COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC UTILITIES

Investigation by the Department of Public Utilities on its own Motion into Electric Vehicles and Electric Vehicle Charging	D.P.U. 13-182

JOINT COMMENTS ON SCOPE OF AUTHORITY BY ENE (ENVIRONMENT NORTHEAST), CHARGEPOINT, CONSERVATION LAW FOUNDATION, THE NEW ENGLAND CLEAN ENERGY COUNCIL, AND PLUG IN AMERICA

ENE (Environment Northeast), ChargePoint, Conservation Law Foundation, the New England Clean Energy Council, and Plug In America ("Joint Commenters on Scope of Authority") appreciate the opportunity to provide comments to the Department of Public Utilities ("Department") in Docket 13-182, Investigation by the Department of Public Utilities upon its own Motion into Electric Vehicles and Electric Vehicle Charging. The Joint Commenters represent a range of stakeholder interests, including perspectives from the environmental community, clean energy business community, the electric vehicle service equipment industry, and electric vehicle drivers and advocates. These joint comments address only a portion of the questions raised in this docket, specifically the issues around the Department's proper scope of authority over electric vehicle charging stations, identified in Questions A.1-6 and E.1.

The Order opening this investigation lays out the history leading up to the opening of this docket, particularly the activities that have taken place as a part of Docket 12-76 on Grid Modernization, the Massachusetts Electric Vehicle Initiative Task Force ("MEVI Task Force"), and inter-state discussions on electric vehicles and other zero-emissions vehicles. Several of the Joint Commenters have participated extensively in the deliberations of the MEVI Task Force as well as the Grid Modernization proceeding. As explained in more detail below, the following represents the Joint Commenters' position:

- The Department should conclude that ownership and operation of electric vehicle supply equipment ("EVSE")[1], without additional qualifications that properly merit such a designation, does not constitute "distribution" of electricity, does not constitute "selling electricity," and that owners and operators are not "suppliers of generation services." As a result, electric vehicle charging should be considered "charging service," regardless of the pricing or business model used, and should not be subject to the limitations placed on

[1] An illustrative definition of EVSE, based on California law, is "an electric component assembly or cluster of component assemblies designed specifically to charge batteries within electric vehicles by permitting the transfer of electric energy to a battery or other storage device in an electric vehicle."

distribution service, or the requirements placed on distribution companies, electric companies, or suppliers of generation services.

- The Department should properly include owners and operators of electric vehicle supply equipment in the relevant definitions of "retail customer" and "end-use customer" for two purposes: (1) preserving the Department's currently appropriate statutory authority in this area over transactions between the utilities and their customers, and (2) preserving the integrity of the Renewable Portfolio Standard and retail competition programs.
- The Division of Standards should use their statutory authority over weights and measures issues to adopt the standards expected to be issued in the coming year by the National Institute of Standards and Technology over EVSE used in commercial transactions, as well as disclosure requirements and other proper consumer protections.

Taken in conjunction, these three determinations provide a solid foundation for the development of electric vehicle charging infrastructure while appropriately protecting consumers and preserving the Department's ability to optimize the electric system. Any other approach taken on these issues by the Department risks halting this emerging market in its tracks and could prevent the Commonwealth from achieving its long-run goals for economic development, air quality, and climate change.

I. Background

Questions A.1-6 and E.1 posed by the Order ask commenters to address the scope of the Department's authority with respect to EV charging and to identify relevant consumer protections. These issues are all part of an ongoing national conversation about the proper way to facilitate the necessary investment in charging infrastructure to support a major increase in the number of electric vehicles over the next decade. To date, in Massachusetts and many other places across the country, much of the infrastructure build-out in the public sphere has been done with public dollars. To make this a sustainable market for the long-term, increased private investment is highly desirable. This would

minimize the amount of public funds needed and allow private competition to determine the service and business models that best meet the needs of vehicle owners.

To incentivize this private investment, a number of States have decided to clarify that non-utility owners and operators of charging stations who provide charging to third-party vehicle owners and operators do not fall within the scope of statutes or regulations covering public utilities, or related prohibitions on resale of electricity and submetering. Although some states have accomplished this with action through legislation, public utility commissions in other states were the first to issue determinations on this issue, notably California[2] and New York[3]. As in these other states, the primary issue for such a determination in Massachusetts is the existing statutory framework. Regulations, previous orders, and utility tariffs may all be altered by the Department. As a result, these comments focus on the Massachusetts General Law to determine the proper scope of the Department's authority and the actions that other agencies in Massachusetts may take to fill any possible gaps.

