

PSMA Transportation Electrification Committee Meeting

Attendance for 5/17/22 PSMA Committee Meeting

- 1) Fred Weber
- 2) Thomas Foulkes
- 3) Matthias Preindl
- 4) Joe Horzepa
- 5) John Horsepa
- 6) Renee Yawger
- 7) Shajjad Chowdhury (ORNL)
- 8) Dinesh Kithany (WAWT – Wired and Wireless Technologies)

Upcoming Meetings

- June 14th at 9 AM CT, 10 AM ET

Agenda

- Fred Weber update about Virtual Electrification Workshop
 - Working to select the date (June was too soon now, July was difficult due to IEEE meeting conflicts and Fred's travel conflicts, August was difficult due to European travel, etc)
 - September 13th and 20th are the tentative dates (Fred and Matthias were both on-board) => Looking forward toward 2023 ITEC in terms of advertising call for abstracts, etc
 - Need recorded copies of presentations by early August. Our team will review the recordings ahead of time to ensure that the recording will flow nicely.
 - Presenters just have to show up for the roundtable on the presentation dates
- Review of APEC Transportation Industry Session APEC conferences 2019-2022
- What is our theme for the industry session of APEC 2023? Discussion of potential speakers and brainstorm additional names – Requesting your input on the following:
 - Charging
 - Different charging methods (wireless, cabled, etc)
 - Grid infrastructure
 - Charging and grid impact – ITEC panel (how all of the charging technologies integrate to deliver value for the consumer and not cause)
 - Vehicle-to-grid
 - Topologies – bi-directional chargers
 - PV renewables for charging = e-mobility engineering magazine (Joe suggested this)
 - Off-road vehicles (large dump trucks and loaders and agriculture)

- Electric aircraft
 - Several startup companies
 - ORNL and NASA Glenn
 - Rolls-Royce and Airbus
 - ORNL Charging Highway Discussion
 - E-mobility city cars or e-scooters (Renee suggested this)
 - Battery swapping
 - Power Electronics
 - Autonomous vehicles (Borg Warner and Aptiv could be topics, contact some professors)
 - Commercial vehicles
 - Status and challenges (what are the power electronics demands)
 - Battery re-use opportunities
 - Battery manufacturing
 - GM modular battery pack design and packaging (recent announcement)
 - Electric ship/boats
 - 5G demands and mobile computing demands
 - Renee suggested that power electronics for lidar could be very good topic and had some initial ideas about companies from semiconductor space
 - Factory vehicles – power electronics for these automated cart vehicles and electric forklifts
 - Disney Imagineering speaker (APEC is in Orlando, FL next year)
 - Hydrogen for semi-trucks and other vehicles as a fuel source (what will the infrastructure look like for this)
- Reflect on PTR Transportation Inverters chapter and identify path forward to the next PTR chapter and presentation (PSMA is looking for abstracts for future PTR presentations about 5-year forward looking trends)