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# NOTICE[1]
# New Jersey Electric Vehicles Infrastructure Ecosystem 2020 Straw Proposal

## Docket # QO20050357: IN THE MATTER OF STRAW PROPOSAL ON ELECTRIC VEHICLE INFRASTRUCTURE BUILD OUT

Pursuant to the "Open Public Meetings Act", N.J.S.A. 10:4-6 et seq., the New Jersey Board of Public Utilities ("Board" or "BPU") hereby gives notice of a Public Meeting to discuss the below New Jersey Electric Vehicles Infrastructure Ecosystem 2020 Straw Proposal ("Straw Proposal" or "Straw"). In an effort to engage with the public, the Board has set up a stakeholder meeting for feedback on this topic with stakeholders, which is detailed later in this notice.

## I. Introduction

The Board is committed to Governor Murphy's stated goal of having 330,000 electric vehicles ("EVs") on New Jersey's roads by 2025. The Governor's objectives were endorsed and amplified by the Legislature with the passage of Senate Bill 2252, highlighting the fact that addressing range anxiety is "high priority" in the State of New Jersey and adopting aggressive targets for installation of vehicle chargers in the next five (5) years.

In response to clear directives from both the Executive and Legislative branches of government, Board Staff has developed this Straw Proposal aimed at furthering EV adoption. Board Staff recognizes that New Jersey needs to create a comprehensive "EV Ecosystem"[2] that provides consumers with easy access to electric vehicle charging infrastructure where they work and play, in partnership with stakeholders, including New Jersey's employers, property owners, Electric Distribution Companies ("EDCs"), consumers, and investors. Yet, according to the 2019 Energy

[1]Not a Paid Legal Advertisement
[2] Capitalized terms throughout the document are defined in the "Background on Terminology" section below.

Master Plan, New Jersey is starting from a relatively low baseline, with New Jersey currently ranked 45th in the nation in electric charging stations per registered vehicle.

Many of the issues this Straw Proposal seeks to explore include questions about who should construct, own, operate, and pay for the comprehensive network necessary to make New Jersey a national leader in the adoption of EVs. The Board is seeking feedback on the following framework for a comprehensive EV Ecosystem:

A "shared responsibility" model for EV infrastructure that promotes appropriate roles for both the EDC and private investors. Under this model:

- EDCs would be responsible for the wiring and backbone infrastructure necessary to enable a robust number of Charger Ready locations, along with the ability to own and operate Electric Vehicle Service Equipment ("EVSE") in specified circumstances, as further described in Section V. Program Elements or as otherwise determined by the Board; and

- Non-utility entities, which we refer to as EVSE Infrastructure Companies, would be primarily responsible for installing, owning and/or operating, and marketing EVSE using private capital.

2. Funding of the EV Ecosystem, which builds on the shared responsibility model:

    - EDCs will invest in, and earn on, the wiring and backbone infrastructure necessary to make locations Charger Ready as well as on any Board-approved EVSE owned by the EDCs; and

    - EVSE Infrastructure Companies would expect to see returns from their sales of electric charging equipment and services to the public.

3. A commitment that all communities within the State of New Jersey have equitable access to the EV Ecosystem, which may include allowing EDCs to own EVSE where the private sector is unwilling to provide services.

4. Reform utility rate structures that are acting as barriers to mass deployment of EV infrastructure, including:

    - A strong preference that EVSE serving residential customers operate on a retail rate structure, whether single-family or multi-family dwellings with rate parity between single-family and multi-family customers; and

    - Reform to commercial and industrial demand charge structures so that the effective cost of electricity for public charging facilities does not exceed an agreed to amount on a per-KW-hour basis.

Staff is keenly aware of the need to move expeditiously towards a low-carbon future and that successful EV policies are critical to meeting New Jersey's long-term emissions targets. Staff anticipates that resolving key issues as part of a generic docket is more expeditious than addressing these same policy issues in each EDC filing seriatim. Addressing these issues in a generic docket also ensures a consistent state-wide approach to EV Ecosystem development that is critical to the ultimate replicability and success of New Jersey's program.

**To be clear, the Board's consideration of these and other generic policy issues will proceed in parallel with its evaluation of EV-related filings from individual EDCs and ultimately result in a faster development of a successful EV Ecosystem. To that end, Staff has included a partial list of additional information sought from the EDCs in Section V.E. of this Straw Proposal.**

This Straw Proposal is intended to provide an opportunity for stakeholder feedback; instructions for providing that information can be found in the last section of this Straw Proposal.

