

**DOCKETED**

<b>Docket Number:</b>	23-IEPR-03
<b>Project Title:</b>	Electricity and Gas Demand Forecast
<b>TN #:</b>	252117
<b>Document Title:</b>	Daimler Truck North America Comments - on IEPR Workshop
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Daimler Truck North America
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	9/1/2023 12:34:31 PM
<b>Docketed Date:</b>	9/1/2023

*Comment Received From: Daimler Truck North America  
Submitted On: 9/1/2023  
Docket Number: 23-IEPR-03*

**DTNA Comments on IEPR Workshop**

*Additional submitted attachment is included below.*

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September 1, 2023

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### **Re: Docket # 23-IEPR-03: Response to IEPR Commissioner Workshop on Load Modifier Scenario Development**

Daimler Truck North America (DTNA) submits the following comments in response to the IEPR Commissioner Workshop on Load Modifier Scenario Development.

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 heavy-duty (Class 8) trucks for sale, and we are preparing for the market introduction of an all-electric medium-duty (Class 6/7) truck. 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”<sup>1</sup>.

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. Illustrating this factor, during the June Joint CEC-CTC NEVI workshop<sup>2</sup>, it was discussed that there are only 4 publicly accessible truck charging stations across the West Coast today. CTC estimated in the Clean Freight Corridor Efficiency Assessment that 84 public truck charging stations are needed in

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<sup>1</sup> <https://www.youtube.com/watch?v=eY76BzcxFe>

<sup>2</sup> <https://www.energy.ca.gov/event/workshop/2023-06/joint-workshop-development-2023-update-californias-deployment-plan-national>

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California by 2025 under the Accelerated Battery Electric Adoption scenario, highlighting the near-term infrastructure gap.

### Transportation Electrification Considerations

DTNA appreciates CEC's careful consideration of transportation electrification in this year's IEPR. As a critical piece of California's climate policy, utility readiness is a prerequisite for enabling compliance with CARB's ZEV regulations and ultimately achieving the State of California's carbon reduction targets. DTNA recommends additional consideration of the following:

- DTNA supports the inclusion of Additional Achievable Transportation Electrification (AATE) Scenario 3 in the Forecast Framework, including both the Advanced Clean Trucks (ACT) regulation and Advanced Clean Fleets (ACF) regulation. Beyond including both of these regulations in the forecast, DTNA strongly encourages CEC to consider CARB's vehicle projections for these regulations as "investment grade" evidence to authorize build out of necessary capacity. These regulations are concrete obligations for manufacturers and fleets in California, and **not** aspirational targets.
  - Enacted in 2021, the ACT regulation phases in increasing percentages of Class 2b-8 ZEV sales volumes, beginning January 1, 2024. Based on average annual new truck registrations in California, DTNA believes ZEVs sold under the ACT regulation can be reliably projected, and required capacities calculated.
  - The final ACF regulatory package was submitted to the Office of Administrative Law on August 30, 2023 and is expected to be approved well before the conclusion of this proceeding. While DTNA appreciates some uncertainty exists as fleets have multiple compliance pathways, CEC staff should coordinate closely with CARB staff to develop reliable annual ACF projections. DTNA also notes the ACF regulation includes a 2036 100% medium- and heavy-duty vehicle sales requirement, which can be reliably forecasted based on historical sales data.
- DTNA agrees with staff's stated need to add spatial patterns of charging demand. DTNA also supports including the "when" (deployment year, time of day), and "how much" (load) related to MHD electrification. We look forward to seeing these results included in this year's IEPR forecast.
- DTNA commends the CEC Staff for preparing electricity use forecasts for each of the state's largest electric utilities. We urge staff to add insights into where these MHD TE loads are likely to occur in each service area, as the utilities will need that information to develop their Grid Needs Assessment (GNA), Distribution Deferral Opportunity Plan (DDOP), and Distribution System Plan (DSP) to submit specific projects to their respective regulatory bodies for approval to proceed with construction/energization.

