October 2, 2023

Sent via email to Cheryl.Laskowski@arb.ca.gov

Re: Recommended provisions regarding capacity crediting for medium- and heavy-duty vehicle charging in the Low Carbon Fuel Standard (LCFS)

Dear Ms. Laskowski:

Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E) (the Joint Utilities) appreciate the opportunity to provide recommendations concerning capacity crediting in the Low Carbon Fuel Standard (LCFS). We support the creation of a new medium-and heavy-duty (MHD) vehicle capacity credit program to 2035, capped at 2.5 percent of prior quarter deficits, consistent with the current light-duty (LD) program.

Based on our experience working with MHD fleet operators in support of their charging infrastructure needs, we've seen several projects for a variety of vehicle classes, emerging innovative business models, and the challenges in this nascent space. We believe that the MHD Fast Charging Infrastructure (FCI) capacity credit program can provide needed financial support for accelerating MHD infrastructure and vehicle deployment in California. The elegant design of the FCI helps break the 'chicken and egg' challenge and enables charging infrastructure to be built in advance of the vehicles, which is critical for MHD fleet operations. Additionally, the program helps charging infrastructure developers to de-risk building the stations and in turn increase investment and development to scale charging infrastructure deployment.

The recommendations described below were developed in an effort to best support the rapid build out of the large amount of MHD charging that is needed to support the vehicle electrification called for in the CARB Scoping Plan and Advanced Clean Fleets, and to complement other streams of funding that exist from utilities.

MHD Capacity Program Recommendations

The Joint Utilities suggest that the regulation not be restrictive on the MHD use cases that are allowed in the FCI program. The inclusion of a variety of use cases will help support business model innovation and accelerate the deployment of charging infrastructure. Fleet operators need guaranteed access to charging, as it's critical to their operations. We are encountering a variety of new approaches to shared charging infrastructure across multiple fleet operators as a solution to numerous challenges that fleet customers face and believe the FCI program can encourage cost-effective innovative charging models that minimize grid impacts where possible.

We oppose the addition of geographic limitations for the location of charging plazas and refueling stations, including limiting proximity of plazas /stations, or requiring specific locations. Similarly, we request that CARB not include the proposed one mile from a major highway limitation. EV charging infrastructure has different siting requirements from other types of liquid or gaseous fueling infrastructure. Especially for MHD vehicles, charging can be located closer to the point where they are domiciled and used, which may not be on or near highway corridors for many of the vehicle fleets that must be electrified. Leveraging this charging model, where MHD vehicles are charged near where they are domiciled and used, can also enable these EVs to provide load flexibility depending on charging

patterns and duty cycles. Also, not all classes of vehicles subject to the Advanced Clean Fleet regulation have the same driving patterns. EV charging also requires available utility grid infrastructure with capacity to interconnect new loads, and this may not always align with highway corridor infrastructure. Overly restricting location could create adverse impacts on the grid, delay deployment and increase overall cost.

Additionally, we believe it is important to not establish a minimum charger size that is unnecessarily high. Bigger is not necessarily better, when it comes to fast charger capacity for MHD fleets. Depending on the vehicle class, battery size, duty cycle, daily miles driven, and dwell time, a multitude of charging approaches and solutions can service MHD fleets. We think an arbitrary size limit on fast charging capacity could result in perverse consequences, whereby charging providers oversize charging capacity to obtain LCFS credits, resulting in suboptimal charger utilization and increasing stress and cost on the grid. It is important to balance the grid to create flexibility and these tradeoffs are important to consider.

We appreciate that the FCI programs enable the advanced build out of infrastructure that California needs to support ZEV adoption and make the business case more likely to succeed. Thank you for your consideration. We look forward to continue working with your team on this important regulation.

Regards,

Fariya Ali Air & Climate Policy Manager PG&E Linda Morales Principal Manager Air & Climate Policy SCE Danielle Weizman Business Development Manager SDG&E

cc: Rajinder Sahota Matthew Botill Jordan Ramalingam Jacob Englander