## II. Statutory Authority

On January 17, 2020, Governor Murphy signed S 2252 into law (N.J.S.A. 48:25-1 et seq.), which included an extensive set of new goals for a comprehensive EV Ecosystem throughout New Jersey. Among other things, N.J.S.A. 48:25-1 et seq. calls for at least 330,000 EVs on New Jersey roads by December 31, 2025 and at least 2 million EVs by December 31, 2035. This would mean that at least 85% of all new light duty vehicles sold or leased in the State would be EVs by December 31, 2040. The legislation gives the Board the authority to "adopt policies and programs to accomplish the goals established pursuant to this section."

N.J.S.A. 48:25-1 et seq. also includes specific EV Ecosystem goals, including requiring publicly-accessible charging infrastructure as follows:

- The installation of at least 400 DC Fast Chargers and 1,000 Level Two publicly-accessible chargers installed across New Jersey by December 31, 2025;

- That the DC Fast Chargers be located in at least 200 locations across the state, of which a certain number must be located either on "Travel Corridors" or in "Community Locations;"

- That the DC Fast Chargers located on Travel Corridors must be capable of delivering 150kW of charging power, and be no more than 25 miles apart; and

- That the DC Fast Chargers located at Community Locations must be capable of delivering at least 50kW of charging power, but establishing a preference for 150kW charging where feasible.

The legislation also contains requirements for the aggressive expansion of charging infrastructure at multi-family dwellings and overnight lodging establishments, including specific numeric targets. In addition, N.J.S.A. 48:25-1 et seq. established a financial incentive for electric vehicle purchases, which is the subject of a separate Board proceeding, and for home charging equipment.

Finally, N.J.S.A. 48:25-1 et seq. clarified that the "charging of a plug-in electric vehicle shall be deemed a service and not a sale of electricity by an electric power supplier or basic generation service provider," which allows EVSE Infrastructure Companies to charge for charging services either on per-kW-hour basis or on a time basis, without subjecting them to unnecessary regulation.

## III. Background on Terminology

Staff proposes to adopt the following terminology for discussing EV infrastructure and the EV charging experience, many of which are adopted from N.J.S.A. 48:25-1 et seq. Capitalized terms in this document refer to these definitions. Staff welcomes comment on these terms, as well as suggestions for other items that should be included on this list:

- "Charger Ready" means the pre-wiring of electrical infrastructure at a parking space, or set of parking spaces, to facilitate easy and cost-efficient future installation of Electric Vehicle Service Equipment, including, but not limited to, Level Two EVSE and DC Fast Chargers. Making a site Charger Ready includes expenses related to service panels, junction boxes, conduit, wiring, etc., necessary to make a particular location able to accommodate Electric Vehicle Service Equipment on a "plug and play" basis. "Charger Ready" is synonymous with the term "Make Ready."

- "Charger Ready Map Proposal" is a proposal from an EDC which pre-identifies areas that are suitable for Level Two or DC Fast Charging based on the EV Mapping Effort.

- "Community Location" means a charging location that is not a Travel Corridor location, and that is established in a town center, commercial area, retail center, or near concentrations of multi-family dwellings, to provide vehicle charging services to local plug-in electric vehicle drivers near where they live and work.

- "DC Fast Charger" means EVSE that provides at least 50 kilowatts of direct current electrical power for charging a plug-in electric vehicle through a connector based on fast charging equipment standards, and which is approved for installation for that purpose under the National Electric Code through an Underwriters Laboratories Certification or an equivalent certifying organization.

- "Demand Charges" are an existing feature of many rates whereby large users of the electric system pay for their contribution to the fixed costs of operating the electric system. In most cases, Demand Charges are set at a customer's peak annual usage.

- "Electric Vehicle Service Equipment" or "EVSE" means the equipment, including the cables, cords, conductors, connectors, couplers, enclosures, attachment plugs, power outlets, switches and controls, network interfaces, and point of sale equipment and associated apparatus designed and used for the purpose of transferring energy from the electric supply system to a plug-in electric vehicle. EVSE may deliver either alternating current or direct current electricity consistent with fast charging equipment standards. "Electric Vehicle Service Equipment" is synonymous with "Charging Station Infrastructure."

- "EV Ecosystem" or "Ecosystem" refers to all of the physical equipment necessary to charge a vehicle, which includes the Electric Vehicle Service Equipment (i.e., "charging station infrastructure"), the Charger Ready portion of the electrical system, as well as distribution upgrades on the utility-side of the meter.

