



September 14, 2021

Scott Seigal, Hearing Officer  
MA-Department of Public Utilities  
One South Station  
Boston, MA 02110

**Re: Docket No: D.P.U. 21-91: Proposal by National Grid for MA Phase III in Electric Vehicle Development and Clean Transportation**

Dear Mr. Seigal:

We appreciate the opportunity to offer comments on the Phase III proposal of National Grid to accelerate the development of zero-emission vehicles (ZEVs) and deploy necessary charging infrastructure in its service territory. This is a comprehensive and robust proposal that is commensurate with the ambitious public policy goals of Massachusetts to reduce greenhouse gas emissions substantially. Moving toward a clean transportation system, at scale, is challenging and involves multiple sectors, companies, and organizations. The proposal of National Grid meets the goals of this challenge and addresses the multiple end use cases for ZEVs and the associated necessary infrastructure. We strongly support this proposal.

The Alliance, a 501(c)(6) non-profit corporation, is led by electric vehicle (EV) infrastructure firms and service providers, automobile manufacturers, utilities, and EV charging industry stakeholders and affiliated trade associations. We started with 20 organizations at the launch just over three years ago and now we have nearly 55 members nationally. We take a “big tent” approach to advance the industry and focus not just on accelerating EV charging deployments—which necessarily requires a strong utility role—but also promoting public accessibility and open standards. We are presently involved in about 25 proceedings in the States before the PSCs, state energy offices, Legislatures, Governors, state DOTs and DEPs, and other agencies.

Overall comments:

Massachusetts has recognized the urgency and importance of the climate challenge, and how it specifically affects the economy, infrastructure, public health, and underserved and communities of color in the Commonwealth. These policies are enunciated in several important public policy directives passed by the Legislature and by the Governor for the Executive Branch, including the Clean Energy and Climate Plan for 2030, or CECP. This is complemented by the development of a roadmap for decarbonization for 2050 (net zero carbon goal) that incorporate the strategies, policies, and actions that are set forth in the 2030 CECP.

National Grid has responded aggressively to these public policy challenges by setting forth a number of programs and policies to achieve the Commonwealth’s decarbonization goals, especially critical as the

transportation sector is the lead source of GHG emissions in the state. About three years ago, National Grid developed the modelling and analysis for the generation, heat, and transportation sectors leading to a net zero carbon future by 2050 for the Northeastern states, including New York (“Northeast 80 x 50 Pathway, National Grid, June 2018). It set forth ambitious goals for these states across both generation and demand side sectors, including a goal of 10 million ZEVs (mostly light-duty vehicles) on the road by 2030, about 50 percent of all fleet vehicles. This decarbonization pathway study is still very relevant to the decarbonization of the transportation sector today, and the key role that National Grid can and should play. To illuminate the magnitude of this challenge, however, today the Commonwealth has only about 43,000 registered plug-in vehicles (both PHEVs and full BEVs) on the road today.

National Grid has been adopting pilot programs for several important use cases for transportation electrification and testing issues like consumer behavior, rate designs, managed charging, and other key factors affecting TE adoption. We believe incremental progress and learning lessons through pilot programs is necessary, but today given these public policy goals, it is time to accelerate EV adoption and infrastructure deployments.

Yet we believe that we should put these pilot programs in the TE space in the rear-view mirror and instead squarely focus on the near-term future. The urgency of the climate crisis and the need to reduce greenhouse gas emissions and pollution from the transportation sector is confronting us directly now. In other words, the Commonwealth should be acutely aware of the following: the extreme weather patterns throughout the country, including extreme heat in the Western states and recent devastation wrought by Hurricane Ida, the drought conditions in most states, the lack of tangible progress in reducing GHGs over the past decade, and the disproportionate impacts of the recent Covid-19 pandemic upon underserved and BIPOC communities. Accordingly, we need to be assessing programs and measures that deal with the issues of EV adoption and TE infrastructure at greater scale. Besides building upon the “lessons learned” of earlier phases of pilot programs, we believe that this proposal achieves the objectives of comprehensive, greater scale, environmental justice, and accelerating TE infrastructure in a creative and cost-effective way.

### **Specific Comments:**

**1. *The Proposed Public and workplace charging are well-designed, appropriately sized, and will catalyze the overall market:***

We believe that the scope and balance achieved in this portfolio of programs is well crafted. Other utilities and Commissions have debated the definition of “publicly accessible” (such as New York and New Jersey), but the Grid proposal is well defined and should work for most of the Level 2 and DC fast charging ports that are contemplated in the proposal. And the proposal emphasizes rightly that any parking spaces for employees – whether private or non-profit or municipal – should be addressed in the workplace charging program design and incentives, albeit at different levels.

