

SENATE, No. 2252

STATE OF NEW JERSEY
218th LEGISLATURE

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Sponsored by:

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SYNOPSIS

Establishes Statewide public plug-in electric vehicle charging system.

CURRENT VERSION OF TEXT

As introduced.



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

4
5 **BE IT ENACTED** *by the Senate and General Assembly of the State*
6 *of New Jersey:*

7
8 1. The Legislature finds and declares that plug-in electric
9 vehicle technology has improved significantly, and vehicles with
10 longer range and lower costs are now available as a viable
11 alternative to a fossil-fueled vehicle for many mainstream
12 customers, with more makes and models to be introduced over the
13 next several years; that legislation has already been proposed to
14 adopt goals for the expanded use of electric vehicles and the
15 establishment of the infrastructure required to support it; that
16 widespread use of plug-in electric vehicles is constrained by
17 consumer concerns over range anxiety and the lack of charging
18 infrastructure; that public acceptance of these vehicles is therefore
19 strongly dependent on the availability of public charging
20 infrastructure that is reliably available, equitably accessible,
21 conveniently useable by the public, and both strategically located
22 and highly visible; and that the needed infrastructure does not yet
23 exist within the State to the extent required.

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

31
32 2. As used in this act:

33 “Board” means the Board Of Public Utilities.

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

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

45 “Corridor location” means a DCFC location along, or within one
46 mile of, travel corridor roadways which is intended to serve long
47 range as well as local plug-in electric vehicle drivers.

1 “Direct Current Fast Charger” or “DCFC” means electric vehicle
2 service equipment that provides at least 50 kilowatts of direct
3 current electrical power for charging a plug-in electric vehicle
4 through a standardized connector, and which is approved for
5 installation for this purpose under the National Electric Code
6 through Underwriters Laboratories Certification or equivalent.

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

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

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

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

32 “Owner or operator” means an entity that owns and operates
33 EVSE equipment for public use by PEV drivers. An
34 “owner/operator” may be a site host or a third party contracted by
35 the site host for the purposes of owning and operating EVSE on the
36 site host’s property.

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

46 “Range anxiety” means consumer concerns that public electric
47 charging infrastructure may not be widely available, resulting in
48 fewer electric vehicle purchases due to perceived risks that plug-in

1 electric vehicle drivers may be stranded with a fully discharged
2 battery and no source for recharging it.

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

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

13

14 3. a. The Board of Public Utilities, the Department of
15 Environmental Protection, the Department of Transportation, the
16 New Jersey Transit Corporation, the New Jersey Turnpike
17 Authority, the South Jersey Transportation Authority, and the
18 Department of Community Affairs shall establish, with
19 representatives of their respective entities, a working group to
20 develop a Statewide plan for installing at least 600 public DCFC
21 and Level 2 public community chargers at 300 locations or more in
22 the State by December 31, 2020.

23 b. The working group established pursuant to subsection a. of
24 this section shall incorporate in the Statewide plan:

25 (1) strategies for creating general market conditions necessary
26 for long term development of public electric vehicle charging
27 infrastructure that fully address range anxiety, ensure attainment of
28 the goals established in P.L. , c. (C.) (pending before the
29 Legislature as Senate Bill No. 1975 of 2018-2019), and establish
30 minimum standards for consistent, reliable, and convenient access
31 to highly visible public electric vehicle charging infrastructure as
32 provided in this act;

33 (2) methods for monitoring and compiling data on Statewide
34 PEV purchases, EVSE use, and other statistics for developing and
35 maintaining an effective charging infrastructure; and

36 (3) Statewide marketing and consumer awareness campaigns
37 that highlight the availability of public EVSE infrastructure in the
38 State, with a specific focus on addressing consumer concerns about
39 range anxiety and the availability of DCFC EVSE, to be
40 implemented by the entities in the working group.

41 c. To fulfill its duties pursuant to this act, the working group
42 shall consult with other State agencies, stakeholders, the public
43 electric utilities, and any other entities with an interest in promoting
44 the use of the public electric vehicle charging system.

45

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

1 plug-in electric vehicles at each of the service areas along the New
2 Jersey Turnpike and the Garden State Parkway.