- "EV Mapping Effort" refers to the effort to map existing and proposed EV Ecosystem investments, under the lead of the Department of Environmental Protection ("DEP"), in conjunction with the Board and other Agencies.

- "EVSE Infrastructure Company" refers to an entity using private capital to deploy Electric Vehicle Service Equipment (i.e., "charging station infrastructure"). An EVSE Infrastructure Company cannot be an EDC, affiliated with an EDC, or controlled by an EDC, unless otherwise approved by the Board.

- "Equity Areas" refer to low-income, urban, environmental justice, and/or rural communities. "Low-income, urban, or environmental justice community" means a community: (1) in which at least one half of the households are at or below twice the poverty threshold as determined annually by the United States Census Bureau; (2) that is urban, as determined by the Department of Community Affairs, due to the population and development density in the community; or (3) that has been burdened with environmental justice issues, as determined by the NJDEP, including, but not limited to, exposure to high levels of air pollution, close proximity to major industrial facilities or hazardous waste sites, or other environmental hazards.

- "Operational" means a charging location that an EVSE Infrastructure Company would be required to maintain and promptly fix, in accordance with industry standards, in the event of malfunctioning hardware or software that would impede the use of the equipment by a consumer.

- "Poor Performing EVSE Infrastructure Companies" means EVSE Infrastructure Companies that fail to regularly maintain or promptly fix malfunctioning locations in accordance with industry practices, i.e., EVSE Infrastructure Companies that fail to maintain Operational charging locations, as defined above.

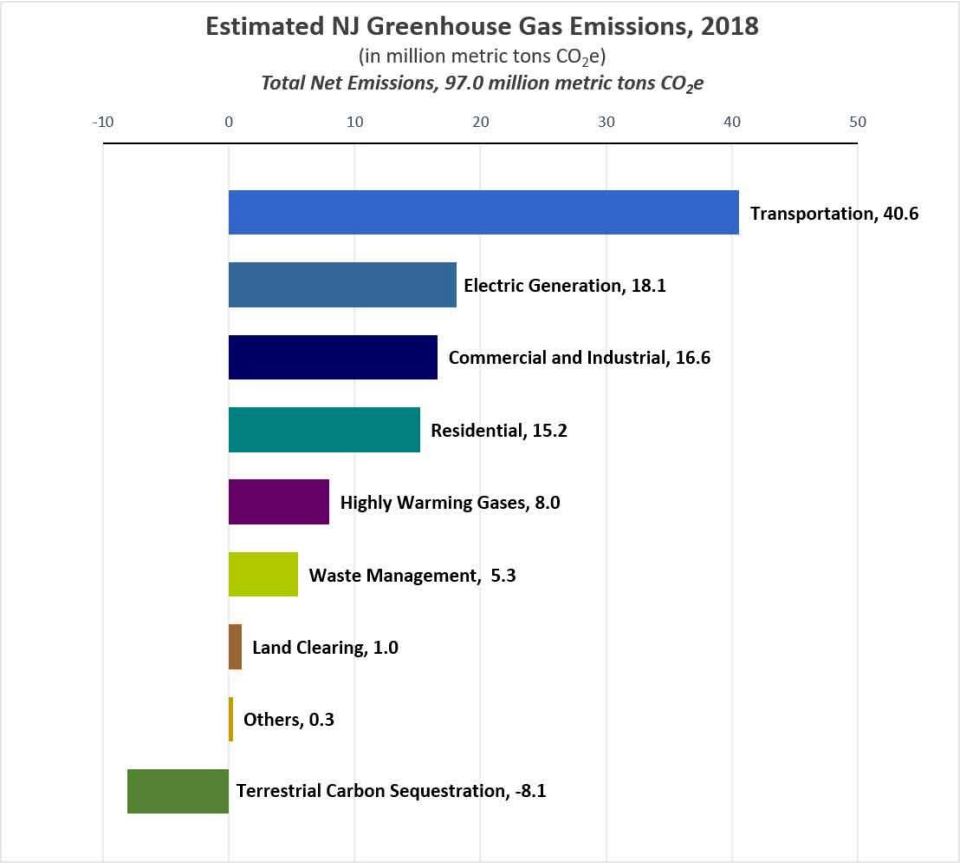
- "Travel Corridor" means heavily used public roads in the State, as designated by the NJDEP, which shall include, but need not be limited to, the Garden State Parkway, the New Jersey Turnpike, the Atlantic City Expressway, federal interstate highways, and the subset of federal or State roads which collectively support the majority of long distance travel through and within the State as well as the majority of daily travel by local drivers.

