STATE OF NEW JERSEY

BEFORE THE BOARD OF PUBLIC UTILITIES

In the Matter of the Petition of	)	
Atlantic City Electric Company for	)	BPU Docket No.
Approval of a Voluntary Program	)	EO18020190
For Plug-In Vehicle Charging	)	

TESTIMONY IN RESPONSE TO PROPOSED STIPULATION
BY JOSHUA J. COHEN
ON BEHALF OF ZECO SYSTEMS D/B/A/ GREENLOTS

February 5, 2021

I. INTRODUCTION

Q. Please state your name, position, and business address.

A. My name is Joshua J. Cohen. I am Director of Policy for Zeco Systems, Inc. d/b/a Greenlots ("Greenlots"). Greenlots' principal place of business is located at 767 S. Alameda Street, Suite 200, Los Angeles, CA, 90021. I currently work remotely at my home office in Maryland.

Q. Have you previously filed testimony in this proceeding?

A. Yes, I filed direct testimony, rebuttal testimony and surrebuttal testimony pertaining to Atlantic City Electric Company ("Atlantic City Electric", "ACE" or "the Company")'s Voluntary Program for Plug-In Vehicle Charging as submitted via Amended Petition on December 17, 2019 ("PIV Program").

Q. What is the purpose of your testimony in response to the proposed stipulation?

A. I believe it is important to share with the Board of Public Utilities (the "BPU" or the "Board") Greenlots' perspective on—and recommendations to improve—the proposed stipulation filed by the Company, the Attorney General of New Jersey, the New Jersey Division of Rate Counsel and other parties (the "stipulation") on February 2, 2021.

Q. Are you sponsoring any additional attachments as part of your comments on the stipulation?

A. No.

II. GREENLOTS' PERSPECTIVE ON THE STIPULATION

Q. Does Greenlots object to the stipulation?

A. No, Greenlots does not object to the stipulation.

Q. Does Greenlots support the stipulation?

A. Greenlots respects and appreciates the collective efforts of the parties during the settlement process. Regrettably, however, for reasons discussed below, Greenlots does not support the stipulation.

Q: Broadly speaking, how does Greenlots view the stipulation to be beneficial?

A: Greenlots believes the PIV Program as modified by the stipulation will meaningfully advance transportation electrification in New Jersey, and commends the Company's leadership for proposing it. Indeed, with its initial petition in February 2018, the Company positioned itself as a utility leader in transportation electrification, not just in New Jersey but nationally. Subsequently, in proposing its amended petition in 2019, the Company sought to more fully leverage its capacity and resources to "comport with the State's ambitious goals for electrifying the transportation sector and…provide for a cleaner environment for the state's residents."[1] The Company's comprehensive goals were reflected in its portfolio of offerings designed to be "holistic in nature, and…serve a variety of residential and commercial customers, as well as the public sector."[2] While the stipulated changes diminish the extent of these benefits, the modified PIV Program still adheres to a portfolio framework that is designed to—and Greenlots believes will—advance electrification across multiple customer segments and use cases.

Q. Why does Greenlots not support the stipulation?

A. Despite the benefits that the PIV Program as modified by the stipulation will provide, Greenlots is deeply concerned it will be insufficient to achieve the foundational backbone of critical infrastructure necessary for New Jersey to meet its climate and electrification goals in a timely and equitable manner. These include both statutory commitments and timetables already enacted into law, and additional commitments and targets described in more detail later in this document.

Fundamentally, Greenlots is convinced the stipulation is deficient in two key respects: it withdraws or delays important provisions that would more equitably accelerate electrification across multiple customer segments; and, it fails to take advantage of the benefits that utility ownership of charging stations will provide, particularly in the near-term when it is most needed. Taken together, these deficiencies perversely position New Jersey to de-emphasize supporting equitable and inclusive deployment at a time when

[1] ACE's Amended Petition at p.6.
[2] *Id.* at p. 8.

equity writ large has seemingly never had more national awareness or societal emphasis, especially in New Jersey.

