

2020
Annual INCOSE
international workshop
Torrance, CA, USA
January 25 - 28, 2020

Power & Energy Systems

www.incose.org/IW2020

Power & Energy Systems





CHAIR

Ray Beach (Raymond.f.beach@nasa.gov)

MEMBERS 67

INCOSE CONNECT ADDRESS



https://connect.incose.org/WorkingGroups/PES/Pages/Home.aspx

INCOSE WEB PAGE



https://www.incose.org/incose-m ember-resources/working-group s/Application/power-energysystems

Charter Summary





WG PURPOSE/MISSION

Charter currently in revision... prior statement of purpose is:

The Power and Energy Working Group (PESWG) seeks to organize experts from within the ranks of INCOSE as well as other professionals in the Energy sector of the economy to facilitate a ?systems approach? to the analysis and future development of effective energy solutions.

The purpose of the PESWG is to direct expertise and a ?systems? focus to support decision makers in the critical challenges of developing future energy systems

WG GOAL(S)

- 1. Identification of viable candidate energy systems for inclusion in the scope of PESWG studies / activities (this includes viable Aero and Space Power systems, as well as terrestrial applications)
- 2. Define standard system methods for assessment and life?cycle development process
- 3. Comparative assessments (model?based) of system behavior and effectiveness
- 4. Recommendations on system methods and key priorities for future energy development

WG SCOPE

Scope is based on ares of interest and relevance to group members in the area of Power Technology, Electric Grid architecture, Microgrids, and related matters. Model-based Systems Engineering methods and model development are fundamental to all endeavors.

IW Outcomes





IW Outcomes

At IW2020, PES participated in multiple cross-wg collaboration discussions, including relevant power applications and challenges in:

Critical Infrastructure Protection & Recovery wg
Telecommunication Systems wg
Model-based SE workshop
Smart Cities Initiative
Discussion on EnergyTech areas of interest for above

Planned Work past IW





PLANNED ACTIVITIES

Continue collaborative efforts across multiple working groups in support of Power Systems Expand agenda for EnergyTech 2020 to include multiple areas of interest to INCOSE wg Develop wg Primer for member interest Organize efforts for Microgrid MBSE developments

PLANNED WORK PRODUCTS

Primer (in work)
Microgrid Reference Model (in work)
Planned contribution to INSIGHT pub
Planned attendance at Microgrid Knowledge conference, spring 2020
EnergyTech2020 conference