## IV. Objectives Underlying this Straw Proposal

As principles underlying this document and its recommendation governing the preferred business model, Staff took note of the extensive research around the need to rapidly transition our transportation sector, including the following:

- Transportation fuels account for approximately 40% of $CO_2$ emissions in the state today, the largest single sector of carbon emissions.

- New Jersey cannot meet its ambitious clean energy goals or its 80% reduction below 2006 levels in $CO_2$ emissions by 2050 unless it can electrify its transportation section, as shown in the following chart:




- Vehicle electrification reduces the cost of meeting New Jersey's 2050 targets. Failing to electrify the vehicle fleet increases the cost of decarbonization from 2035 to 2050 by an average of $1.6 billion per year, according to the research underlying the 2019 Energy Master Plan.

- Wide-spread adoption of EVs drive increased electricity consumption, even as total energy usage shrinks.

As noted in the 2019 Energy Master Plan, affordability of EV infrastructure is also critically important. To keep these efforts affordable, this Straw Proposal follows the framework laid out in the EMP that New Jersey should seek to:

- Attract private capital into the EV infrastructure sector and substitute shareholder dollars for ratepayer capital wherever possible;

- Minimize the risk of ratepayers paying for stranded EV infrastructure investments, such as the risk that charging station infrastructure, or EVSE, becomes technologically obsolete or is simply never utilized at a high level, through strategic mapping and encouraging private investment; and

- Design EV infrastructure policies that are fair to both EV-driving ratepayers and non-EV driving ratepayers, to ensure the benefits of EVs are shared by all ratepayers.

In developing the recommendations in this Straw Proposal, Staff conducted an extensive review of best practices across the country, including reviews of programs and rate structures in California, Georgia, Maryland, Missouri, New York, Washington State, and others.

## V. Program Elements

### A. The "Shared Responsibility" Business Model for Ownership, Maintenance and Advertising of EV Infrastructure.

The standardized approach that this Straw recommends is a "shared responsibility" model where EDCs invest in (and earn on) the wiring and backbone infrastructure necessary to enable a robust EV Ecosystem and the private sector owns, operates and advertises the EVSE. Even though under normal circumstances, private investors will install, operate, and market the charging stations, making sites across the state Charger Ready represents an extension of EDC responsibility.

Staff proposes that charging station infrastructure, or EVSE, costs will be generally borne by private investors, with no recourse to ratepayer funds, except where the EDC acts as the party of last resort, where investment in EVSE is not occurring, or is not occurring in specific geographic areas. EDCs shall continue to bear the burden of demonstrating that any investments made to serve such areas are reasonable, prudent, and that rate recovery of such investments is appropriate.

The policies laid out in this Straw take into account the investment time horizon and risk of various segments of the EV Ecosystem and attempt to portion responsibilities out in a way that represents each partners' expertise and risk appetite. For example, the EDCs have deep experience in delivering electricity and operating distribution infrastructure, therefore it makes sense to prioritize EDC involvement in making locations Charger Ready. In many ways, making a particular location Charger Ready looks like an extension of the distribution system and mimics the utility's ownership of meters on customer-owned land. This Straw proposes that the Board clarify that EDCs can do the work necessary to make a parking spot Charger Ready, even if the new infrastructure is on private property, and socialize the costs associated with this work, provided that the parking spot is either publicly available or is available to serve a multi-unit dwelling. The

Board requests comment on how to treat infrastructure costs in multi-family buildings where spots are assigned to, or owned by, a single user.

In contrast, the portions of the EV Ecosystem that are likely to become obsolete the fastest are the EVSE. Staff expects that as technology changes and various standards come and fade away, there is significant risk associated with this rapid pace of technological change, particularly with respect to networking hardware and payment systems, and the software tied to this equipment. Further, EDCs have no particular expertise in siting, maintaining, marketing or operating EVSE, whereas EVSE Infrastructure Companies specialize in providing these services.

Through this distribution of responsibilities, this Straw seeks to reduce the danger that ratepayers are responsible for stranded costs, while attracting private capital into the EV market *and* including a strong incentive for the EDCs to participate as full partners in the expansion of the system. Further, by allowing the EDCs to build out (and earn on) the Charger Ready infrastructure, combined with effective rate design reform, the total cost outlay for EVSE Infrastructure Companies is reduced and improves the likelihood of a robust market response. This fulfills the goal of substituting non-utility, investor-supplied capital for ratepayer capital wherever possible, particularly in portions of the EV Ecosystem that may change with time, such as the risk that charging station infrastructure, or EVSE, becomes technologically obsolete or is simply never utilized at a high level.