Q. What is Greenlots' perspective on the amended PIV Program?

A. As Greenlots noted in its testimony and reply testimony, Greenlots generally supports the Company's PIV Program as proposed in its amended petition, although Greenlots recommends modifying certain aspects of the program and "increasing the overall size and scale of the program."[3] Greenlots believes the amended PIV Program, particularly as modified in accordance with Greenlots' recommendations, would be "needed, prudent and targeted utility investment that will have a significant beneficial impact in accelerating both the adoption of electric vehicles and the market for EV charging infrastructure products and services, applying downward pressure to rates for all utility customers, and more broadly supporting the growth and modernization of New Jersey's economy."[4]

Q. What electrification goals should the Board consider as it reviews the stipulation?

A. The Board's consideration of the Company's stipulation should carefully consider how the PIV Program will support the state's electrification commitments. The Plug-In Electric Vehicle Law ("PIV Law") that commits the state to 330,000 EVs and 400 public DCFC stations by 2025 offers a clear starting point for the Board's consideration.[5] However, those commitments are only a starting point. *New Jersey's Global Warming*

[3] Direct testimony of Cohen at p.9.
[4] *Ibid.*
[5] *N.J.S.A.* 48:25-3(a).

Response Act 80 x 50 Report ("80 x 50 Report"), published October 15, 2020 by the Department of Environmental Protection ("DEP"), paints a clearer picture of what New Jersey needs to meet its climate and emissions reduction goals. This report calls for "average adoption rates of at least 111,000 new electric vehicles annually through 2025" with increasing rates of adoption "until all new sales of light-duty cars, SUVs, and trucks are electric by 2035."[6] Importantly, DEP has acknowledged that the state's EV charging deployment targets reflected in the PIV Law are insufficient to meet New Jersey's emission reduction pathways and "need to be overhauled to address the charging needs associated with [the] new goals" of the 80 x 50 Report.[7]

Additionally, in July 2020, Governor Murphy, along with the governors of more than a dozen other states, committed "to make sales of all new medium- and heavy-duty vehicles…zero emission vehicles no later than 2050," and established a nearer-term target of 30 percent of such sales by 2030.[8]

As it considers the Company's stipulation, the Board should consider both the statutory commitments embodied in the PIV law, the more ambitious and rapid electrification goals called for in the 80 x 50 Report, and the zero emission commitments for medium- and heavy-duty vehicle sales contained in the Medium- and Heavy-Duty ZEV MOU. The

[6] New Jersey Department of Environmental Protection. (October 15, 2020). New Jersey's Global Warming Response Act 80 x 50 Report, at p.9. https://www.nj.gov/dep/climatechange/docs/nj-gwra-80x50-report-2020.pdf.
[7] Environment New Jersey. (Oct. 26, 2020). Webinar: "On the Path to 330K EVs by 2025: The First Year of Our EV Law." Available at: https://drive.google.com/file/d/12FY1UMW7BkspiWUy5vQClspJooaytBS0/view (Comments start at 56:45).
[8] Northeast States for Coordinated Air Use Management. (July 14, 2020). Multi-State Medium- and Heavy-Duty Zero Emission Vehicle Memorandum of Understanding ("Medium- and Heavy-Duty ZEV MOU"). https://www.nescaum.org/documents/multistate-truck-zev-governors-mou-20200714.pdf.

Board should further consider how to achieve these goals in an equitable way for all New Jerseyans, and the important role the Company's PIV Program should play to support more equitable outcomes.

Q: How is the stipulation inadequate to support the electrification of New Jersey's transportation sector at the scale and speed required?

A: The stipulation reduces funding for the PIV program to less than half of what the Company proposed, eliminates utility ownership of charging stations, and heavily—Greenlots believes overly—relies on private market investment. The private market has proven inadequate to electrify New Jersey's transportation sector at the scale and speed required to adequately support existing rates of EV adoption, let alone meet the state's statutory commitments in the PIV Law and the more rapid timetables called for in the 80 x 50 Report. Indeed, reducing the size and scope of the program, delaying implementation of key aspects of it, and eliminating the valuable tool and participant option of utility ownership of charging stations will only make it that much more challenging to meet current commitments, and significantly increase the public investment needed to meet the additional and more robust commitments the state is likely to make.

