



Climate Change Mitigation Technologies LLC

*Testimony Before the New Jersey Board of Public Utilities
relating to the Public Service Electric & Gas Electric Vehicle & Energy Storage Petition
Docket No. CEF-EVES E0 18101111*

October 21, 2020

1. Introductory Remarks

Good Evening Commissioner Chivakula, the BPU staff, Office of the Rate Counsel, the parties, and all others dialed into the hearing this evening. Thank you for this opportunity to offer our comments on the PSE&G CEF EV&ES rate case proceedings.

My name is James Sherman, V.P. & Chief Operating Officer of Climate Change Mitigation Technologies LLC, (CCMT) a New Jersey-based developer and manager of zero emission medium and heavy duty (MDHD) public and private truck and bus fleet projects. CCMT President Ray Kenard is on the line as well.

CCMT is an intervenor in the CEF-EV&ES rate case and offers the following testimony with respect to those elements of the “EV Sub-program” that we are most familiar with and see as critical to accelerating the deployment of zero emission MDHD trucks and buses across New Jersey and making New Jersey the East coast center of the zero emission MD truck and bus industry. We understand that the Board staff is planning a MDHD straw poll and that subsequent proceedings with direct respect to MDHD trucks and buses is still to come, but we believe our comments are nonetheless timely since elements of the EV Sub-program intersect with what CCMT is doing presently and intends to do with respect to MDHD truck fleets in New Jersey.

My comments are divided into 3 parts:

- A brief backgrounder on CCMT;
- Our direct comments on elements of the EV Sub-program relating to make-ready infrastructure, the school bus program. and the technology innovation charge; and
- How all these things fit together to accelerate the deployment of zero emission public and private fleet projects that creates the electric truck and bus industry in New Jersey.

2. Background of CCMT

CCMT is a New Jersey based zero emission electric truck and bus developer and project manager. We focus on public and private fleet projects in Environmental Justice communities. CCMT helped pioneer

the zero emission MDHD truck and bus space going back a decade with the founders of the Proterra transit bus company and founders of TransPower Inc. These companies pioneered the city transit bus and the yard tractor and dray truck applications respectively. In 2016-2017 we realized the VW “Dieselgate” funds would be available to fund our projects and also realized that BYD Motors was going to be the only zero emission OEM that was able to supply yard tractors, dray trucks, and garbage trucks and so we facilitated Hudson County Motors in Secaucus, NJ becoming the first BYD dealer in the nation. We have now facilitated United Ford, also in Secaucus, in becoming the first Lightning Systems (LS) dealer in New Jersey and one of only two or three in the nation as a whole. LS makes a variety of zero emission MD trucks and buses on the Ford E and F 350, 450, and 550 chassis.

We are now in the process of delivering some of the very first NJDEP VW Consent Order projects including the deployment of 10 zero emission heavy-duty BYD yard tractors to the Red Hook Container Terminal’s Port Newark facility and 5 zero emission heavy-duty BYD garbage trucks for Jersey City. We expect to have the Red Hook project up and running before the end of this year and the Jersey City project up and running next year. The bodies for the garbage trucks are being supplied by Sanitation Equipment Corporation in Totowa, NJ.

CCMT currently has 17 projects on file with the NJDEP for 45 different trucks and buses, including 23 garbage trucks, 4 yard tractors, 6 senior citizen transport buses, 6 Type A school buses, and 2 box delivery trucks. The projects include 11 New Jersey towns and cities including Bergenfield, Elizabeth Board of Education, Englewood, Paramus, Paterson, Perth Amboy, Rutherford, Teaneck, Trenton, Wallington, West New York, and Woodbridge. Many of these communities are Tier 1 or Tier 2 Environmental Justice communities.