1. <u>Proposed EDC Role in the EV Ecosystem:</u>

The EDCs play several indispensable roles in the EV Ecosystem under the shared responsibility model, including four key roles, spelled out below. This Straw proposes that the EDCs would request recovery of their investments and other costs through a traditional rate case, the Societal Benefits Charge ("SBC"), or any other applicable rate recovery mechanism authorized by statute or regulation. EDCs should be permitted to seek recovery of their costs associated with the first three of the items listed below, as well as the administrative costs associated with serving a Last Resort role, which is discussed separately below. Specifically, under the Shared Responsibility model, the EDCs would be responsible for:

- Performing any necessary upgrades on the utility-side of the meter necessary to accommodate charging station infrastructure, or EVSE, and the anticipated increase in load on the distribution system caused by the rapid expansion of the EV Ecosystem;

- Wiring various locations upon request by an EVSE Infrastructure Company or a state, local, or municipal entity, with priority given to sites recommended by the EV Mapping Effort, to accept charging stations without additional electrical wiring or utility interconnection needs, in a process known as making a location "Charger Ready;"[3]

- Develop hosting maps in conjunction with the EV Mapping Effort that identify where to prioritize making sites Charger Ready, as well as identify where charging infrastructure

[3] Effectively, a location is Charger Ready if it includes service panels, junction boxes, conduit, wiring, etc., necessary to make a particular location able to accommodate a charging station on a "plug and play" basis.

can be located so as to meet the requirement of N.J.S.A. 48:25-1 et seq. while avoiding lengthy and costly distribution upgrades; and

- Costs associated with any "Last Resort" function the EDCs may undertake to ensure equitable distribution of EVSE.

Staff notes that, historically, the costs of upgrades on the EDC's side of the meter necessary to accommodate new development including, for example, EVSE, are assigned under a "beneficiary-pays" model, where the entity creating the need for the upgrades (here, presumably the EVSE Infrastructure Company) pays for the upgrade costs, consistent with the Board's regulations on extensions of utility service in N.J.A.C. 14:3-8 et seq. Staff requests comment on whether these investments would be expected to meet the earnings test, or whether, given the need for rapid deployment of the EV Ecosystem, coupled with the human health and environmental benefits of moving towards an electrified transportation sector, other measures should be implemented.
This Straw proposes that the EDCs recover all costs associated with distribution system upgrades, the costs of making a location Charger Ready, and the costs of any mapping exercises, provided the EDCs make an adequate showing that the costs are reasonable and prudently incurred, and that such investments are otherwise appropriate for recovery through the rate recovery mechanism proposed by the EDC.

2. Proposed Role for EVSE Infrastructure Companies:

Under this Shared Responsibility business model, private capital would be used as the primary means of funding EVSE. EVSE Infrastructure Companies would be expected to earn their revenues in the marketplace through the sale of charging services.[4] EVSE Infrastructure Companies would be the primary mechanism for deploying EVSE across the state and be primarily responsible for:

- Determining where EVSE can be sited to maximize market response in conjunction with their own market research, the results of the EV Mapping Effort and the EDC's hosting maps;

- Requesting that the identified sites be made Charger Ready by the EDC;

- Installing, owning, maintaining and marketing the EVSE so as to maximize consumer acceptance and revenue; and

- Performing such functions under contract to the EDCs as part of any "Last Resort" function to ensure equitable distribution of EVSE.

EVSE Infrastructure Companies would have the option of working in concert with the EDCs to use Charger Ready locations funded by ratepayers, or to establish their own Ecosystems without financial support from ratepayers. Because EVSE Infrastructure Companies will invest private

[4] EVSE Infrastructure Companies could charge customers either based on the time of charging or the amount of electricity the customer consumers. N.J.S.A. 48:25-1 et al. clarifies that neither option subjects the EVSE Infrastructure Company to regulation as a seller of electricity or as a public utility.

capital and compete in the market for customers, ratepayer costs may be reduced. Limiting, or eliminating, potential stranded investment by EDCs to provide Charger Ready locations, is an important component of the development of a robust and equitable Ecosystem. As discussed below, this Straw requires that any usage of ratepayer-funded Make Ready infrastructure would be subject to a number of criteria, as determined by the Board, including but not limited to assurances that any private EVSE Infrastructure Company keeps its chargers operating and open to the public.