As Greenlots noted at length in its direct testimony and rebuttal testimony, a competitive market for EV charging does not exist at present in New Jersey. At this very early stage of EV adoption, the business case for private EV charging companies to deploy, own and operate charging stations remains challenging at best.[9] Charging station availability and EV adoption are inherently linked: more charging stations spur increased EV adoption, which in turn creates more demand for EV charging stations, and so forth in a virtuous cycle. The unfortunate corollary to this dynamic is that the lack of a critical mass or foundational backbone of charging stations – which characterizes New Jersey's market today – is inadequate to measurably spur EV adoption. This market stagnation remains largely self-perpetuating in the absence of effective market interventions, notably by regulated utilities. Indeed, utility ownership of charging stations is a key tool to increase demand for charging, grow the market while supporting a diversity of business models, and accelerate private investment.

Despite these concerns, Greenlots does not intend to diminish the real and meaningful benefits the PIV Program will still deliver as modified in the stipulation. By allocating $20 million in funding to advance transportation electrification, including almost $15 million in direct incentives, the PIV program will help EV drivers, commercial fleet managers and other key market participants overcome some of the challenging financial barriers to adoption that hinder market growth today. In this way, the offerings included in the stipulation may start to achieve the virtuous cycle described above and help to bring EV adoption towards an inflection point of growth, at least in certain geographic parts of ACE's service territory and for some of the customer segments most directly addressed by the subprograms.

[9] Direct Testimony at pp. 16-24 and Rebuttal Testimony at pp. 2-3.

Q: How can inclusion of utility ownership in the PIV Program better address these market failures that hinder EV charging deployment and EV adoption?

A: Greenlots believes the BPU should firmly encourage utility ownership of charging stations at this stage of the market because utility ownership offers multiple benefits to ratepayers and the private EV charging industry alike. Regrettably, the stipulation proposes to remove all utility ownership of charging stations, which is counter to the foundation established by the Straw Proposal Order which acknowledges the value of utility ownership "where the private sector has not shown the willingness to invest."[10]

Industry experience has shown that relying solely on make-ready incentives, as the stipulation would do, will not yield the rate of uptake that ACE and the Board may intend. Utility ownership of charging stations, as opposed to rebates or make-ready investment, offers the greatest likelihood of successful deployment and installation of the intended number of charging stations, and often in a more timely manner. Utility ownership also helps minimize ratepayers' risk of stranded assets and helps ensure charging stations are well-maintained in good working order.

Furthermore, utility ownership of charging stations supports the growth of a competitive EV charging market. Rather than perpetuating a market dynamic in which a handful of EVSE companies vie for their share of a relatively small and yet-to-be-profitable market, Greenlots believes BPU approval of utility ownership will accelerate EV adoption and increase driver demand for charging services, thereby increasing the size of the market,

[10] Board Order at p. 12.

enabling greater opportunity for all market participants and hastening the arrival of a truly competitive and, indeed, profitable EV charging market in New Jersey. Further, BPU approval of utility ownership will provide market predictability for private market participants and send a very positive market signal that New Jersey is fully committed to achieving New Jersey's ambitious goals for electrification.

Q: How can utility ownership of charging stations better address concerns around equity?

A: Utility ownership is a critically important strategy to ensure equitable deployment of, and access to, charging. The Straw Proposal Order, despite its framework that limits utility ownership to a last resort, still acknowledges the value of utility ownership in this respect. This is reflected in the Order's minimum filing requirements which call for an accelerated schedule for utility ownership of charging stations when located in overburdened communities compared to non-overburdened communities.[11]

Indeed, this aspect of utility ownership as a tool to promote equity was clearly envisioned by the Company in its amended filing, with its "comprehensive approach to its PIV Program [which] seeks to ensure that underserved communities reap the benefits associated with electrification of the transportation sector."[12] ACE was even more direct about its plans when describing its utility-owned subprograms: "The Company…intends to target underserved areas in ACE's service territory under this offering such as LMI and

---

[11] *Ibid*.
[12] ACE Amended Filing at p.10.

EJ communities."[13] Unfortunately, with utility ownership eliminated from the stipulation, the only consideration now given to address equity is an increased make-ready incentive for multi-family L2 charging.[14] The stipulation lacks any other equity-related financial incentives or even prioritization of charging locations. This program design and lack of attention for equity will almost certainly result in widening disparities of access to EV charging within ACE's service territory.

