## ASSEMBLY, No. 3687

# STATE OF NEW JERSEY

### 218th LEGISLATURE

INTRODUCED MARCH 13, 2018

**Sponsored by:** 

Assemblyman DANIEL R. BENSON
District 14 (Mercer and Middlesex)
Assemblywoman NANCY J. PINKIN
District 18 (Middlesex)
Assemblywoman ANNETTE QUIJANO
District 20 (Union)

**Co-Sponsored by:** 

Assemblymen Zwicker, Kennedy, Calabrese and Karabinchak

#### **SYNOPSIS**

Establishes Statewide public plug-in electric vehicle charging system.

#### **CURRENT VERSION OF TEXT**

As introduced.



(Sponsorship Updated As Of: 6/11/2019)

AN ACT concerning the establishment of a Statewide plug-in electric vehicle charging system, and supplementing Title 27 and Title 48 of the Revised Statutes.

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**BE IT ENACTED** by the Senate and General Assembly of the State of New Jersey:

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1. The Legislature finds and declares that plug-in electric vehicle technology has improved significantly, and vehicles with longer range and lower costs are now available as a viable alternative to a fossil-fueled vehicle for many mainstream customers, with more makes and models to be introduced over the next several years; that legislation has already been proposed to adopt goals for the expanded use of electric vehicles and the establishment of the infrastructure required to support it; that widespread use of plug-in electric vehicles is constrained by consumer concerns over range anxiety and the lack of charging infrastructure; that public acceptance of these vehicles is therefore strongly dependent on the availability of public charging infrastructure that is reliably available, equitably accessible, conveniently useable by the public, and both strategically located and highly visible; and that the needed infrastructure does not yet exist within the State to the extent required.

The Legislature therefore determines that there is an important need for public and private sector investment in public charging infrastructure and development of general conditions that ensure long term market growth, as well the benefit of a State-enabled initiative focused on creating a critical mass of essential public charging infrastructure short term as a high priority, as needed to address existing market barriers related to range anxiety.

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#### 2. As used in this act:

"Board" means the Board Of Public Utilities.

"Community location" means a location established to primarily, but not exclusively, serve local plug-in electric vehicle drivers in a municipal center or other area commonly accessible to drivers residing or working in the area or along the route on which the location is established. "Community location" shall not mean a corridor location.

"Competitive solution provider" means a non-utility entity that develops projects, provides electric vehicle service equipment or related equipment, or provides related services for the development, design, installation, and operation of charging locations and the associated electric vehicle service equipment.

"Corridor location" means a DCFC location along, or within one mile of, travel corridor roadways which is intended to serve long range as well as local plug-in electric vehicle drivers. "Direct Current Fast Charger" or "DCFC" means electric vehicle service equipment that provides at least 50 kilowatts of direct current electrical power for charging a plug-in electric vehicle through a standardized connector, and which is approved for installation for this purpose under the National Electric Code through Underwriters Laboratories Certification or equivalent.

"Electric vehicle service equipment" or "EVSE" means equipment, including but not limited to devices that provide electric power in appropriate form for the on-board battery charging of a plug-in electric vehicle and which may include switching controls, point-of-sale equipment and functions, network connectivity, a user interface, and other controls. "EVSE" may deliver either alternating current or direct current electricity and is designated at different levels according to industry standards and depending on the electrical power rating of the equipment.

"Level 2 EVSE" means an electric vehicle service equipment device that provides a plug-in electric vehicle with single phase alternating current electrical power at 208-240Vac, at up to 80 amperes, through a standardized plug connector in compliance with SAE J1772 standards, or an equivalent wireless power transfer interface.

"Light duty plug-in electric vehicle" or "Light duty PEV" means any two-axle, four wheel plug-in electric vehicle, designed primarily for passenger travel or light duty commercial use, and approved for travel on public roads. "Light duty PEV" includes, but is not limited to, vehicles commonly referred to as cars, minivans, sport utility vehicles, cross-overs, and pick-up trucks.

"Location" means a publicly accessible parking space or collection of spaces, with visible signage designating the parking space as a parking space for charging plug-in electric vehicles only, but available for such use by the public without access restriction.