Despite most surveys which indicate that over 80 percent of charging will be done “at home”, it is indisputable that range anxiety is still one of the most important barriers that prevent consumers from purchasing an EV. Over the past century or so, most consumers have become accustomed to a “gas station on every corner and highway” and that the ubiquitous fueling experience should be replicated for electric vehicles. While much charging will be done at home

and the workplace, the public infrastructure both for Level 2 and DC fast charging will be critical to help the consumer to overcome these legitimate anxieties. Moreover, in our modern society and working lives of time-starved consumers, we believe it is essential to have adequate public charging infrastructure for several charging experiences, including “topping off” within a metro area, long-distance interstate travel, or simply doing an opportunistic charge when low on electric fuel.

We agree with the proposal of Grid (along with Eversource) to require workplace and public customers or host sites to purchase the first few ports, after which the utility will pay for 50 percent of the installed costs for a limited number of additional ports for these use cases. These customers should be able to put some “skin in the game” and contribute to the costs of these deployments. However, since the issues of Equity and BIPOC communities are critical, we agree with National Grid’s proposal to cover 100 percent of the EVSE costs in Environmental Justice Communities (EJC) up to ten ports.

For the DCFC deployments, we agree with the Company’s proposal to cover make-ready costs on both sides of the meter, both the utility-side and the customer-side. In this evolving world of increased reliance on DERs, including the issues of resiliency, data analysis, and real-time grid management, the traditional regulatory demarcation line between the utility and the customer side of the meter is outdated and increasingly less relevant. We agree with the Company’s proposal to require all the ports of the EVSE to be networked, and as part of the agreement for receiving the \$480/port rebate, to share that data freely with Grid for its analysis and management. We also think it is important for Grid to cover 100 percent of the EVSE costs for the EJ communities, and to make a commitment to provide 20 DC fast chargers in these EJ communities. This should be an important step forward in trying to provide the full benefits of beneficial electrification to all classes of customers and communities, including the underserved.

## **2. Residential programs:**

ATE agrees that these programs are appropriately sized and designed in a way which will enable the Company to gain valuable knowledge about home charging patterns. More specifically, the levels of support for both the make-ready investments and the EVSE itself are reasonable, and consistent with best practices from utilities in other States. It is important to get the balance right in setting these levels of support appropriately. We believe Grid has struck the right balance here.

We also think that it is important to require the customer receiving support to participate in a managed charging program (“active programs”), instead of simply relying on variable TOU rates (rate design, which is considered a “passive program” and blunt tool to change consumer behavior overall). As the proposal indicates, many of the benefits of this program will be focused on single family homes (SFH), estimated to be about 15,000 customers, but still only about 2 percent of this population segment. They will receive \$700 for the 240 volt upgrades (which is consistent with practices of utilities in other states), while the “duplexes” (2 to 4 units) will receive \$1400 for such upgrades. In our view, these are appropriate levels of support based on our understanding of construction costs in comparable markets.

For multi-family dwellings (MFDs), this has proven to be one of the most challenging use cases in jurisdictions across the country. Many complications bedevil this particular use case, including legal and contractual agreements between landlord and tenant, or among homeowners, the number of parking spaces and whether they are deeded or not, the location of the metering on the property site, and others. In general, as we have witnessed with energy efficiency upgrades, the dilemma of the “split incentive” between the landlord and the tenant sometimes prevent the rapid uptake of new technologies unless additional support is provided. The same challenges apply to TE infrastructure in these MFDs, and we need creative solutions.

Overall, we think that Grid has struck the right balance with providing the costs of the service upgrade and 100 percent of the make-ready and EVSE rebate for this use case (up to \$2,000 per port). Grid intends for this program to cover 3,800 Level 2 ports in its service territory, in addition to 200 EV-Ready site plans. For EJ communities, it will cover 100 percent of the make-ready costs and double the EVSE rebate (to \$4,000) in order to accelerate these deployments. We agree with the company that support for the EV Site Plans are important and will assist EJ communities as most large multi-family dwellings (MFDs) are located in such communities.

We urge the Commission to review progress in this use segment (especially for the MFDs in EJ communities), and provide flexibility during mid-term reviews to adapt and alter course. Specifically, we note that the company sets forth a contingency for the utility owning and operating the EVSE (in addition to the make-ready investments) if the private third parties do not meet the needs of this market segment. In leading markets for EVs in the country, such as California, Oregon and Washington, the utilities, with the Commission support, have allowed utilities to own and operate in some of these difficult use cases. We believe the Commission should provide similar flexibility.