Q. Does Greenlots have additional perspective on utility ownership as a last resort?

A. Yes. As Greenlots has noted, utility ownership should be encouraged from the outset rather than narrowly constrained to scenarios of last resort. Nonetheless, utility ownership as a last resort is still a more effective tool than no utility ownership at all. The proposed stipulation eliminates even ownership as a last resort, which the Company had proposed in the initial filing and which would have comported with the minimum filing requirements of the Board's Straw Proposal Order.[15]

While the Straw Proposal Order represents New Jersey's first regulatory framework for utility EV charging investments, Greenlots believes the experience of California is instructive. Almost ten years ago, California's commission conducted a proceeding to address many issues relating to utility investment and ownership that are similar to those addressed in New Jersey's Straw Proposal Order. That proceeding resulted in a 2011 decision which essentially prohibited utility ownership of charging stations, and made an

[13] ACE Amended Filiing at p.17. *See similar language on p.18 for Level 2 offering: "the Company intends to target underserved areas of the State for the Level 2 chargers under Offering 8, such as LMII and EJ communities."*
[14] Stipulation, Attachment A at pg.5.
[15] Board Order at pp. 8-9.

exception only if “utilities present evidence…of underserved markets or market failure in areas where utility involvement is prohibited.”[16]

Three years later, the commission reversed itself. The exceedingly slow pace of third-party deployment of charging stations, coupled with the state’s then-bold EV adoption goals, underscored the value of leveraging utility ownership to accelerate EV charging station deployment and help the state achieve its goals. In its subsequent 2014 decision, the commission wrote, “we…endorse an expanded role for utility activity in developing and supporting [plug-in electric vehicle] charging infrastructure.” The decision “sets aside the requirement that the utilities demonstrate a ‘market failure’ or ‘underserved market’ as part of any request for authority to own PEV charging infrastructure,” and further stated “the blanket prohibition against electric utility ownership of plug-in EV charging infrastructure adopted in Decision 11-07-029…shall no longer be in effect, and shall be replaced by a case-specific approach.”[17]

By zeroing out even ownership as a last resort, the proposed stipulation takes New Jersey down a similarly counterproductive path as California took several years ago before it learned from its ill-advised policy and corrected course. Unfortunately, New Jersey’s northern neighbor New York is taking a similar approach as California took in its early days of EV adoption by prohibiting utility ownership and—similar to the stipulation in this proceeding—emphasizing make-ready incentives. New York’s program just recently launched in 2020 and metrics are not yet available, but Greenlots is deeply concerned that

[16] *See* California Public Utilities Commission. Decision 11-07-029 (July 14, 2011) at pg. 50.
[17] *See* California Public Utilities Commission. Decision 14-12-079 (Dec. 22, 2014) at pp. 2, 5 and 11.

New York's make-ready focus will fail to yield the participation and deployment rates needed to support the state's EV ambitions.

By allowing and, indeed, encouraging utility ownership, ACE and the other parties to this proceeding have an opportunity to avoid repeating the mistakes of the past.

Q: Are there other ways in which the stipulation is insufficient to electrify New Jersey's transportation sector?

A: Respectfully, yes. The stipulation withdraws the Innovation Fund, Electric School Bus and New Jersey Transit Bus subprograms (Offerings 10, 11 and 12, respectively, in the amended petition). The Company intends to reconsider and likely resubmit these and perhaps other subprograms after the completion of the upcoming stakeholder proceeding on medium- and heavy-duty electrification which the Board intends to commence during Fiscal Year 2021.[18] However, delaying these important subprograms to an uncertain date will make it that much more challenging for New Jersey to achieve its electrification goals for school buses, ground service equipment and other medium- and heavy-duty vehicle classes, as Governor Murphy committed when he signed the Medium- and Heavy-Duty ZEV MOU last year.

Withdrawing these subprograms also works at cross-purposes to New Jersey's efforts to advance equity, because they each address vehicle classes that are imperative to support equitable electrification. As the Governor's Office noted, "Medium- and heavy-duty

[18] Stipulation at Paragraphs 17-18.

trucks are a major source of harmful smog-forming pollution, particulate matter, and air toxics…[and] disproportionately impact low-income communities and communities of color often located near major trucking corridors, ports, and distribution hubs."[19] Indeed, the Company's amended petition noted that the Innovation Fund subprogram would encourage projects "designed to serve underserved and/or LMI and EJ communities;" the Electric School Bus Fund would "focus on districts in LMI and/or EJ communities;" and the New Jersey Transit Bus Electrification would "support bus-dependent residents in LMI and EJ communities."[20]

III. RECOMMENDATIONS

Q: How does Greenlots recommend that the stipulation be modified?