### B. Process for Making a Location Charger Ready:

Under this Straw Proposal, the EDCs would be the entity primarily responsible for making locations Charger Ready. EDCs would make a location Charger Ready upon request from an EVSE Infrastructure Company or a state, local, or municipal entity, with priority given to sites recommended as part of the EV Mapping Effort. Either way, the EDC would be entitled to roll the costs of such upgrades into rates.

Under any of these scenarios, the EDC would have twelve (12) months from the date of the request to make a site Charger Ready. Staff anticipates that any delay greater than 12 months would result in reduced EDC earnings on that portion of the Charger Ready infrastructure, unless an appeal is granted by the Board. Staff requests comment on how this should be handled. In addition, an EVSE Infrastructure Company that wishes to invest in EVSE at a particular location has several options.

1. The EVSE Infrastructure Company could request that the EDC make the location Charger Ready.

2. The EVSE Infrastructure Company could elect to take over an existing Charger Ready location that is currently identified by the EDC as unused on a first-come, first-served basis.

3. The EVSE Infrastructure Companies could finance the cost of making the site Charger Ready itself.

In sequencing all Charger Ready requests, the EDC would prioritize Charger Ready locations that are identified as priorities by the EV Mapping Effort. However, if an EVSE Infrastructure Company elects to use an EDC-funded Charger Ready location (i.e., electing Option #1 or #2 above), it would be required to accept certain performance requirements, including that the EVSE Infrastructure Company:

1. Commits to installing the EVSE within a period of time from when the Charger Ready is installed (Staff proposes an initial 12-month period, with up to two six (6) month extensions);

2. Commits to keeping the Charger Ready site Operational[5] and open to the public for a period of time (this Straw proposes an initial two year commitment);

3. Commits to making the Charger Ready site available to the public on either a subscription or per-use basis, at the customer's election;

4. Commits to using chargers capable of handling more than one EV, such as dual-port chargers, wherever technically feasible; and

5. Commits to returning the Charger Ready infrastructure back to the EDC for redeployment in the case that the EVSE Infrastructure Company no longer wishes to maintain EVSE at that location, fails to meet the performance criteria, as discussed below, or the EVSE Infrastructure Company ceases its commercial operations.

This Straw proposes that the EDCs will jointly establish and file for Board approval criteria for identifying Poor Performing EVSE Infrastructure Companies (i.e., not adequately maintaining operational equipment), along with a *pro forma* state-wide contract suitable for use in all utility service territories. In such cases, pursuant to these rules, the EDC would provide appropriate notice to the EVSE Infrastructure Company and, if the performance issues are not resolved, revoke the right of the EVSE Infrastructure Company to use the Charger Ready infrastructure, subject to Board approval if the EVSE Infrastructure Company objects. Lack of use, by itself, would not be grounds for revoking the use of a Charger Ready location. The EDC would then identify the Charger Ready infrastructure as available for redeployment to another EVSE Infrastructure Company.

### C. Ensuring Equitable Distribution of EVSE

In order to be successful, this Straw must ensure equitable geographic diversity, particularly with respect to ensuring a viable EV Ecosystem in low-income, urban, environmental justice communities, or rural communities, referred to collectively as "Equity Areas," or along designated evacuation routes. Staff is cognizant of the socio-economic and demographic challenges associated with ensuring equitable delivery of EV charging to all New Jersey drivers. The factors may result in geographic localities within New Jersey where the market is not sufficiently mature to build EVSE on a purely merchant basis.

In particular, this Straw focuses on Equity Areas that may be identified as suitable locations for a Charger Ready location by the EV Mapping Effort, but where the market is not sufficiently mature to build EVSE without financial assistance. Staff specifically requests comment on how to identify Equity Areas, how to define when a market is not sufficiently mature to drive investment, how long to wait for the market to respond, or whether certain communities should be immediately identified (based on Census Tract or other data) as areas where additional financial support may be necessary.

[5] Staff notes that "operational" is not intended to require an unrealistic level of up-time, however, EVSE Infrastructure Companies would be required to maintain and promptly fix malfunctioning locations in accordance with industry standard practices.