**3. *Medium and heavy duty (MHD) vehicles: Fleet Segment:***

We believe that the Company has developed a reasonable proposal to provide good planning services, accelerate infrastructure deployments, and to assist EJs, especially in the use case of school bus deployments. First on the issue of Fleet Assessment Services, this has become a necessary and best practice of many utilities in most jurisdictions across the country such as Maryland, Minnesota, Michigan, Colorado, and elsewhere. Simply put, the “collision” between the planning and services of electric utilities, and the fleet operators both public and private have become quite apparent in the last few years. Having a core group of experts/planners in the utility who can assist in making this transition, by coordinating efforts, providing tools and support for the needs of the fleet operators will be key ingredients of success.

The goal of 2,625 vehicles is appropriate for the level of support of fleet assessment services, and the varying levels of support make sense as well: 50 percent for private fleets, and no-cost for the non-profit (or government) fleets. Moreover, the target of 40 percent for EJC fleets is both appropriate and achievable, based on similar targets that we are seeing from utilities and Commissions in other states.

The level of make-ready support for the post enabling fleet electrification is appropriate, namely 181 DCFC and 431 Level 2 ports for a total of 612 ports. However, we believe it is more important to keep one's eye on the number of MHD vehicles to be electrified during this period, namely the 850 MHD vehicles and the 1,150 light-duty vehicles. The focus on the goal of vehicles to be electrified is important (rather than simply number of ports) since the needs of each fleet are unique, the site assessments will be different, the local distribution feeders will vary, and therefore the design of the power levels and the number of chargers may differ from expected goals once the actual work starts to get done over the next several years.

Finally, the school bus program proposal that is oriented toward the EJ communities is well done, and reflects both recent technology developments as well as certain best practices from other States where school bus deployments are increasing. This is still a challenging use case due to the difference in upfront capital cost between a "clean diesel" and a full battery-electric bus. But there are many creative ways in which to overcome these challenges, and the Grid proposal strikes the right balance.

**4. *Utility pole pilot program***

We are especially pleased to see the expansion of this utility-pole expansion program (beyond the successful Melrose municipal program) to about 10 municipalities to deploy about 225 Level 2 charging ports. In cities such as Los Angeles and New York, this utility pole mounted EVSE has proven to be a cost-effective and equitable way to deploy charging infrastructure in more dense urban environments without ready access to a garage or alley. Grid asserts that it is about 70 percent cheaper to install than the traditional pedestal (EVSE on a concrete stub), and about 30 percent cheaper in overall project costs. We agree that Grid should be able to develop, and own and operate the EVSE itself on the pole as an integrated solution for the early stages. This reduces complexity in both permitting and deployment issues, resulting in quicker solutions in these municipalities. After early market development (about four years), Grid can offer these assets to the municipality or a third party.

**5. *Own and operate option for DCFC (in EJ communities):***

As stated earlier, we support the own and operate (O&O) model for the utility when the private EV service providers cannot meet the needs of market segments, such as DCFC in EJ communities. We believe that the two segments can operate in a complementary, hybrid fashion. This is especially true for the multi-family or multi-unit dwelling market (MFAs or MUDs) as well as the unique needs of the environmental justice communities in the Commonwealth. As stated earlier, we believe that the ambitious goals of the Commonwealth require an "all hands on deck" approach for the early development of the market, especially for the more difficult and challenging market segments. Accordingly, we support the option for Grid in its proposal to own and operate up to 20 DC FC charge in the EJ communities.

**6. *Demand charge alternative:***

We believe that National Grid, working together with Eversource and Unitil Corp., have offered a credible, straightforward, and responsive proposal on rate design issues, and specifically the issue of demand charges vs. volumetric charges for cost recovery. The ten-year transition

period is reasonable, and the offer of two specific tariffs (General Service Demand Rate G-2 for under 200 kW, and G-3 for those customers over 200 kW) is clear and is open to any customers for enrollment during the nine years of the program.

The use of a formula to calculate the monthly load factor is easy to understand, and over the 10-year period, Grid will focus on this load factor (in other words, utilization of the charging facility assets) and, for example, keep the 100 percent discount factor if utilization remains under 5 percent. However, as utilization of the chargers increase, the discount factor will be reduced, and in all cases, the load factor needs to remain under 15 percent to qualify for the discount factor. This is a straightforward mechanism for discounting the demand charge, while at the same time increasing the volumetric charge so that the utility can receive full and timely cost recovery on its investments.

The Alliance believes that the key issue that needs to be addressed in these early years of market development is low utilization of the DC fast charging assets. Once more EVs are introduced into the fleet, especially the full BEVs with larger battery capacities, we believe that these issues will fairly quickly be resolved, of course depending on location, availability and other factors. But overall, we believe that this demand charge mechanism proposed by National Grid is well balanced and may catch on with other jurisdictions. The Alliance recently published a paper on Principles of Rate Design (July 2021) and introduced at the summer NARUC meeting in Denver, CO, which we submit here for the record.

Sincerely,

*Philip B. Jones*

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