3. Direct Testimony on Elements of the EV Sub-Program

a. General Remarks

CCMT’s public comments this evening are limited to the key elements of the EV Sub-program that we are familiar with because of our experience developing and managing MDHD truck projects and because we follow developments at the CARB, the California Energy Commission, and the California electric utility companies as part of being in the business. We are familiar with the SDGE, PGE, and SoCal Edison fleet charging programs and so we have some perspective on the PSE&G EV Sub-Program. Generally speaking, we can say that the PSE&G EV Sub-program is consistent with what we see the California utilities doing to promote the acceleration of charging infrastructure in order to deploy MDHD truck and bus fleet projects.

b. Make -Ready Infrastructure

We strongly favor the “Make-Ready Infrastructure” part of the filing because this helps solve the other major piece of the puzzle for MDHD truck fleet project deployments, which is the charging infrastructure. We are currently in the process of delivering our first major NJDEP VW Consent Order project for RHCT and the fleet owner is incurring design, installation, and commissioning costs that he

could have otherwise avoided had the “make-ready infrastructure” program been available. Make-ready infrastructure lowers the cost and increases the ROI of the project.

c. Rebates or Other Incentives to Off-Set Demand Charges

The CEF EV program also contains language that PSE&G intends to offer incentives or otherwise offset demand charges for fleet charging projects for a certain period of time. We also strongly favor this aspect of the filing as we spend half our time designing the Charging Systems precisely to avoid incurring demand charges.

d. School Bus Fund and Technology Innovation Charge

We also strongly support the \$33 million school bus fund because we see it as a source of “gap funding” that is going to provide funding for zero emission school buses in the period between the end of the NJDEP VW Consent Order program and the time when the RGGI or other state-level funding becomes available.

The \$33 million school bus grant fund is especially important for towns and cities that own and operate their own fleets. The vast bulk of the RGGI funding is slated for private fleets with only about 10% being allocated to public fleet projects.

We also note that PSE&G is not alone in presenting a school bus grant program. Dominion Energy established a school bus grant program last year that is supposed to roll out 50 battery electric school buses this year.

The Vehicle Innovation Project Fund Program (VIPF) being proposed by PSE&G is also an important program element. The School Bus program and the VIPF program will allow us to prove out whether vehicle-to-grid (V2G) communications, grid interoperability, and the whole world of transactive energy is real and economically viable. Using fleets of V2G equipped school buses for frequency regulation service and as a virtual peaker plant to alleviate peak load conditions instead of calling on fossil fuel fired peaker plants has been a holy grail moment for PJM for the past 20 years. Aware of this goal, CCMT has developed a VW Consent Order school bus project involving 4 Type A school buses that will be equipped with V2G systems. The buses are garaged in Paterson and travel to and around Teaneck three times a day transporting public school students so both communities will benefit. The school bus bodies will be made in Middlesex New Jersey with final assembly in Paterson, New Jersey.

4. How This All Fits Together – The Paterson Works

Fourteen of the 45 vehicles that CCMT has submitted to the NJDEP for funding are MD Lightning Systems’ trucks and buses. 6 are Type A school buses for the Elizabeth Board of Education and D&M Tours in Paterson, 2 are E-450 box delivery trucks for the EBOE, and 6 are Ford F-550 24 seat senior citizen shuttle bus with lift and 2 handicap positions. These vehicles are currently made in Colorado but can be made in New Jersey and that is exactly what we plan to do in cooperation with LS and our local truck and school bus assembly partners in Paterson. We can start up operations in 2021 if sufficient orders and state-level funding are put in place.

We call this assembly facility the Paterson Works which we project will generate 45 new jobs at full production of 500 trucks and buses per year with the majority of the jobs in Paterson but also in Garfield and in Middlesex.

So all these things fit together: make ready infrastructure, the school bus fund, and the vehicle innovation fund. When put together, we get advanced zero emission vehicle technologies, job creation, increased grid reliability. We get school buses made in New Jersey and driven in New Jersey. We get immediate clean air benefits at the community level, starting off with the Tier 1 environmental justice communities and eventually to all New Jersey communities.

5. Closing Remarks

I would say in closing that there are a handful of “take-aways:”

1. We see the provision of make-ready infrastructure as significantly accelerating the deployment of public and private MDHD fleet projects;
2. We see school bus grant funding and Vehicle Innovation Project Fund as very important in filling a timing and funding gap between the end of VW funds and the start of RGGI, TCI, or other state-level funding programs;
3. The EV Program, in conjunction with other state-level funding programs for zero emission MDHD trucks and buses, will help us establish an electric truck industry in New Jersey centered at the Paterson Works.
4. We are in the middle of a climate emergency and so we urge the Board to move with dispatch to conclude the CEF EV program rate case as soon as possible so that we can dig in in the fight against climate change and build an electric truck and bus industry here in New Jersey at the same time.

It is for these reasons that CCMT is strongly supporting the CEF EV program. Thank you for this opportunity to testify.

/s James Sherman,

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