II. The Department Does Not Have Jurisdiction Over EVSE Owners and Operators as Distribution Service or a Distribution Company, as an Electric Company, or as Supplier of Generation Services

The Massachusetts General Laws charge the Department with authority over many different entities but three categories appear to be potentially relevant to EVSE: (1) regulation as distribution service or a distribution company, (2) regulation as an electric company, and (3) regulation as a supplier of generation services. Ownership or operation of EVSE, without additional qualifications that render an entity subject to any of these three categories, should not trigger the Department's authority, regardless of any pricing structure or business model. Accordingly, the current statutory definitions do not necessarily cover EVSE and the policy consequences of invoking this authority broadly could be extremely adverse. In particular, the statutory requirements for these three categories of entities would be overly burdensome if

[2] See California Public Utilities Commission Decision 10-07-044, dated July 29, 2010. This was subsequently codified by the California Legislature in 2011 with A.B. 631.
[3] See New York Public Service Commission Declaratory Ruling on Jurisdiction over Publicly Available Electric Vehicle Charging Stations, issued November 22, 2013 in Case 13-E-0199.

applied to EVSE owners and operators and are in many cases inappropriate in that context. Instead, the provision of energy from EVSE to vehicles should be considered "charging services." It is important to note that this does not in any way eliminate the Department's role and Section II below lays out the Department's appropriate authority in this area.

a. Distribution Service and Distribution Company

One of the major areas of the Department's authority is jurisdiction over distribution service and distribution companies. Under M.G.L. Ch. 164, § 1, the definition of both "distribution services" and "distribution company" trace back to the definition of "distribution": "the delivery of electricity over lines which operate at a voltage level typically equal to or greater than 110 volts and less than 69,000 volts to an end-use customer within the commonwealth." Although the voltage used by EVSE does typically fall within this range, at least two portions of this definition indicate that EVSE need not be implicated: "over lines" and "to an end-use customer". "Over lines" should not be interpreted to include the EVSE itself or other limited wiring behind a utility meter. Similarly, "to an end-use customer" indicates a single customer at a fixed physical location, not the many possible mobile users of a charging station. In addition, the typical policy rationales for regulation of public utilities do not apply here. There is no natural monopoly over electric vehicle charging, in part because customers are all mobile. There is no substantial risk of harm from an unjustified disconnection of service to vehicles. For the purposes of later discussion, it should also be noted that nothing in the definitions of distribution, distribution service, or distribution company require a commercial transaction.

A determination that ownership or operation of EVSE does not constitute "distribution" would appropriately avoid burdening those parties with the regulations on distribution service or distribution companies. To begin, M.G.L. Ch. 164, § 1B(a) forbids the provision of distribution service within the service territories of each distribution company without written consent of that distribution company being filed with the Department. In the worst case, this burdensome requirement could kill non-utility provision of charging services. In the best case, it would be an unwarranted burden for the distribution

companies and EVSE installers. In addition, there are many requirements on distribution companies that are inappropriate and unnecessary in this context, including:

- Obligation to serve entire town under M.G.L. Ch. 164, § 92;
- Notification in writing of terms of service under M.G.L. Ch. 164, § 1F(2); and
- Low-income discount rates under M.G.L. Ch. 164, § 1F(4).

As a result, the Department should determine that ownership or operation of EVSE to provide charging services to other persons does not fall within the definition of "distribution" and does not trigger the Department's authority over distribution services or distribution companies.

b. Electric Company

Another major area of the Department's authority is jurisdiction over an electric company, defined under M.G.L. Ch. 164, § 1 as "a corporation organized under the laws of the commonwealth for the purpose of making by means of water power, steam power or otherwise and for selling, transmitting, distributing, transmitting and selling, or distributing and selling, electricity within the commonwealth…." Subsequent language excludes "alternative energy producers," notably certain categories of cogeneration and renewable power, and transmission entities exclusively regulated by the Federal Energy Regulatory Commission.

