric Code.<sup>1</sup> Many of these charging stations are available for purchase at Home Depot or other retailers and require minimal work to install at a customer's home or business.<sup>2</sup> Preliminary research has identified no other state in the nation that has or is contemplating additional state or local requirements for installer certification.<sup>3</sup> Therefore, we recommend that the ICC incorporate existing codes and licensing requirements to the maximum extent possible rather than adopting

---

<sup>1</sup> The National Electric Code specifically covers the installation of electric vehicle charging stations. See *National Fire Protection Agency (NFPA) NFPA 70 National Electrical Code (NEC) Article 625: Electric Vehicle Charging System Equipment*. The NFPA is conducting ongoing work to review and update these requirements as necessary. See, e.g., <http://www.nfpa.org/assets/files/Research%20Foundation/RFEVCharging.pdf>.

<sup>2</sup> See, e.g., [http://www.homedepot.com/Tools-Hardware-Auto-Electric-Car-Chargers/h\\_d1/N-bzjtZ5yc1v/R-202950820/h\\_d2/ProductDisplay?catalogId=10053&langId=-1&storeId=10051](http://www.homedepot.com/Tools-Hardware-Auto-Electric-Car-Chargers/h_d1/N-bzjtZ5yc1v/R-202950820/h_d2/ProductDisplay?catalogId=10053&langId=-1&storeId=10051) (Level 1 charging station that can be simply plugged-in to the wall); <http://www.homedepot.com/buy/electric-vehicle-charging-station-248150.html> (Level 2 charging station that requires minimal electric work to install). Plug-In America maintains a database of commonly available charging stations. See <http://www.pluginamerica.org/accessories>.

<sup>3</sup> For example, legislation in the State of Washington required the Department of Labor and Industries to formulate rules for the installation of electric vehicle infrastructure. RCW 19.28.281 (2009). Labor and Industries, however, determined that existing electrical laws and the National Electric Code were sufficient. See State of Washington Dept' of Commerce, *Electric Vehicle Infrastructure: A Guide for Local Governments in Washington State*, at p. 36 (available at <http://www.commerce.wa.gov/DesktopModules/CTEDPublications/CTEDPublicationsView.aspx?tabID=0&ItemID=8851&Mid=863&wversion=Staging>).

35 East Wacker Drive, Suite 1600 • Chicago, Illinois 60601

(312) 673-6500 • [www.ELPC.org](http://www.ELPC.org)

Nancy Loeb, Chairperson • Howard A. Learner, Executive Director

Columbus, OH • Des Moines, IA • Jamestown, ND • Madison, WI • Minneapolis, MN • Sioux Falls, SD • Washington, D.C.



new or different requirements for installers of EV charging stations in Illinois. While it is of course important to ensure that EV installation, maintenance, and repair is carried out in a safe and reliable manner, it is also crucial that the regulation does not hamper economic development. If the ICC determines that additional requirements are necessary, we recommend that they apply only to fast charge equipment (sometimes referred to as “Level 3” chargers), as further discussed below.

## **I. DEFINITIONS AND APPLICABILITY**

Since the Illinois Commerce Commission’s request for informal comments, the Illinois General Assembly has passed House Bill 5071, which requires the Commission to “establish certification requirements that shall be applicable to persons or entities that install, maintain, or repair electric vehicle charging stations.” The bill, which we expect the governor to sign, sets out definitions for “electric vehicle charging station” and “self-installer.” In addition, the bill does not refer to “vendor[s]” that install EV charging stations, but states that “[t]he notification and certification requirements of this Section shall only be applicable to individuals or entities that perform work on or within an electric vehicle charging station, including, but not limited to, connection of power to an electric vehicle charging station.”

The Commission’s rule should clarify that only individuals that actually “perform work” on an EV charging station must be certified; if a company offers services relating to the installation, maintenance, or repair of EV charging stations, the certification requirement should only apply to those individuals within the company who actually perform such work. The definitions of “install,” “maintain,” and “repair” must be narrowly defined and clearly only include work relating to the connection of the EV charging station to the grid. Operation of the charging station, repairs to or maintenance of the charging station façade, or modifications to the software of the charging station must unmistakably be excluded from the definitions. Regulating activities other than those directly relating to the connection of the EV charging station to the electric grid is unnecessary and would only impede the development the of EV industry and of the corresponding economic and environmental benefits.

