Virtual Transit Agency Infrastructure Workgroup Meeting for Zero-Emission Buses (ZEB)

Meeting Agenda

Tuesday, January 31, 2023, 9:30 AM- 4:00 PM
This meeting will be conducted via Zoom (*Register*)

- **Introduction (9:30-9:40 AM)**
- **California's ZEB Transition–present and future (Caltrans and Go-Biz) (9:40-9:50 AM)**
- **Hydrogen track (9:50 AM-12:00 PM)**
    - Case studies (presented by transit agencies)
        - Successes and lessons learned
        - Cost and supply methods
        - Infrastructure resiliency
    - Discussion topics
        - What to expect for low carbon-intensity H2 supply and price?
        - What are the economics for fuel cell electric buses and H2 dispensing? Funding? Investment? Long-term price predictability?
        - How would a rural H2 station be different from an urban station in terms of fuel cost, maintenance support, and delivery frequency?
        - Are station designs becoming more replicable? If so, what effect does that have on permitting, station build timelines, and capital cost?
        - What policy drivers are needed?
        - How could H2 be a solution for range and infrastructure resiliency (use of H2 for grid load relief)?
    - Questions and comments
    - Next steps

- **Lunch**

- **Electrical track (1:00-4:00 PM)**
    - Case studies (presented by transit agencies)
        - Successes and lessons learned
        - Rural transit grid capacity—upgrade is more than site make-ready
        - Large transit grid capacity—substation and regional grid load
        - Infrastructure resiliency—charger operation in a power outage
        - Infrastructure resiliency—opportunities and limitations for off-grid charging
        - How grid upgrades are planned and funded (presented by Southern California Edison)

- Discussion topics
    - Planning for current and future potential grid needs
        - Are the local utilities getting sufficient information to accurately plan for grid upgrades?
        - How far into the future do utilities plan for upgrades?
        - How is the process or experience different in rural/remote settings vs. populated urban settings?
    - How ready are we if the electrical upgrades need to be completed in 3, 5, and 10 years?
        - How to optimize the scale up process on the utility side? Staggered vs. one-time upgrade
        - What is needed to promote early action—upgrading the grid ahead of demand, and how far in advance is acceptable?
        - Assessing grid capacity from the utility perspective for each project
        - Review and permitting process—at what point in permitting process are timelines for upgrades and utility connection/energization established?
    - Infrastructure resiliency
        - How could on-site solar power and energy storage be utilized?
        - What are the regulatory requirements? Utility incentives or restrictions?
        - What policy drivers are needed?
- Questions and comments
- Next steps