In addition to the possibility that this definition could be invoked by a determination, covered above, that EVSE owners and operators are distributing electricity, the Department could invoke this authority with a determination that EVSE owners and operators are "selling electricity." A determination that EVSE owners and operators are "selling electricity" would only cover EVSE-related commercial transactions and not EVSE where vehicle owners charge for free. For this reason, it is important for the Department to determine that EVSE owners and operators are selling "charging services" and not electricity, the issue identified in Question A.3. As above, the typical policy rationales for regulation of public utilities do not apply here. There is no natural monopoly over electric vehicle charging, in part because customers are all mobile. The best analogy to EVSE is a dryer at a laundromat. In both

transactions, the marginal cost to the seller is primarily electricity and both involve a non-trivial capital investment. In both cases, a consumer can choose which laundromat or EVSE to visit and will often have the opportunity to install comparable equipment at their residence. In both cases, the energy can only be used for one purpose, not the many purposes for which electricity is used in homes and businesses. These factors can all easily distinguish EVSE from any prior DPU orders involving resale and submetering.

Question A.5 asks whether the Department must regulate EV charging if the price is determined on a volumetric basis. The answer to this question is "no." Sale of energy on a per-kWh basis, or other volumetric energy basis, may have been used as a proxy for "selling electricity" in certain situations historically. However, nothing in DPU's statutory jurisdiction hinges on this and should not be considered a dispositive factor for EVSE owners and operators. In addition, even if the Department chooses to regulate certain business models for EVSE, such as sales on a volumetric energy basis or time-based charging, there are clearly business models that the Department could not regulate as "selling electricity," such as payments for parking, inclusion in rent payments, or condo fees, as asked in Question A.4. Invocation of the Department's authority over sales on a per-kWh basis would shift the market into methods where regulation would be less burdensome. The one area where the pricing model may be directly relevant is if distribution company tariffs forbid selling energy on a per-kWh basis. The Department should require thorough examination of tariffs and order revisions as necessary.

The primary obligation invoked by a Department determination that EVSE owners and operators are "selling electricity" are the requirements on electric companies for rate filings and hearings under M.G.L. Ch. 164, § 94.[4] This requirement on electric companies would likely also be invoked by a determination that ownership or operation of EVSE is "distribution." Current procedures under this

[4] Although this section excludes suppliers of generation services from these requirements, a determination that EVSE owners and operators are suppliers would invoke other burdensome and inappropriate statutory requirements as discussed below.

section for the electric distribution companies are quite lengthy and would represent a major obstacle to non-utility investment in charging infrastructure.[5]

Question A.6 asks how the presence of on-site renewable power generation would affect the Department's jurisdiction. As described above, the definition of electric company excludes alternative energy producers. Among other categories, the definition of "alternative energy producers" in M.G.L. Ch. 164, § 1 includes ownership or operation of a "small power production facility," which is in turn includes generation units under 30 megawatts which use "biomass, waste, wind, water, wood, geothermal, solar energy or any combination thereof, or produces gas if it is produced from coal, biomass, solid waste or wood…." Although this exemption could incentivize installation of solar at EV charging facilities, it is yet another example of how the current statutory framework is ill-suited for the Department to exercise extensive statutory authority over EVSE. Fundamentally, this exemption would be inappropriate if the Department labels EVSE owners and operators as "electric companies" in order to provide consumer protections or optimize the electricity system.

In addition to the above determination on distribution, the Department should determine that commercial transactions between EVSE owners and operators and vehicle owners and operators do not constitute "selling electricity" but rather "charging services." This determination would be nearly identical to the one reached by the New York Public Service Commission: "Charging Stations are used to provide a service, specifically, charging services."[6] The result is that the Department would not have jurisdiction over an owner or operator of EVSE as an electric company.

c. Supplier of Generation Services

Lastly, an owner or operator of EVSE should not be considered a supplier of generation services to retail customers. Statutory obligations on suppliers include:

[5] Other statutory requirements on electric companies that could possibly be triggered include requirements for retail access to generation services and choice of suppliers by retail customers under M.G.L. Ch. 164, § 1F and equalized rates of return for each customer class for base distribution rate proceedings under M.G.L. Ch. 164, § 94I.
[6] New York Public Service Commission Declaratory Ruling on Jurisdiction over Publicly Available Electric Vehicle Charging Stations, issued November 22, 2013 in Case 13-E-0199, p. 4.