If the market is not delivering EV services to a particular Equity Area, within a given timeframe, the EDCs would be eligible to act in lieu of an EVSE Infrastructure Company, meaning that it could directly own and operate the EVSE. Staff is seeking feedback with regard to criteria for this timeframe. EDCs would serve as a party of last resort to own charging infrastructure under specific conditions to ensure that EV infrastructure is available and accessible across demographic and socio-economic pockets of New Jersey. EDCs would be eligible to recover administrative costs associated with such a program. Under this proposal, EDC ownership of new EVSE would sunset December 31, 2025, unless extended by the Board after a market analysis.

**D. Rate Reforms Designed to Encourage Adoption of Electric Vehicles.**

Included in this Straw are proposed rate reforms designed to encourage rapid deployment of EV Infrastructure across the state. These reforms center on addressing concrete problems, including:

1. Ensuring that chargers serving residential customers in multi-family dwellings are charged a rate (in $/kW-hour) that is consistent with normal residential rates;

2. Ensuring that demand charges applicable to publicly-available chargers, many of which are in the Commercial & Industrial ("C&I") rate class, do not result in excessive $/kW-hour charges;

3. Ensuring that each EDC offers a voluntary time-of-use rate for EV charging that rewards consumers that elect to charge during off-peak periods.

Staff addresses each issue in turn.

*First*, this Straw proposes to level the playing field between customers charging vehicles in single-family homes and those living in multi-family dwellings. Currently, most residential customers living in single-family houses pay standard residential rates for any EV charging they do at home. Many residential customers living in multi-family dwellings, or whose parking facilities are metered as part of electric load of the entire complex, are subject to C&I-type rates. The Straw proposes that each EDC would, on an expedited basis, ensure that all residential customer-related EV charging pays standard residential rates. This could be accomplished a number of ways. Staff seeks input from stakeholders on how this could be accomplished either through a modified tariff design or a rebate or bill credit program that meets its individual needs, while ensuring equitable treatment for those citizens living in multi-family housing.

*Second*, this Straw also proposes that each EDC ensure that the rates associated with chargers on C&I rates are reasonable. Staff notes that many new advanced charging technologies, such as DC Fast Chargers, have a large instantaneous draw, which can create large demand charges, particularly when such stations are combined into "banks" of chargers. This problem is particularly acute in the early days of EV adoption, where some stations may have relatively few monthly charging sessions over which to recoup a high demand charge.

To aid in adoption of this new technology, this Straw directs each EDC to either waive demand charges associated with EV charging or develop a rebate methodology that ensures that the

effective $/kW-hour rate (i.e., the demand charge averaged over the number of kW-hours used in a given month added to the standard $/kW-hour rate) remains below a specified "set point."[6] This Straw requests feedback on the best manner in which to achieve demand charge reductions. The actual level of the set point would be agreed to by the EDCs, in conjunction with interested stakeholders, and then filed with the Board. The Straw anticipates that the set point would be benchmarked so that electric vehicle charging remains below the equivalent cost of diesel or gasoline on a per-mile traveled basis. Alternatively, an EDC could elect to waive a percentage of the station's demand charges for the first 5 years of a station's operations, with the right for low utilization stations (those where the station is used less than 25% of the hours in a given month) to seek a five (5) year extension.

*Third*, this Straw would require that each EDC offer a time-of-use rate for EV chargers designed to reward customers who charge during periods where electricity is cheap. Managed charging can avoid the incurrence of large additional fixed costs that could occur if most vehicle charging were to take place during peak or super-peak hours. Each EDC proposal should focus on keeping metering costs low and ensuring that the program is open to both shopping and non-shopping customers on a non-discriminatory basis.

### E. Other Policy Considerations and Minimum Filing Requirements

In addition to the other aspects of this Straw Proposal, Staff seeks other information necessary to ensuring an expeditious and consistent deployment of EVs in New Jersey. This Straw proposes that the EDCs will include in (or update, as applicable) their EV filings and long term EV plans the additional information discussed below, and further directs all EDCs to file EV plans and proposed EV programs by December 31, 2020, with implementation dates commencing no later than April 1, 2021. Such filings shall include the following information (which does not comprise all relevant information necessary to review and approve such filings):

- Specific proposals from the EDCs about how to determine areas of Last Resort, including schedules for implementing EDC deployment of EVSE in those areas. Such proposals should include a discussion of how to ensure that EDC ownership of EVSE in Last Resort areas is time-limited in order to ensure, in the short-term, that Last Resort areas are served by EVSE and, in the long-term, that the marketplace and private capital serve the mature EV market.

- Specific citation to and discussion of the statutory authority for any rate recovery proposals associated with EDC deployment of infrastructure required to serve Charger Ready locations, and EVSE, whether owned by the EDC or third parties.