A: Greenlots recommends modifications to the stipulation in three key areas: utility ownership of charging stations, overall funding levels, and the reinstitution of the medium- and heavy-duty subprograms.

Q: How does Greenlots recommend that the stipulation be modified to address utility ownership of charging stations?

A: Greenlots recommends modifying the budgets and regulatory conditions of the Public DCFC and Public L2 subprograms (Offerings 5 and 6 in the stipulation) to allocate 25 percent for utility ownership of charging stations and retain the remaining 75 percent for

[19] Office of Governor Phil Murphy. (July 14, 2020). 15 States and the District of Columbia Join Forces to Accelerate Bus and Truck Electrification. https://www.nj.gov/governor/news/news/562020/approved/20200714a.shtml.
[20] Amended Petition at pp. 20-21.

incentives for third-party ownership such as the make-ready incentives proposed in the stipulation. Greenlots further recommends allowing ACE to commence implementation of utility ownership at the start of the PIV Program.

Greenlots believes that this recommendation to allocate three-quarters of PIV subprogram funding for third-party ownership incentives while reserving one-quarter of funding for utility ownership aligns with the Board's intent to prioritize private investment over ratepayer investment while still leveraging the benefits of near-term utility ownership to expand EV adoption and help the state achieve its EV goals.

Greenlots acknowledges the Board's desired framework for utility ownership only as a last resort.[21] However, Greenlots believes this last-resort framework directly conflicts with and undermines the Board's priority to "keep in mind the fierce urgency of meeting our climate goals."[22] Moreover, as Greenlots has noted above, even last resort ownership has proven to be inadequate to keep pace with existing rates of EV adoption, let alone achieve the state's statutory commitments and other policy goals that require accelerating the rate of adoption, and doing so in an equitable manner.

Greenlots notes that several other commissions that share the BPU's desire to encourage the growth of the private charging market recognize the value and benefit of utility ownership from the outset as a vital first step to support EV adoption and seed the private market. Three recent examples come from Minnesota, North Carolina, and Colorado.

---

[21] Stipulation at p. 27.
[22] *Ibid*.

In August 2020, the Minnesota Public Utilities Commission approved Otter Tail Power's $2.1 million program to "own and operate a backbone fast charging network for its service territory" in rural western Minnesota.[23]

On November 24, 2020, the North Carolina Utilities Commission issued an Order authorizing Duke Energy to install 40 utility owned public DCFC, 160 utility-owned public L2 chargers, 80 utility-owned L2 chargers at multi-unit dwellings, and utility-owned charging infrastructure for 15 electric school buses, in addition to incentives for the buses themselves.[24] In approving these investments, the Commission noted that "[t]he private EV charging marketplace alone cannot adequately meet North Carolina's transportation electrification and emissions goals, let alone achieve market transformation or maximize future growth and associated benefits."[25]

Most recently, on December 23, 2020, the Colorado Public Utilities Commission approved Xcel Energy's Transportation Electrification Plan totaling over $100 million in investments, including a sizable amount of utility-owned charging infrastructure across single family residential, multi-unit dwelling, public L2, public DCFC, school bus, and commercial program offerings. Notably, the Commission was intentional about focusing

---

[23] *In the Matter of* Otter Tail Power Company's Request for Approval of Electric Vehicle Charging and Infrastructure Programs, MPUC Docket No. E017/M-20-181 (approved August 27, 2020). *See* Staff Briefing Papers at p.4.
[24] *In the Matter of* Application by Duke Energy Carolinas, LLC, and Duke Energy Progress, LLC, for Approval of Proposed Electric Transportation Pilot, Order Approving Electric Transportation Pilot In Part, NCUC Docket Nos E-2, SUB 1197 and E-7, SUB 1195 (approved November 24, 2020).
[25] *Id.* at p.18.

on equity, including both utility-owned and operated DCFC and an electric vehicle rebate program for income-qualified customers.[26]

While not all regulators have taken this approach to accelerate private investment in charging stations, these recent commission decisions and orders from across the country demonstrate growing recognition of the value of a strong utility role to advance electric mobility and seed the market while supporting EV drivers.