- A written statement before "initiation of service" under M.G.L. Ch. 164, § 1F(5);
- Labeling requirements under M.G.L. Ch. 164, § 1F(6), including collective bargaining agreements;
- Code of conduct under M.G.L. Ch. 164, § 1F(7);
- Affirmative choice of supplier requirements under M.G.L. Ch. 164, § 1F(8); and
- The Renewable Portfolio Standard and Alternative Energy Portfolio Standard under M.G.L. Ch. 25A, §§ 11F and 11F1/2.

The Department should determine that EVSE ownership or operation alone does not constitute supply of generation services. Of course, if an EVSE owner or operator also chooses to self-supply generation services and otherwise falls within the relevant qualifications for a supplier of generation services, these requirements would be necessary and appropriate, particularly the Renewable Portfolio Standard and Alternative Energy Portfolio Standard to prevent a loophole in these programs and to ensure that charging stations compete on equal terms.

III. EVSE Owners and Operators Should Be Properly Included as "Retail Customers" and "End-use Customers"

Under the current statutory framework, the proper role of the Department in regulating EV charging, as asked in Question A.1, primarily comes from the Department's authority over transactions between the electric distribution companies and retail customers. This includes authority over terms of service for a distribution company to connect retail customers, as well as authority over distribution rates and certain other aspects of electricity rates. The Department should properly include owners and operators of electric vehicle supply equipment in the relevant definitions of "retail customer" and "end-use customer" to preserve their authority in this area and prevent possible confusion that vehicle owners and operators could be considered the "end-use customer". It would also clarify the Department's ongoing authority over the conditions of interconnection between the regulated distribution company and the end-use customer, including customers that install EVSE.

These same statutory determinations are necessary to preserve the integrity of the Renewable Portfolio Standard and retail electricity competition programs. The Renewable Portfolio Standard and Alternative Energy Portfolio Standard, under M.G.L. Ch. 25A, §§ 11F and 11F1/2, are both implemented as requirements on "selling electricity to end-use customers in the commonwealth." This should include sales to the owners and operators of EVSE, not subsequent energy transfers to vehicle owners and operators, for both consistency and avoiding double counting. Similarly, the provisions implementing retail electricity competition, M.G.L. Ch. 164, §§ 1A-1F, use the term "retail customers". This should include the owners and operators of EVSE, not the vehicle owners and operators purchasing "charging services."

IV. The Division of Standards Has Authority to Implement Proper Consumer Protections for Commercial Transactions involving EVSE

In Question A.3, the Department asks whether EV charging could be "unregulated." While the above determinations would provide a lighter regulatory touch than some other paths that the Department could choose, it is important to know other agencies in the Commonwealth have the statutory authority to implement proper consumer protections in this area. In particular, the Division of Standards, part of the Office of Consumer Affairs and Business Regulation, has broad statutory authority under M.G.L. Ch. 98, § 29 over "weighing and measuring devices" and their use in commercial transactions. While duplicative regulations should be avoided, the definition of "weighing or measuring device" under M.G.L. Ch. 98, § 1 can clearly include EVSE used in commercial transactions as "computing scales and other devices having a device for indicating or registering the price as well as the weight or measure of a commodity offered for sale…."

The National Institute of Standards and Technology ("NIST"), part of the U.S. Department of Commerce, and the National Conference on Weights and Measures ("NCWM"), an association of state and local weights and measures officials, federal agencies, manufacturers, retailers and consumers, are currently working to establish national standards that would apply to the measuring devices used in commercial transactions between EVSE owners and operators and vehicle owners and operators. Much

of the deliberations can be found at http://www.nist.gov/pml/wmd/usnwg-evfs.cfm. Of particular note, M.G.L. Ch. 98, § 29 requires that "All weighing and measuring devices used or intended to be used commercially shall meet all the applicable requirements contained in the most recent publication of National Institute of Standards and Technology Handbook 44 as adopted by the National Conference on Weights and Measures." The process underway has already produced draft requirements on devices for "Electric Vehicle Fueling and Submetering" to be included in Handbook 44, including accuracy requirements, display of the prices charged, and printed receipts. These regulations would provide a more appropriate level of consumer protection than regulation of EVSE by the Department as an electric company or distribution company. The Division of Standards would be able to adopt these national standards, with any appropriate modifications for Massachusetts, after they are adopted by the NCWM and published by NIST. Additional funding, for both testing equipment[7] and staff, may be necessary to enforce the standards, but that would be necessary regardless of the agency enforcing consumer protections in this area.

