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DTNA Comments on Draft 2023 IEPR

Additional submitted attachment is included below.

DAIMLER TRUCK
North America

December 20th, 2023

California Energy Commission
715 P Street
Sacramento, CA 95814

Re: Docket # 23-IEPR-01 Draft 2023 Integrated Energy Policy Report

Daimler Truck North America (DTNA) submits the following comments in response to CEC's Draft 2023 IEPR. DTNA additionally filed comments on CEC's Load Modifier Scenario (23-IEPR-03) and incorporates those comments by reference.

DTNA is the largest producer of medium- and heavy-duty (MHD) vehicles in North America. DTNA is fully committed to supporting the emerging zero-emission vehicle (ZEV) market; we expect these technologies to play a significant role in the future of commercial transportation, and know they are a vital contributor to lowering NOx and GHG emissions. DTNA is investing heavily in the development of electric vehicles. We currently offer battery electric school buses, walk-in van chassis (Class 5/6), as well as medium-duty (Class 6/7) and heavy-duty (Class 8) tractors for sale. DTNA – in partnership with Portland General Electric (PGE) – is proud to have built the first-of-its-kind public charging island for commercial ZEVs in Portland, Oregon. In addition, DTNA launched a joint venture focused on public charging & refueling (Greenlane) to help in the acceleration of infrastructure that meets the needs of MHD vehicles. Finally, DTNA has an expert eConsulting team dedicated to supporting fleets with all aspects of the ZEV transition, including site design and interfacing with utilities. Therefore, DTNA is uniquely positioned to offer insights into MHD transportation electrification (TE).

DTNA believes the successful transition to ZEV transportation will require a three-part "transformation equation"[1].

Vehicle Technology x Cost Parity x Infrastructure = Successful Transformation

Manufacturers have vehicle technologies available today suitable for a variety of fleet applications. A number of state and federal incentive programs exist to help fleets achieve cost parity. However, the infrastructure factor remains effectively zero, jeopardizing this transformation, the ability of obligated parties to meet CARB regulatory requirements, and the State of California's carbon reduction targets.

DTNA Feedback on MDHD Forecasting Updates

DTNA commends CEC staff for their continued refinement of the transportation electrification scenario forecast. DTNA is pleased to see this year's IEPR forecast incorporates CARB's Advanced

[1] https://www.youtube.com/watch?v=eY76BzcxeFc

Clean Fleets (ACF) regulation and has been extended to 2040, reflecting the rapid increase in MHD ZEV population and associated electricity demand increase as a result of the ACF's 100% ZEV sales mandate in 2036.

We understand that due to timelines for preparing this year's forecast, many of the modeling assumptions in the HEVI-LOAD model related to zero-emission MHD vehicles could not reflect real-world data from electric trucks now on California's roads. As we look forward to the IEPR forecast update in 2024, DTNA encourages CEC staff to rely more heavily on real-world performance data, as collectively across the OEMs, several million miles of ZEV travel, usage (and charging) data will be available. DTNA's customer fleet alone has reached over 3 million miles across all ZEV vehicle platforms. NACFE's Run-on-Less project is another source of timely, real-world information, highlighting actual usage findings differ from prior modeling assumptions.

DTNA generally supports CEC's approach to hydrogen fueled trucks in the 2023 IEPR AATE3 forecast. While DTNA is investing in the development of hydrogen fuel cell electric vehicle (FCEVs), significant uncertainty exists around the total cost of ownership as well as the availability of medium- and heavy-duty accessible hydrogen refueling infrastructure. DTNA believes the ACF regulation may drive some early decade FCEV adoption, as High Priority and Federal Fleets following the Milestone Schedule must begin electrifying their Group 3 (sleeper cab and specialty vehicles) in 2030, and we believe these segments may favor FCEVs over BEVs. However, given the uncertainties, we believe CEC's approach to assuming a mostly BEV scenario at this time is prudent. However, DTNA also notes that CEC's assumption that all hydrogen fueled vehicles are FCEVs may result in an under-estimate the hydrogen need if hydrogen internal combustion engines become a market favored technology.

DTNA Feedback on the Regional Energy Allocation and Load Shapes

DTNA commends CEC staff for the inclusion of the load forecasts by region and electric utility as part of this year's transportation electrification work, but we believe more granular local forecasts are critical for distribution system planning. While system-level energy forecasts continue to be important for CAISO purposes, the localized but concentrated distribution capacity addition needs are emerging as just as important, especially based on the AATE forecasting process with tools such as HEVI-LOAD that can pinpoint where MHD charging loads are likely to occur. DTNA encourages CEC to further identify the areas likely to see the highest near-term charging loads, and support the State's utilities, both investor-owned and publicly-owned utilities, in expediting new distribution grid capacity additions in these "no regrets" zones.

DTNA Feedback on Timing

While DTNA is pleased to see the addition of the Advanced Clean Fleets regulation in this year's IEPR forecast, this forecast is being presented only weeks ahead of the start of ACF implementation. Because of the long lead nature of utility proceedings, current ongoing General Rate Cases are relying on the *2021* IEPR forecast, with proposed infrastructure upgrades coming online in the critical ~2030 timeframe, where the 2023 IEPR is projecting much higher ZEV

deployment rates.

We commend Staff for recognizing the unique challenges posed by rapid transportation electrification in this draft report. Staff notes recent growth in large load projects, including highway fast charging plazas, which can be constructed in a year or less, but their power needs may require new distribution or transmission system assets to provide adequate capacity. However, DTNA is concerned that strategies and solutions are not proposed in the IEPR to address this situation where grid infrastructure will lag (often substantially, by many months or years) behind the ZEV deployment need. Furthermore, DTNA is concerned the planning, budgeting, and approval process for capacity projects are held every four years during an IOU's GRC proceeding, which results in further timing delays. We encourage CEC to further highlight streamlining options so grid capacity is available to meet ZEV charging loads as they occur to meet CARB's regulatory compliance targets.

DTNA thanks CEC for the opportunity to provide feedback on the this year's IEPR Load Modifier Scenario and looks forward to continued collaboration to enable widespread transportation electrification.

Sincerely,

Alissa Recker
Engineer, Compliance & Regulatory Affairs