- Where EDCs propose incentives for residential chargers, such proposals must accommodate the principle that there should be no "duplicative" incentives for such chargers, i.e. where the state (through the Clean Energy Program or other programs) has already declared an intention to provide incentives for residential charging, EDCs must show that any proposed residential incentive program complements, and does not

duplicate, such incentives. Such residential charging incentive program proposals must include, at a minimum: an analysis of the role of Advanced Metering Infrastructure ("AMI") and EDC plans for AMI roll-out; as well as specific tariff proposals that ensure equitable treatment of residential customers regardless of housing stock or location. Staff is considering whether or not to recommend a requirement that all unique, individual residential charging incentives include deployment of an AMI or "smart meter" in preference, and/or in addition to, any installed charger regardless of the charger's technical capabilities.

- EDC proposals for EV programs should also include the following information, at minimum:
    - A list of all airports, seaports, bus and rail terminals owned and/or administered by entities like the Port Authority or New Jersey Transit, or other public carrier;
    - A description of the facilities currently serving such locations and a planning-level estimate of the costs to electrify such facilities. If planning level estimates for electrification of such facilities have not been prepared, the EDCs may file a proposed schedule by which they will prepare and file such estimates prior to the approval of any EV program;
    - Proposals for electrification of school bus fleets;
    - A complete and current list of all Charger Ready infrastructure investments made to date; all pending applications; and a description of the criteria that is being used by the EDC to determine whether or not a location is already adequately served by EVSE prior to any utility investment being made.

As noted, this list is not exhaustive and additional information may be required to ensure consistent achievement of the EMP EV goals.

### F. Stakeholder Process and Schedule for Comments

Staff is committed to an open and transparent process in which to further develop the ideas laid out in this Straw Proposal. To that end, Staff is establishing an online technical conference-format meeting on **June 3, 2020** where interested stakeholders can provide comments on the topics discussed in this Straw Proposal.

The technical conference format will include a series of panels on the specific topics discussed below. Interested parties on a particular topic are requested to self-nominate for a particular panel. To self-nominate, please provide the following information to Cathleen Lewis at cathleen.lewis@bpu.nj.gov by May 22, 2020:

- Name, title and affiliation;
- Desired panel (please also provide a secondary panel selection); and
- Short description (no more than a page) explaining why you should be selected for the panel.

Selected panelists will be notified by May 28, 2020, that they have been selected for a particular panel. Staff will endeavor to ensure that various interests and a diversity of opinions,

constituencies, and business models are represented. An agenda and list of panelists will be published in advance of the technical conference. Each panelist will be afforded the opportunity to make a short presentation, followed by a discussion between the panelists and Board Staff, as well as questions from the audience. Parties not selected as panelists will still have the opportunity to ask questions and make public statements, time permitting. Self-nominated panelists may be asked to participate in a panel other than the one they requested. The three technical panels are described as follows:

1. How to best expand the EVSE Infrastructure and encourage Charger Ready investment.
    - Establishing the appropriate role for the EDCs and EVSE Infrastructure Companies.
    - Identifying communities where market forces alone may not result in the desired level of EV infrastructure.
    - Establishing cost recovery for EDC investment in making locations Charger Ready.

2. How to ensure equity in the EV Ecosystem.
    - Utilizing the EV Mapping effort to identify Charger Ready locations.
    - Identifying how market failures should be identified that would trigger utility intervention.

3. How to design and integrate EV charging into the rate structure.
    - Identifying appropriate residential rate design for customers living in multi-family dwellings.
    - Establishing rate design for C&I customers installing EVSE: waiver versus rebate.
    - Designing adequate time-of-use rates be for EV customers.

Written comments on each topic are due two (2) weeks after the meeting on **June 17, 2020**. Written comments must be submitted to:

Aida Camacho-Welch, Secretary
New Jersey Board of Public Utilities
Post Office Box 350
Trenton, New Jersey 08625

Written comments may also be submitted electronically to board.secretary@bpu.nj.gov in PDF or Microsoft Word format. Commenters may also efile comments through the Board's External Access Portal upon obtaining a MyNewJersey Portal ID. Once a MyNewJersey account is established an authorization code is required. The authorization code can be requested from the Board's IT Helpdesk at ITHELPDESK@bpu.nj.gov. Please note that these comments may be considered "public documents" for purposes of the state's Open Public Records Act. Stakeholders may identify information that they wish to keep confidential by submitting them in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3.