

## PSMA Energy Storage Committee Meeting Minutes 18 Aug 2021

### Some Talking Points:

- Welcome to any new attendees
- APEC 2022 IS Proposal – Sep 17 is the submission deadline
- Potential Roadmap presentations
- Potential Educational Webinars
- Other Topics
- Next Meeting – a request to move 1 hour earlier on Wed

### Attendees:

John Horzepa, Joe Horzepa, Fred Weber, Ed Herbert, Juan Carlos Balda, Padraig Lyons, Brendan Andrews, Eric Schneider

### Discussion:

- Juan Carlos Balda introduced himself as a first-time attendee. He is chairman of IEEE PELS Technical Track #5, which deals with Sustainable Energy Systems. He advertised a special session on the topic of Power Electronic Technologies for Distributed Energy Resources that will be during ECCE in October. We talked a bit about how Energy Storage plays a role in Distributed Energy, and the potential cross-ties between his technical committee and ours.
- The next meeting will be 1 hour earlier on Sep 15.
- Most of the rest of the meeting was about the APEC 2022 Industry Session Proposal and topics. The proposal is due by Sep 17. Please look at the following for a draft proposal and potential topic areas. Please attend the meeting on Sep 15 or email Ed H. or Eric S. by then if you want to influence the proposal. Topics are an on-going discussion.

### Draft Proposal:

**“Energy Storage”**  
**(Seven speakers)**

## **Proposal for an Industry Session for APEC2022**

George R. Brown Convention Center, Houston, TX

March 20-24, 2022

### **Session Chairmen:**

Eric Schneider, ericdschneider39@aol.com

Edward Herbert, ed@eh-psma.com

## **PSMA Energy Storage Committee August 18, 2021**

The PSMA Energy Storage Committee in collaboration with PELS TC-5 proposes an Industry Session for APEC2022. The subject will be “Energy Storage”. We plan to have seven speakers addressing a variety of energy storage devices and applications.

The proposed Industry Session definitely is not a clone the dozens of battery and super-capacitor forums that are proliferating now. The Industry Session will target the specific interests of the PSMA and APEC audience. For this audience, the products of interest are the many kinds of energy storage, their control, and their protection, including cybersecurity.

Hypothetically, a small to medium sized power converter manufacturer with limited resources is facing the problem of incorporating energy storage into their systems. What issues must they confront, and what problems must they solve?

We note that many energy storage systems store and return energy to the grid. Others supply energy to a micro-grid, an office park or residences, Energy storage may be incorporated into PV inverters and other equipment. Other energy storage systems are in small, self-contained systems as portable devices or remote sensors for the Internet of Things.

The Industry Session will show different kinds of energy storage, with emphasis on their control and their whole cycle efficiency.

Potential Topics (brainstorming):

- Hydrogen
- Green, Blue and Gray Hydrogen
- Energy storage for aircraft: hydrogen, batteries, green fuel.
- Hot bricks, (hot salt)
- Batteries
- Pumped hydro and alternatives
- Super capacitors and/or cabatteries
- Power density vs energy density
- What to do if you have too much energy?
- Mechanical energy storage
- Ice and hot water storage for domestic a/c.