Maryland's 2019 commission order is another example of a well-designed portfolio approach that recognizes the value of utility ownership and incorporates it as an essential aspect of the program. As Greenlots noted in its direct testimony, the Company's sister utility Baltimore Gas & Electric (BGE) is one of the Maryland utilities authorized for ownership of public DCFC by the commission.[27] BGE's EV Smart program is currently active and has already deployed numerous public charging stations throughout its territory.

Q: In what other way does Greenlots recommend modifying the stipulation to address utility ownership?

A: In addition to allocating 25% of the public charging subprogram budgets for utility ownership as described above, but as an alternative to allowing utility ownership to

[26] *In The Matter of* Application of Public Service Company of Colorado for Approval of its 2021-2023 Transportation Electrification Plan, Colorado PUC Proceeding No. 20A-0204E, Commissioner deliberative meeting held December 23, 2020 (written decision forthcoming).
[27] Direct testimony of Cohen at pp. 26-27.

commence at the outset of the program, Greenlots believes it is still critically important that the PIV Program as approved by the Board include utility ownership within the context of the instant proceeding. For example, establishing a subprogram budget allocation of 25% for utility ownership of charging stations and infrastructure but holding it in abeyance pending further detail would streamline the process and avoid unnecessary procedural and scheduling delays that would otherwise be necessitated by the stipulation's proposed elimination of utility ownership from the PIV Program. If the Company were required to file a wholly new and separate proposal for utility ownership at some undefined point in the future, not only would it require duplicative time and expense on the part of the parties to intervene and the Board to establish and facilitate a new procedural schedule, it would further prolong the state's progress in meeting its electrification goals, and in an equitable manner.

Q: How does Greenlots recommend that the stipulation be modified to address funding levels?

A: Greenlots recommends raising the overall PIV program budget and the individual subprogram budget funding levels to more closely align with the amounts initially proposed in the amended petition.

Q. How does Greenlots recommend modifying the medium- and heavy-duty subprograms?

A. Greenlots recommends modifying the Innovation Fund, Electric School Bus and New Jersey Transit Bus subprograms by fully funding them as proposed in the Company's amended filing, rather than withdrawing them and further delaying the benefits to all New Jerseyans – and particularly to overburdened communities – of electrifying these vehicle classes.

Greenlots acknowledges that the BPU intends to commence a stakeholder process to establish a regulatory framework for the medium- and heavy-duty charging ecosystem before the end of this fiscal year. However, Greenlots believes that this intended stakeholder process is insufficient reason to delay approval of these three subprograms. Many commissions around the country have developed their regulatory and policy frameworks for transportation electrification concurrently with consideration of proposed programs filed by utilities. Indeed, a proposed program can often focus parties' attention in a more concrete manner than a more generic proceeding. The urgency to both act on greenhouse gas emissions and address current public health conditions call for reinstituting these subprograms as part of the instant proceeding.

IV. CONCLUSION

Q. Please summarize your comments on the stipulation.

A. Greenlots recommends modifying the stipulation in three ways. First, Greenlots recommends commencing utility ownership from the outset of program implementation, and allocating 25 percent of the budgets for utility ownership of charging stations and infrastructure for the Public DCFC and Public L2 subprograms. In addition, as an alternative to, on the one hand, commencing utility ownership from the outset, or on the other hand, taking the opposite approach of eliminating utility ownership entirely from the approved PIV program, Greenlots suggests a third option to approve a delayed implementation of the utility owned charging, which would avoid the necessity of a wholly new docketed proceeding in the future on this issue. Second, Greenlots recommends increasing the overall PIV Program budget and individual subprogram levels to more closely align with those proposed in the amended petition. Third, Greenlots recommends including and fully funding the Innovation Fund, Electric School Bus and New Jersey Transit Bus subprograms.

Although Greenlots disagrees with the terms of the stipulation, Greenlots respects and appreciates the efforts of the parties during the settlement process and commends the Company for seeking to substantively advance transportation electrification in New Jersey. Greenlots appreciates the opportunity to submit these comments and looks forward to the continued advancement of transportation electrification in New Jersey.

Q. Does this conclude your comments on the stipulation?

A. Yes.