3 b. The authority shall provide at least two parking spaces at
4 each location for Direct Current Fast Chargers by December 31,
5 2020, with the electrical infrastructure to support future installation
6 of at least eight spaces for DCFC and at least four spaces with
7 Level 2 EVSE at each location. The authority shall monitor and
8 record the use and wait times for the EVSE at all of the service
9 areas and shall expand the number of spaces served by EVSE as
10 needed to ensure reliable and convenient use by the public.

11 c. The authority may charge PEV drivers using the EVSE a
12 reasonable amount to recover costs associated with installation and
13 operation of EVSE for public use, either directly, or through third
14 parties that have been authorized to provide PEV charging services
15 at each service area.

16 d. The authority shall pursue public-private partnerships for the
17 purpose of facilitating the development, funding, and operation of
18 public electric vehicle charging infrastructure required pursuant to
19 this act.

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

27
28 5. a. No later than December 31, 2020, the South Jersey
29 Transportation Authority shall establish publicly accessible electric
30 vehicle service equipment parking spaces for the exclusive use by
31 plug-in electric vehicles at each of the service areas along the
32 Atlantic City Expressway.

33 b. The authority shall provide at least two parking spaces at
34 each location for Direct Current Fast Chargers by December 31,
35 2020, with the electrical infrastructure to support future installation
36 of at least eight spaces for DCFC and at least four spaces with
37 Level 2 EVSE at each location. The authority shall monitor and
38 record the use and wait times for the EVSE at all of the service
39 areas and shall expand the number of spaces served by EVSE as
40 needed to ensure reliable and convenient use by the public.

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43 operation of EVSE for public use, either directly, or through third
44 parties that have been authorized to provide PEV charging services
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47 purpose of facilitating the development, funding, and operation of

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2 this act.

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4 properties owned or controlled by local government units, and
5 which are owned or operated by a third party, charges for service
6 may include a fee that is transferable to the State agency or local
7 government unit as a concession pursuant to a written agreement
8 between the owner/operator and the State agency or local
9 government unit.

10

11 6. a. Within 180 days after the effective date of this act, the
12 Department of Transportation shall designate the travel corridor and
13 shall expand the designation to include additional public roads as
14 necessary as determined by the department to achieve the density of
15 public DCFC locations sufficient to reduce range anxiety and
16 provide efficient and effective access to public electric vehicle
17 servicing equipment.

18 b. The department, in cooperation and consultation with the
19 New Jersey Turnpike Authority and the South Jersey Transportation
20 Authority, shall establish consistent and effective signage along the
21 travel corridor and local roadways in the State and at EVSE
22 locations to inform the public of EVSE locations, provide guidance
23 for reaching the publicly accessible EVSE locations, and indicate
24 the type of EVSE available at the location. The signage shall
25 indicate the availability of DCFC EVSE when available.

26 c. The department shall coordinate with federal authorities to
27 ensure the use of standardized signage indicating the availability of
28 nearby EVSE along federal interstate highways, similar to current
29 signage in use regarding fuel and other local amenities.

30

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

37

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

- 1 9. a. As soon as practicable after the effective date of this act,
2 the Board of Public Utilities shall establish a Statewide plug-in
3 electric vehicle charging infrastructure to be known as the Essential
4 Public Charging Network or EPCN.
- 5 b. The board shall ensure development of an Essential Public
6 Charging Network that provides a critical mass of public charging
7 infrastructure that seeds the market during its early stages of
8 development, and provides a basic level of high impact public
9 charging infrastructure sufficient to minimize range anxiety.
- 10 c. The board shall ensure that the network:
- 11 (1) is reliably available for use by all PEV drivers in the State at
12 all times;
- 13 (2) is equitably accessible by all PEV drivers in the State;
- 14 (3) provides convenient use by the public without unreasonable
15 commercial or technical restrictions;
- 16 (4) has locations that are highly visible along public roadways
17 and through on-line resources;
- 18 (5) provide a consumer experience that addresses range anxiety;
- 19 (6) provides both DCFC EVSE that provides a quick charge
20 transaction of short duration, and Level 2 EVSE that provides
21 charge transactions that are longer duration and support PEVs
22 without DCFC capability;
- 23 (7) all DCFC EVSE that are part of the Essential Public
24 Charging Network is a typical PEV with a 60 kilowatt-hour battery
25 can achieve an 80% state of charge in 20 minutes or less;
- 26 (8) includes at least 100 DCFC locations Statewide along travel
27 corridors by December 31, 2020, with geographic density of no
28 more than 25 miles between locations, in addition to any locations
29 or EVSE already in place as of January 1, 2018;
- 30 (9) includes at least 200 DCFC locations Statewide at
31 community locations by December 31, 2020, in addition to any
32 locations or EVSE already in place as of January 1, 2018;
- 33 (10) provides at least 500 publically accessible Level 2 EVSE by
34 December 31, 2020, in addition to any locations or EVSE already in
35 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
38 future high power requirements of at least 350 kilowatts of Direct
39 Current per EVSE;
- 40 (13) provides for each DCFC EVSE to support at least two plug
41 types, compliant with CHAdeMO and CCS standards as defined at
42 the time of installation, and other additional standards as may be
43 introduced based on technology improvements and approved for
44 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