V. Conclusion

ENE, ChargePoint, Conservation Law Foundation, the New England Clean Energy Council, and Plug In America greatly appreciate the opportunity to submit these comments on the Department's notice of investigation in this docket. We applaud the Department's decision to open this investigation and proper action by the department will speed the installation of electric vehicle charging infrastructure and allow the Commonwealth to meet the ambitious 2025 targets for electric vehicles.

[7] Limitations on the "sole authorized standards" for the Commonwealth are found in M.G.L. Ch. 98, § 3. However, M.G.L. Ch. 98, § 4 provides that "The state standards shall also include… all other weighing and measuring devices received from the United States as standard weights and measures, and such as have been or shall be supplied by the commonwealth and certified by the national bureau of standards." NIST is the successor agency to the National Bureau of Standards.

Thank you for your consideration of these comments.

Respectfully submitted,

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APPENDIX – SIGNATORY ORGANIZATION DESCRIPTIONS

ENE: ENE is a non-profit organization that researches and advocates innovative policies that tackle our environmental challenges while promoting sustainable economies. ENE is at the forefront of efforts to combat global warming with solutions that promote clean energy, clean air and healthy forests.

ChargePoint: ChargePoint is the largest and most open electric vehicle (EV) charging network in the world, with more than 15,000 charging locations and a 70%+ market share. Ranked #1 by leading independent research firm, Navigant Research, ChargePoint makes advanced hardware and best-in-class cloud based software. ChargePoint's open network is utilized by many leading EV hardware makers and encourages all EV charging manufacturers to join. ChargePoint's real-time network information including the availability of charging locations throughout the nation is available through the ChargePoint mobile app, online and via the navigation systems in top-selling EVs including the new BMW i3 and Nissan Leaf. Every 10 seconds, a driver connects to a ChargePoint station and by initiating over 3.7 million charging sessions, ChargePoint drivers have saved over 2.6 million gallons of gasoline and driven 65 million gas free miles. For more information about ChargePoint, visit www.chargepoint.com.

Conservation Law Foundation: CLF is a non-profit, New England-based environmental advocacy organization whose mission is to protect New England's environment for the benefit of all people. Since 1966, Conservation Law Foundation has used the law, science, policymaking, and the business market to find pragmatic, innovative solutions to New England's toughest environmental problems.

NECEC: The New England Clean Energy Council is a clean energy business association whose mission is to accelerate New England's clean energy economy to global leadership by building an active community of stakeholders and a world-class cluster of clean energy companies. The Council's members and sponsors span the broad spectrum of the clean energy sector, including energy efficiency, demand response, renewable energy (e.g., solar, wind, hydro, anaerobic digestion), combined heat and power (CHP), biofuels, alternative transportation, advanced and "smart" technologies (e.g., smart grid, fuel cells, storage, batteries, materials), among others. They include clean energy businesses, services and technology companies, venture investors, major financial institutions, universities, industry associations, utilities, labor and large commercial end-users.

Plug In America: Plug In America (PIA) is the pre-eminent advocacy organization advancing the plug-in vehicle market. This nonprofit organization works to accelerate the shift to plug-in vehicles powered by clean, affordable, domestic electricity to reduce our nation's dependence on petroleum and improve the global environment. PIA leaders are experts in transportation electrification by virtue of their extensive experiences driving the cars; drivers across PlA networks have logged millions of miles in electric vehicle use. PIA promotes effective policy at the local, state and federal levels, provides a range of expert assistance related to the widespread adoption of electric vehicles, and conducts leading edge consumer outreach and awareness – through events and aggressive use of online campaigns – to connect prospective drivers to electric vehicles now available. PlA maintains the nation's largest database of active and prospective electric vehicle owners, many who are actively engaged in its efforts. Through its efforts, PIA believes it is possible to build on early successes of today's nascent market and significantly contribute to reduce oil demand and greenhouse gas emissions from cars in the next 25 years.