The definition of “commercial use” should be limited to EV charging stations that offer services to the public for monetary compensation or as a perk for visiting the owner’s establishment (i.e. charge while you shop). “Commercial use” should not include the use of a charging station by a vehicle fleet owner for the purpose of charging its own fleet.

House Bill 5071 explicitly states that “the Commission may establish separate requirements based upon the characteristics of electric vehicle charging stations.” The rule should create a tiered system based on the level and use of the charger. Installation, maintenance and repair of most charging stations should simply require compliance with all state and local codes and standards. Additional training should be required, if at all, only for fast charge stations.

## II. REQUIRED APPLICATION FILINGS AND PROCEDURES

House Bill 5071 requires notification to the utility company before and after the installation of an EV charging station, and notification to the utility that the charging station was installed by a self-installer or a certified entity. Notification before and after installation should be limited to a simple form that can be electronically mailed to the utility company. Procedural requirements should be as minimal and convenient as possible in order to avoid obstructing the deployment of EV infrastructure. In no circumstances should an order from the Commission be necessary for the certification of a person or entity. Such a requirement would only create unnecessary paperwork and delay.

## III. GENERAL CERTIFICATION REQUIREMENTS

House Bill 5071 requires that installers meet adequate training and financial requirements. As discussed above, certification to install, repair, and maintain most charging stations should be available to all state-licensed electricians. If the Commission determines that additional requirements are necessary for fast charge (Level 3) installations, then the rule should provide a “menu” of training options, each of which would qualify an individual or entity for certification. Examples include the Electric Vehicle Infrastructure Training Program<sup>4</sup>, Underwriters Laboratory Training Programs<sup>5</sup>, and Eaton Certified Contractor Network’s certification course.<sup>6</sup>

The rule should state that general homeowners’ or property owner’s insurance is sufficient to meet any financial requirement for self-installers and other installers of Level 1 and 2 EV charging stations. For these stations, the insurance need not list the utility as an additional insured. Insurance companies often do not cover the utility on general homeowner’s or property owner’s insurance. There is precedent for this in the Commission’s rules for the interconnection of distributed generation systems on the customer’s side of the electric meter.

Certification fees should be minimal and consequences for noncompliance should be reasonable. Excessive penalties are not recommended.

**In conclusion, requirements included in the rule should be as least burdensome as possible, within the scope of the guiding legislation, so as to avoid creating any unnecessary market barriers or obstacles to the development of the electric vehicle industry and corresponding economic growth and job creation.**

---

<sup>4</sup> <http://www1.eere.energy.gov/cleancities/evitp.html>

<sup>5</sup> <http://www.ul.com/global/eng/pages/offering/industries/powerandcontrols/electricvehicle/contact/>

<sup>6</sup> <https://www.eatoncertified.com/sample-eccn-ev>

STATE OF ILLINOIS



**ILLINOIS COMMERCE COMMISSION**

---

*ELPC / CUB / AG / DCEO Informal Comments -- Responses to ICC – June 8, 2012*

**TO:** All Interested Parties

**FROM:** Jim Zolnierek, Eric Schlaf, and Jennifer Hinman  
Policy Division

**SUBJECT:** Comments Invited: EV Charging Station Installer Certification

**DOCKET:** 12-0212

**DATE:** May 18, 2012

---

On October 26, 2011, the General Assembly passed Public Act 97-0616 (“PA 97-0616”) which, among other things, added Section 16-128A (Certification of installers) to the Illinois Public Utilities Act (“Act”). PA 97-0616 became effective on October 26, 2011. New Subsection 16-128A(d) of the Act states:

(d) Within 180 days after the effective date of this amendatory Act of the 97th General Assembly, the Commission shall initiate a rulemaking proceeding to establish certification requirements that shall be applicable to vendors that install electric vehicle charging stations.

ICC Staff invites *informal* comments regarding the content of the rules. This opportunity to provide informal comments is not mandatory and is at the discretion of each individual party. Comments submitted will be publicly distributed.

Staff requests that (i) comments pertain only to this EV Charging Station Installer Certification rulemaking and do not discuss other currently open proceedings; (ii) the informal comments be organized consistent with the questions outlined below; and (iii) all such comments be as succinct as possible. Parties may offer preferred language for the rule and/or summarize their position regarding each question.