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- DTNA understands the concerns raised by stakeholders during the workshop related to the impacts new capacity investments may have on the affordability of electricity prices. In many instances, these stakeholders advocated for adding traditional utility grid capacity as a last resort, after all conservation measures, energy efficiency measures, and on-site PV solar and energy storage options are exhausted. We urge the CEC to assess whether sufficient grid capacity for charging MHD vehicles can be developed in the timeframe required to meet air quality regulatory compliance milestones using this portfolio of non-grid-addition measures. DTNA is concerned that this approach will not support the highly concentrated loads created by MHD ZEV deployment and working through this “last resort” approach will substantially delay the deployment of the capacity required to support the State of California’s regulatory requirements and carbon reduction goals. We further urge the CEC to conduct analyses to better understand the impacts of electricity prices from either of these approaches and to consider CARB’s Final Environmental Analysis for both ACT and ACF, as they include extensive air quality benefit analysis.
- CEC must consider that MHD vehicles are disproportionately located in concentrated urban areas, creating highly localized grid capacity addition needs in constrained spaces. Many of these highly concentrated areas will be first impacted by CARB’s ACF regulations, including densely populated areas around ports affected by the Drayage regulation as early as January 2024.
  - DTNA recommends based on this IEPR analysis, CEC propose certain locations around the state as “no regrets” zones for grid infrastructure additions to begin immediately in order to meet CARB regulatory compliance obligations. A variety of public and private sources (including FHWA, ICCT, DTNA and other manufacturers) have data indicating where these concentrations will occur. ICCT’s identification of top counties generally aligns with DTNA’s vehicle movement data, and therefore, we recommend CEC take action to accelerate authorization of build out in Los Angeles, San Bernardino, San Diego, Riverside, Orange, Kern, Alameda, and Santa Clara counties.
  - In addition, DTNA recommends CEC place additional emphasis on the drayage fleet needs, as the ACF drayage rule allows only ZEVs to be added to California’s drayage registry as of January 1, 2024 and these fleet needs can be reliably projected. All internal combustion vehicles on the drayage registry must be retired by 2035. These locations are well-known and constitute an example of “no-regret” zones.
  - DTNA is concerned that unless utility grid capacity addition projects are proposed, approved, and moved into the implementation phase immediately, the required grid capacity to serve the rapid increase in TE in the 2024-2033 timeframe will not be available, as most substation capacity additions require ten years to achieve energization. Therefore, we recommend CEC coordinate with CPUC to allow and

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encourage flexibility by electric utilities to address these near term needs on an expedited basis.

### **Collaboration with Other California Agencies**

Transportation electrification at the pace set by the state's vehicle regulations and carbon reduction goals requires radical industry transformation. DTNA urges CEC to work closely with the CPUC on aligning their regulatory oversight capacity over California's investor-owned utilities. This oversight is required for both TE programs and each individual utility's System Improvement Plans. The CPUC's priority to minimize ratepayer risk makes it increasingly difficult for sufficient grid capacity to be installed in an anticipatory manner so that California can meet its emission reduction goals for the transportation sector. DTNA strongly recommends CEC work with the CPUC to encourage pathways for proactive investment ahead of anticipated transportation electrification. Similarly, DTNA urges the CEC to work closely with the publicly-owned utilities and their respective regulatory oversight bodies to make proactive investments for TE.

DTNA strongly recommends CEC coordinate ACT and ACF vehicle forecasts with CARB. DTNA believes CARB is best positioned to advise on fleet turnover and projected ACF adoption, with insight into the TRUCRS reporting database, and believes these concrete regulatory requirements and their associated vehicle forecasts should be considered "investment grade" proof of need.

### **Conclusion**

Because of the high reliance on medium- and heavy- duty vehicles to move over 70% of the nation's freight, electrifying the MHD sector is a critical step in California's climate plan. The variety of vehicle applications and diversity in fleet operations make for a unique challenge in MHD forecasting. DTNA recommends CEC reach out to all truck OEMs, who can provide valuable insights into their customer's transportation electrification needs, and leverage these insights to build out the long-term, necessary capacity to serve the growing MHD ZEV market.

DTNA thanks the CEC for the opportunity to provide feedback on the demand forecasting for transportation electrification, and looks forward to continued collaboration with the agency to enable widespread transportation electrification.

Sincerely,



Alissa Recker  
Engineer, Compliance & Regulatory Affairs