"Owner or operator" means an entity that owns and operates EVSE equipment for public use by PEV drivers. An "owner/operator" may be a site host or a third party contracted by the site host for the purposes of owning and operating EVSE on the site host's property.

"Plug-in electric vehicle" or "PEV" means any vehicle that includes a battery or equivalent energy storage device that can be charged from an electricity supply external to the vehicle through an electric plug. PEVs include pure battery electric vehicles and plug-in hybrid vehicles that can be charged from a source of electricity external to the vehicle, but shall not include hybrid vehicles that do not include a plug for charging from an external source. PEVs may be light duty, medium duty, or heavy duty vehicles.

"Range anxiety" means consumer concerns that public electric charging infrastructure may not be widely available, resulting in fewer electric vehicle purchases due to perceived risks that plug-in electric vehicle drivers may be stranded with a fully discharged battery and no source for recharging it.

"Site host" means an owner of real estate in the State, located within the territory of a utility, proposing to serve as a publicly accessible location.

"Travel corridor" means the subset of public roads designated by the Department of Transportation pursuant to section 6 of this act as providing a travel corridor through and around the State due to their inclusion of, or access to, the Garden State Parkway, the New Jersey Turnpike, the Atlantic City Expressway, and federal interstate highways and numbered federal or State roads with at least 20 miles of roadway located in the State.

- 3. a. The Board of Public Utilities, the Department of Environmental Protection, the Department of Transportation, the New Jersey Transit Corporation, the New Jersey Turnpike Authority, the South Jersey Transportation Authority, and the Department of Community Affairs shall establish, with representatives of their respective entities, a working group to develop a Statewide plan for installing at least 600 public DCFC and Level 2 public community chargers at 300 locations or more in the State by December 31, 2020.
- b. The working group established pursuant to subsection a. of this section shall incorporate in the Statewide plan:
- (1) strategies for creating general market conditions necessary for long term development of public electric vehicle charging infrastructure that fully address range anxiety, ensure attainment of the goals established in P.L. , c. (C. ) (pending before the Legislature as Senate Bill No. 1975 of 2018-2019), and establish minimum standards for consistent, reliable, and convenient access to highly visible public electric vehicle charging infrastructure as provided in this act;
- (2) methods for monitoring and compiling data on Statewide PEV purchases, EVSE use, and other statistics for developing and maintaining an effective charging infrastructure; and
- (3) Statewide marketing and consumer awareness campaigns that highlight the availability of public EVSE infrastructure in the State, with a specific focus on addressing consumer concerns about range anxiety and the availability of DCFC EVSE, to be implemented by the entities in the working group.
- c. To fulfill its duties pursuant to this act, the working group shall consult with other State agencies, stakeholders, the public electric utilities, and any other entities with an interest in promoting the use of the public electric vehicle charging system.

46 4. a. No later than December 31, 2020, the New Jersey 47 Turnpike Authority shall establish publicly accessible electric 48 vehicle service equipment parking spaces for the exclusive use by plug-in electric vehicles at each of the service areas along the New Jersey Turnpike and the Garden State Parkway.

- b. The authority shall provide at least two parking spaces at each location for Direct Current Fast Chargers by December 31, 2020, with the electrical infrastructure to support future installation of at least eight spaces for DCFC and at least four spaces with Level 2 EVSE at each location. The authority shall monitor and record the use and wait times for the EVSE at all of the service areas and shall expand the number of spaces served by EVSE as needed to ensure reliable and convenient use by the public.
- c. The authority may charge PEV drivers using the EVSE a reasonable amount to recover costs associated with installation and operation of EVSE for public use, either directly, or through third parties that have been authorized to provide PEV charging services at each service area.
- d. The authority shall pursue public-private partnerships for the purpose of facilitating the development, funding, and operation of public electric vehicle charging infrastructure required pursuant to this act.
- e. For EVSE located on State agency-owned properties, or on properties owned or controlled by local government units, and which are owned or operated by a third party, charges for service may include a fee that is transferable to the State agency or local government unit as a concession pursuant to a written agreement between the owner/operator and the State agency or local government unit.

