Bidirectional EV Working Group- Meeting 2: Technology and Program Implications by Vehicle Class

Date: March 31, 2026] | **Time:** 9:00 AM ET | **Platform:** Microsoft Teams

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NOTE – MEETING WILL BE RECORDED AND POSTED HERE: HTTPS://ENERGYSTORAGECT.COM/BEVWG/

1 Objectives

- Review definition of light-duty (LD) vs. medium/heavy duty (MHD) EVs for the purposes of the Working Group
- Introduce key differentiating characteristics across vehicle class
- Identify ways that different vehicle class characteristics may influence the integration of bidirectional EVs into the Energy Storage Solutions (ESS) program
- Identify potential gating criteria that would identify when vehicle/vehicle class would be eligible to participate in ESS

2 Agenda

2.1 Welcome & Overview *(5 minutes)*

- Meeting logistics, including voting
- Why are we discussing vehicle classes?
    - PURA order
    - Relevant drivers of program implementation
    - Understand vehicle class maturity/potential for program participation
    - Provide context for future discussion on incentives
- Throughout: ensure discussion considers both present state and anticipated changes (e.g., trends in AC- vs. DC-coupled bidirectional EVs)

2.2 Context – Key Vehicle Class Distinctions and Relevance for ESS and the Bidirectional EV WG (25 minutes)

- Definition: LD – up to 8,500 Gross Vehicle Weight Rating (GVWR); MHD: GVWR of 8,501 and above
- Overview of key distinctions

- Battery size
- AC vs. DC architecture
- Ownership and operations
- Usage patterns/vehicle availability and alignment with ESS windows (provide example data, ask for participants to share data offline)

- Why these distinctions matter for ESS:
  - Assessing potential level of participation in ESS:
    - Why do we care about level of participation?
    - Examples of characteristics that may influence participation and performance
  - Examples of potential implications of different LD vs. MHD characteristics for their integration into ESS:
    - Eligible equipment (applicable standards, eligible equipment lists, battery chemistry, etc.)
    - Enrollment pathway (e.g., bulk enrollment through OEM, charging management service provider, fleet operator, or individual customer etc.)
    - Approach to vehicle dispatch and providing telemetry data
    - Incentive, compensation structure
    - Other details that would need to be addressed in the ESS program manual
- *Discussion: what are the other important implications of LDs vs. MHDs for the ESS and the Bidirectional EV WG's work? For these items, what can be addressed during this meeting vs. future meeting vs. outside of this Working Group?*

2.3 Market Readiness Snapshot by Class (45 minutes)

- Distinguish maturity of vehicle electrification maturity (e.g., % of sales by class) vs. maturity for bidirectional charging
- Review (high level), by vehicle class:
  - % of EV sales overall
  - Brief discussion of vehicle/EVSE interoperability
  - AC vs. DC-coupling standards
  - Pilots – by LD vs. MHD – what have they primarily sought to answer?
- *Discussion questions*:
  - *Are there specific gating criteria that we should consider before vehicles are ready to be integrated?*
    - *This could be completing standards, work that the PAs need to do to make the program ready for it, interconnection criteria, etc.*
    - *Should we consider integrating certain classes of vehicles initially through a limited ESS offering (e.g. one use case)?*

2.4 Participation/Enrollment Pathways (time permitting – approximately 10 minutes)

- Describe current state in ESS (e.g., primarily through BESS OEM)
  - How does a customer enroll?
  - How are dispatch decisions made?
  - How is telemetry data provided to the Program Administrators?

- *Discussion question:*
  - *What are the likely enrollment and participation pathways through which bidirectional EVs would participate in ESS?*
  - *How would this vary by vehicle class?*

2.5 Wrap-Up & Next Steps *(5 minutes)*

- Summary of key discussion points
- Action items and owners