All such informal comments should be submitted to John Sagone [jsagone@icc.illinois.gov](mailto:jsagone@icc.illinois.gov), Eric Schlaf [eschlaf@icc.illinois.gov](mailto:eschlaf@icc.illinois.gov), and Jennifer Hinman [jhinman@icc.illinois.gov](mailto:jhinman@icc.illinois.gov) by close of business **Friday, June 8, 2012**.



## ILLINOIS COMMERCE COMMISSION

---

### I. DEFINITIONS

What definition, if any, should be included in the rule to define an “electric vehicle charging station”?

*The definition of an “electric vehicle charging station” is included in the House Bill 5071.*

What definition, if any, should be included in the rule to define a “vendor that installs an electric vehicle charging station”? Can a single individual be classified as a “vendor”?

*House Bill 5071 eliminated the requirement that “vendors” be subject to certification requirements. The new law states that “[t]he notification and certification requirements of this Section shall only be applicable to individuals or entities that perform work on or within an electric vehicle charging station, including, but not limited to, connection of power to an electronic vehicle charging station.” As explained in the cover memo, the rule should make clear that only individuals, who actually install, maintain or repair electric vehicle charging stations are subject to certification. For example, certification should not be required for individuals who are employed by a company that installs charging stations if the specific individual does not personally install, maintain, or repair the charging stations.*

What definition, if any, should be included in the rule to define “self-installer” of electric vehicle charging station? Does a self-installer fall under the definition of “vendor”?

*The definition of a “self-installer” is provided in House Bill 5071.*

What definition, in any, should be included in the rule to define “install.” Does plugging a charging station cord into an outlet on the premise constitute “installing an electric vehicle charging station”?

*“Install” should be defined to only include work dealing with the charging station’s interconnection to the electric grid. “Install” should not mean plugging a cord into an outlet, nor should it include any other activity that does not pose a safety risk or a risk to the electric grid.*

What definition, if any, should be included in the rule to define “commercial use” of an electric vehicle charging station? Does commercial encompass only those installations that offer services to the public? Would the definition include use of charging stations owned by a fleet owner for limited purposes of charging its own fleet vehicles?

*The definition of “commercial use” should be limited to EV charging stations that offer services to the public for monetary compensation or as a perk for visiting the owner’s*



## ILLINOIS COMMERCE COMMISSION

---

*establishment (i.e. charge while you shop). “Commercial use” should not include the use of a charging station by a vehicle fleet owner for the purpose of charging its own fleet.*

What other definitions, not referenced above, should be included in the rule?

*The rule should include definitions for “maintain” and “repair.” The words should be defined to explicitly apply only to work directly pertaining to the interconnection between the charging station and the electric grid. Maintenance and repair work dealing with the charging station façade, software, etc. should be excluded.*

## II. APPLICABILITY

Should the Commission certify all vendors that install electric vehicle charging stations?

*Self-installers of electric vehicle charging stations should be exempt from certification. Any individual with an electrician’s license should automatically qualify for certification. If the Commission decides that additional requirements are necessary to comply with the law, such requirements should apply only to installers of level 3 charging stations.*

Should self-installers of electric vehicle charging stations be exempt from certification?

*Self-installers of charging stations should be exempt from certification by the Illinois Commerce Commission, but provisions regarding self-installers should not weaken requirements set forth in existing applicable electrical codes. For example, some cities require all electric vehicle charging stations to be installed by licensed electricians; such requirements should still be applicable to self-installers, even if the Commission does not require certification. On the other hand, self-installers should not be subject to any certification requirements beyond those required for other installers.*

Should installers of electric vehicle charging stations that are not for commercial use be exempt from certification?

*Ideally, yes, however House Bill 5071 states that all installers except “self-installers” need to be certified.*

Should installers of electric vehicle charging stations be subject to certification requirements based upon the electrical force or voltage that is transferred to the electric vehicle? For example, should certification only be required for level 3 or DC fast charge station installations?