- 5. a. No later than December 31, 2020, the South Jersey Transportation Authority shall establish publicly accessible electric vehicle service equipment parking spaces for the exclusive use by plug-in electric vehicles at each of the service areas along the Atlantic City Expressway.
- b. The authority shall provide at least two parking spaces at each location for Direct Current Fast Chargers by December 31, 2020, with the electrical infrastructure to support future installation of at least eight spaces for DCFC and at least four spaces with Level 2 EVSE at each location. The authority shall monitor and record the use and wait times for the EVSE at all of the service areas and shall expand the number of spaces served by EVSE as needed to ensure reliable and convenient use by the public.
- c. The authority may charge PEV drivers using the EVSE a reasonable amount to recover costs associated with installation and operation of EVSE for public use, either directly, or through third parties that have been authorized to provide PEV charging services at each service area.
- d. The authority shall pursue public-private partnerships for the purpose of facilitating the development, funding, and operation of

public electric vehicle charging infrastructure required pursuant to this act.

e. For EVSE located on State agency-owned properties, or on properties owned or controlled by local government units, and which are owned or operated by a third party, charges for service may include a fee that is transferable to the State agency or local government unit as a concession pursuant to a written agreement between the owner/operator and the State agency or local government unit.

- 6. a. Within 180 days after the effective date of this act, the Department of Transportation shall designate the travel corridor and shall expand the designation to include additional public roads as necessary as determined by the department to achieve the density of public DCFC locations sufficient to reduce range anxiety and provide efficient and effective access to public electric vehicle servicing equipment.
- b. The department, in cooperation and consultation with the New Jersey Turnpike Authority and the South Jersey Transportation Authority, shall establish consistent and effective signage along the travel corridor and local roadways in the State and at EVSE locations to inform the public of EVSE locations, provide guidance for reaching the publicly accessible EVSE locations, and indicate the type of EVSE available at the location. The signage shall indicate the availability of DCFC EVSE when available.
- c. The department shall coordinate with federal authorities to ensure the use of standardized signage indicating the availability of nearby EVSE along federal interstate highways, similar to current signage in use regarding fuel and other local amenities.

7. The Department of Environmental Protection, in consultation with other agencies and stakeholders, shall establish new programs, procedures, rules and regulations, and guidelines as required to facilitate development of public charging infrastructure consistent with the Statewide plan established pursuant to section 3 of this act.

8. The Department of Community Affairs, in consultation with other agencies and stakeholders, shall establish new programs, procedures, rules and regulations, and guidelines as required to facilitate development of public charging infrastructure by local government units of the State, including issuance of formal guidance that allows local government units to utilize the competitive contracting provisions of the "Local Public Contracts Law," P.L.1971, c.198 (C.40A:11-1 et seq.), in order to partner with private parties for the design, permitting, financing, installation, operation, and management of all EVSE installations made available to the public.

- 9. a. As soon as practicable after the effective date of this act, the Board of Public Utilities shall establish a Statewide plug-in electric vehicle charging infrastructure to be known as the Essential Public Charging Network or EPCN.
  - b. The board shall ensure development of an Essential Public Charging Network that provides a critical mass of public charging infrastructure that seeds the market during its early stages of development, and provides a basic level of high impact public charging infrastructure sufficient to minimize range anxiety.
    - c. The board shall ensure that the network:

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- (1) is reliably available for use by all PEV drivers in the State at all times;
  - (2) is equitably accessible by all PEV drivers in the State;
- (3) provides convenient use by the public without unreasonable commercial or technical restrictions;
- (4) has locations that are highly visible along public roadways and through on-line resources;
  - (5) provide a consumer experience that addresses range anxiety;
- (6) provides both DCFC EVSE that provides a quick charge transaction of short duration, and Level 2 EVSE that provides charge transactions that are longer duration and support PEVs without DCFC capability;
- (7) all DCFC EVSE that are part of the Essential Public Charging Network is a typical PEV with a 60 kilowatt-hour battery can achieve an 80% state of charge in 20 minutes or less;
- (8) includes at least 100 DCFC locations Statewide along travel corridors by December 31, 2020, with geographic density of no more than 25 miles between locations, in addition to any locations or EVSE already in place as of January 1, 2018;
- (9) includes at least 200 DCFC locations Statewide at community locations by December 31, 2020, in addition to any locations or EVSE already in place as of January 1, 2018;
- (10) provides at least 500 publically accessible Level 2 EVSE by December 31, 2020, in addition to any locations or EVSE already in place as of January 1, 2018;
- 36 (11) provides at least two independently operable EVSE;
- 37 (12) includes electric infrastructure that is ready to support future 38 high power requirements of at least 350 kilowatts of Direct Current 39 per EVSE;
  - (13) provides for each DCFC EVSE to support at least two plug types, compliant with CHAdeMO and CCS standards as defined at the time of installation, and other additional standards as may be introduced based on technology improvements and approved for inclusion by the board;
- 45 (14) allows open access and use by the public, which shall not be 46 restricted by membership, vehicle type, or other eligibility 47 requirements; and

