



**Truck Regulation Implementation Group
(TRIG) Infrastructure Meeting #4
Charger Reliability and Networking**

September 5, 2024

Agenda

- Recap previous Infrastructure TRIG meetings
- Objectives and Outcomes
- Charger Reliability and Networking Requirements
 - Overview of requirements - CEC
 - Meeting requirements with networked chargers - Terawatt
 - Meeting requirements with nonnetworked chargers - TerraVerde Energy

See "External Slides" for above presentations
- Focused Discussion
- Recap and Next Steps

Commercial MHD Fleet's Charger Priorities and Expectations - All Chargers

All MHDV charging infrastructure - public and private

- Charging station reliability (hardware, software)
- Ability to restart when power is interrupted
- CapEx plus installation costs need to come down
- e-fuel cost parity with liquid fuels, regardless of charging speed
- Adequate charger egress
- Ability of site to support full GVWR truck weights
- DC chargers deliver at full kW rated capacity when needed
- Standardized for OEM interoperability between chargers and vehicles
- Minimum cable length 18 feet

Commercial MHD Fleet's Charger Priorities and Expectations - Public Chargers

Public heavy-duty truck charging infrastructure

- eFuel price transparency - post kWh price plus fees
- Network roaming and network access in remote locations
- App-based reservation system accessible via truck's navigation device
- No restrictions on ability to receive maximum charge
- 24/7 support services
- Major repairs completed within 7-days
- Multiple vehicle and charger OEM interoperability/standardization
- Station layout accommodates truck/trailer including a pull-through option
- Access to essential driver amenities (similar to today's truck stops)

Commercial MHD Fleet's Charger Priorities and Expectations - Private Chargers

Private medium and heavy-duty charging infrastructure

- Automatic charger restart after interruption
- Employees access including pay for use
- Charging station manufacturer provides customer support, replacement parts, and repairs within 7 days
- Getting network access and enough power to chargers in remote locations
- Incentive options for non-networked charging infrastructure
- ADA compliant

Recap and Next Meeting

- Recap today's discussion
- Possible topic - Hydrogen Infrastructure
 - DOE H2 Hubs funding to ARCHES
 - LCFS amendments and implications
 - Other factors that can affect future cost/price of hydrogen
 - November 4, 2024, 1:00-3:00 P.M.
- Are you still interested in being on the Infrastructure TRIG panel?
- What topics should we cover at future meetings next year?
 - Email Leslie.Goodbody@arb.ca.gov