1 (15) provides at each EVSE location payment methods that allow
2 any driver to make use of the public charging EVSE;

3 d. The board may define additional requirements for the
4 Essential Public Charging Network, including standards to ensure
5 reliable access, equitable use, consumer consistency and
6 convenience, assurance of long term operation and minimization of
7 asset stranding, payment method and solution interoperability, and
8 other factors as deemed necessary to achieve the goals of this act.

9 e. This section shall not prohibit or displace any other charging
10 infrastructure development projects or programs that may be
11 pursued in addition to the development of the Essential Public
12 Charging Network.

13

14 10. a. Within 180 days after the effective date of this act, each
15 electric public utility in the State shall submit to the board a
16 proposal for the construction and long term operation of the
17 Essential Public Charging Network, including but not limited to
18 development and operation of electrical infrastructure, financing
19 plans, financial incentives, new rate designs and tariffs, partnership
20 programs with local government units, marketing and other
21 consumer awareness building initiatives, or other programs that
22 support the goals of this act.

23 b. The electric public utility may propose tariffs or other
24 methods that ensure electricity costs that allow owners or operators
25 of EVSE for public use to charge PEV drivers competitive rates,
26 and such tariffs, programs, or methods are recoverable through
27 rates. Such tariffs or other methods may be approved for EVSE that
28 are part of the Essential Public Charging Network, or for any other
29 EVSE that is available for public use and meet any requirements
30 deemed necessary by the board.

31 c. Any proposal submitted within the year preceding the
32 effective date of this act that is consistent with the goals and
33 requirements established by this act shall be considered fulfilling
34 the requirements of this subsection.

35 d. No later than 180 days after receipt of a proposal submitted
36 pursuant to subsection a. of this section, the Board of Public
37 Utilities shall review and issue a determination approving, rejecting,
38 or modifying and approving the proposal. The board shall apply the
39 following criteria for this review and determination:

40 (1) The proposal is consistent with and supports attaining the
41 goals of this act;

42 (2) The expenditures estimated and set forth in the proposal are
43 reasonable for attaining the goals of this act;

44 (3) The proposal (a) offers competitive solution providers for
45 project development where feasible, (b) sourcing of DCFC and
46 Level 2 EVSE, and other services to implement and operate the
47 locations for public use, (c) leveraging of private investment, and

1 (d) promotes development of a competitive market for continued
2 growth in public charging infrastructure;

3 (4) The proposal does not limit the ability of publicly regulated
4 electric public utilities from owning and operating locations and
5 EVSE that are part of the Essential Public Charging Network if
6 approved by the board, and any such installations are sourced from
7 competitive solution providers; and

8 (5) The proposal ensures that all DCFC and Level 2 EVSE
9 intended for public use are developed in a manner and at locations
10 that provide public benefit.

11 e. The board order approving, rejecting, or modifying a utility
12 proposal shall provide for and approve recovery through utility
13 rates for all reasonable costs, which may be treated as regulatory
14 assets. Proposed programs shall use external funding sources where
15 feasible, in addition to ratepayer funds as recovered by utilities
16 through rates.

17

18 11. Unless otherwise specifically provided pursuant to Title 48
19 of the Revised Statutes or any other federal or State law, a person
20 owning, controlling, operating, or managing an electric vehicle
21 charging station shall not be deemed an electric public utility solely
22 because of that ownership, control, operation, or management. The
23 charging of an electric vehicle shall be deemed a service and not a
24 sale of electricity by an electric power supplier or basic generation
25 service provider pursuant to P.L.1999, c.23 (C.48:3-49 et al.).

26

27 12. This act shall take effect immediately.

28

29

30 STATEMENT

31

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