- (15) provides at each EVSE location payment methods that allow any driver to make use of the public charging EVSE;
- d. The board may define additional requirements for the Essential Public Charging Network, including standards to ensure reliable access, equitable use, consumer consistency and convenience, assurance of long term operation and minimization of asset stranding, payment method and solution interoperability, and other factors as deemed necessary to achieve the goals of this act.
- e. This section shall not prohibit or displace any other charging infrastructure development projects or programs that may be pursued in addition to the development of the Essential Public Charging Network.

- 10. a. Within 180 days after the effective date of this act, each electric public utility in the State shall submit to the board a proposal for the construction and long term operation of the Essential Public Charging Network, including but not limited to development and operation of electrical infrastructure, financing plans, financial incentives, new rate designs and tariffs, partnership programs with local government units, marketing and other consumer awareness building initiatives, or other programs that support the goals of this act.
- b. The electric public utility may propose tariffs or other methods that ensure electricity costs that allow owners or operators of EVSE for public use to charge PEV drivers competitive rates, and such tariffs, programs, or methods are recoverable through rates. Such tariffs or other methods may be approved for EVSE that are part of the Essential Public Charging Network, or for any other EVSE that is available for public use and meet any requirements deemed necessary by the board.
- c. Any proposal submitted within the year preceding the effective date of this act that is consistent with the goals and requirements established by this act shall be considered fulfilling the requirements of this subsection.
- d. No later than 180 days after receipt of a proposal submitted pursuant to subsection a. of this section, the Board of Public Utilities shall review and issue a determination approving, rejecting, or modifying and approving the proposal. The board shall apply the following criteria for this review and determination:
- (1) The proposal is consistent with and supports attaining the goals of this act;
- (2) The expenditures estimated and set forth in the proposal are reasonable for attaining the goals of this act;
- (3) The proposal (a) offers competitive solution providers for project development where feasible, (b) sourcing of DCFC and Level 2 EVSE, and other services to implement and operate the locations for public use, (c) leveraging of private investment, and

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- (d) promotes development of a competitive market for continued growth in public charging infrastructure;
  - (4) The proposal does not limit the ability of publicly regulated electric public utilities from owning and operating locations and EVSE that are part of the Essential Public Charging Network if approved by the board, and any such installations are sourced from competitive solution providers; and
  - (5) The proposal ensures that all DCFC and Level 2 EVSE intended for public use are developed in a manner and at locations that provide public benefit.
  - e. The board order approving, rejecting, or modifying a utility proposal shall provide for and approve recovery through utility rates for all reasonable costs, which may be treated as regulatory assets. Proposed programs shall use external funding sources where feasible, in addition to ratepayer funds as recovered by utilities through rates.
  - 11. Unless otherwise specifically provided pursuant to Title 48 of the Revised Statutes or any other federal or State law, a person owning, controlling, operating, or managing an electric vehicle charging station shall not be deemed an electric public utility solely because of that ownership, control, operation, or management. The charging of an electric vehicle shall be deemed a service and not a sale of electricity by an electric power supplier or basic generation service provider pursuant to P.L.1999, c.23 (C.48:3-49 et al.).

12. This act shall take effect immediately.

#### **STATEMENT**

This bill would establish a Statewide public plug-in electric vehicle charging system. The bill directs a working group of the Board of Public Utilities, the Department of Environmental Protection, the Department of Transportation, the New Jersey Transit Corporation, the New Jersey Turnpike Authority, the South Jersey Transportation Authority, and the Department of Community Affairs to develop a Statewide plan for installing at least 600 public DC fast chargers and Level 2 public community chargers at 300 locations or more in the State by December 31, 2020.