*As discussed in the cover memo, House Bill 5071 provides that for “[r]ules regulating the installation, maintenance, or repair of electric vehicle charging stations... the*



## ILLINOIS COMMERCE COMMISSION

---

*Commission may establish separate requirements based upon the characteristics of electric vehicle charging stations.” Certification should be available to all licensed electricians. If additional certification requirements are deemed necessary, they should only apply to installers of level 3 charging stations. Rules that distinguish between the types and uses of charging stations can be tailored to ensure safety and reliability while avoiding unnecessary and disadvantageous regulation.*

Should installers of electric vehicle charging stations be subject to certification requirements based upon the number and type of installations performed? Should certification only be required for groupings of level 2 charging station installations?

*If the Commission determines that the law necessitates certification requirements beyond the attainment of an electrician’s license, any such requirements should be tailored as specifically as necessary to avoid unnecessary encumbrances to the development of the electric vehicle industry. In addition, the Commission should ensure that the fulfillment of more stringent requirements automatically and necessarily counts as fulfillment of less stringent requirements. For example, if an individual is certified to install level 3 charging stations, he or she should also be permitted to install level 1 and 2 charging stations without separately applying, paying fees, or completing any differing requirements for level 1 and 2 certification.*

What other types of installations, not reference above, should be exempt from certification requirements?

### III. REQUIRED APPLICATION FILINGS AND PROCEDURES

Should certified installers be required to file notices of installation of each charging station and its location? How often – quarterly? After each installation? If so, what information should be provided in such notices?

*The statute requires notification to the utility before and after an installation. Notification requirements should be as minimal as possible; a simple form that can be electronically mailed informing the utility of the location of the proposed installation, followed by a form informing the utility that the installation has occurred should suffice.*

Should the customer have to provide the ICC or their electric utility with a certification that the entity/vendor installing the charging station was an entity certified by the ICC to install EV charging stations? If so, what information should be provided in such notices?

*The law requires the customer to “notify” the utility that the installation was done by either a self-installer or a certified entity. Any requirements beyond a simple electronically-mailed form are unnecessary.*



## ILLINOIS COMMERCE COMMISSION

---

Is it necessary for the Commission to issue an order granting or denying an application for a vendor to be certified to install and EV charging station?

*No. Under no circumstances would it be necessary for the Commission to issue an order granting or denying applications for certification to install charging stations.*

Are there circumstances under which the Commission should require vendors to amend their certificates? If so, what are such circumstances?

*New or amended certificates should be issued to applying installers who have become qualified for the installation, maintenance, and repair of new or additional categories of charging stations.*

### IV. GENERAL CERTIFICATION REQUIREMENTS

Should installers meet adequate training, financial, and competency requirements to be certified? If so, should certification requirements vary based upon the electrical force or voltage that is transferred to the electric vehicle or according to the number and type of installations performed?

*It is a requirement in the law that installers meet adequate training and financial requirements. The training required for an electrician's license should be sufficient for the installation of electric vehicle charging stations. If the Commission determines that additional requirements are necessary under the law, such requirements should be applicable only to installers of level 3 charging stations.*

*Homeowners' or property insurance should fulfill financial requirements. As explained in the cover memo, the rules should not require the utility to be listed as an additional insured.*

Should installers be licensed to do business and be bonded in the State of Illinois in order to receive certification?

*House Bill 5071 includes this requirement.*

How should the Commission ensure that installers that get certified have the requisite knowledge, skills, training, experience, and competence to perform functions in a safe and reliable manner?

*The attainment of an electrician's license would ensure that installers have the requisite knowledge, skills, training, experience, and competence to install, maintain, and repair electric vehicle charging stations. If the Commission determines that the language in*



## ILLINOIS COMMERCE COMMISSION

---

*House Bill 5071 necessitates additional requirements, such requirements should only apply to individuals and entities that install, maintain, and repair level 3 charging stations.*

Should the Commission impose reasonable certification fees and penalties on installers for failing to comply with its certification requirements?

*Certification fees should be minimal and consequences for noncompliance should be reasonable. Excessive penalties are not recommended.*

Should all installers conform to applicable building and electrical codes?

*This requirement is included in House Bill 5071.*

Should all certified installers be required to ensure that all EV charging stations they install meet recognized industry standards as the Commission deems appropriate (e.g., NEC, IEEE, EPRI, DTE, UL, SAE, NIST)?

*This requirement is included in House Bill 5071.*