Workshop on Future of DC Distribution Systems for Stationary and Mobile Applications

Day 1: Wednesday October 2nd Conference Room: NREL ASPEN A&B

Start	Item
8:15	Breakfast – Participants check in at NREL East Security Entrance for Shuttle to ASPEN A&B Conference Rooms at NREL
8:30	**Welcome – Context for the Workshop and Agenda Review** • NREL and Eaton hosts **Welcome – Morning Session – Current State-of-the-Art** • Introduction – TBD
9:00	**Panel 1 - Current State-of-the-Art of Stationary DC Distribution** • Moderator: TBD The panel will focus on the DC distribution related to EV charging with DC/DC chargers, DC microgrids, DC datacenters, PV and Energy storage farms. The goal is to understand what the current practices are and what the new trends are. Challenges faced by the designers and installers will be useful. If there are pilot projects in this area it will be great provide some details.
10:00	Coffee Break
10:15	**Panel 2 - Current State-of-the-Art of Mobile DC Distribution** • Moderator: TBD The panel will focus on the DC distribution related to light, medium, and heavy-duty vehicles, aerospace applications, ship-board power systems and any others related to mobility. The goal is to understand what the current practices are and what the new trends are in DC distribution. Challenges faced by the designers and OEMs will be useful. If there are pilot projects in this area it will be great provide some details.
11:15	**Panel 1 & 2: Interactive Conversation** • All Participants
12:00	Lunch break
1:00	**Welcome – Afternoon Session -Technical Challenges** • Introduction– TBD
1:15	**Panel 3: Technical Challenges in DC Distribution Architectures - Stationary and Mobile** • Moderator: TBD There are common features in stationary and mobile DC architectures but there are significant differences as well. The goal here is to identify the challenges faced with different architectures being adapted or proposed. The panel presenters will provide their insights into the challenges they face and the trends in the respective industry to address them. The end goal is for the participants to go away and build the right products.
2.30	**Panel 3: Interactive Conversation** • All Participants
3:15	Break
3.30	**Panel 4: Technical Challenges in DC Solid State and Hybrid Breakers – Stationary and Mobile** • Moderator: TBD Solid state and hybrid DC switches (breakers and contactors) are being proposed for various applications. What are the challenges for low-current-low-voltage and high-current-higher-voltage switches? What are broadly recognized as current and voltage limits for the switches. Is there a need for standards that can help product development? The goal here is to identify the use cases for these devices in both stationary and mobile applications and the panel presenters will provide their insights into the challenges they face and the trends in the respective industry to address them. The end goal is for the participants to understand the gaps and what could be available in near time for pilot projects.
4.30	**Panel 3: Interactive Conversations** • All Participants

4.50	**Closing comments/Summary – TBD**

Day 2: Thursday October 3rd **NREL FLATIRONS CAMPUS**

Start	Item
8 to 8:30	Meet at NREL East gate
8:30	Departure for FLATIRONS Campus at NREL's East gate or individuals driving to the Flatirons campus.
9:00	Tour of FLATIRONS Campus at NREL.
10:00	Tour ends
10:30	Drop-off at NREL East gate