Meeting Minutes
IEEE/PES PEEC University Education Subcommittee
2022 IEEE/PES General Meeting (GM) – Hybrid Event

Date: Monday Jul 18, 2022
Time: 3:30pm – 5:00pm Mountain Time (MDT)
Location: Director's Row F
Virtual Meeting Platform: Zoom
Access Link: https://wsu.zoom.us/j/93706107118?pwd=VFVROXJhSk9NbC84T3ZR
RkJWUnJnQT09&from=addon

1. Welcome
2. Attendees introduce themselves. In attendance are: Christine Chen (UBC), S M Muyeen (Qatar), Anamika Dubey (WSU), Masood Parvania (University of Utah), Liang Min (Bits and Watts Initiative at Stanford), Olga Lavrova (New Mexico State University), Luke Dosiek (Union College), Gregor Verbic (University of Sidney), Subhonmesh Bose (UIUC), Visvakumar Aravinthan (Wichita State), Ned Mohan (University of Minnesota), Irfan Khan (Texas A&M University), Panos Kotsampopoulos (NTUA), Nikos Hatziargyriou (NTUA).

3. Committee Members
   - Chair: Christine Chen (UBC)
   - Vice-chair: S M Muyeen (Qatar)
   - Secretary Anamika Dubey (WSU)

4. Minutes from GM2022
   - The subcommittee meeting accepts the minutes of GM2022

5. Task Force Update on "Innovative teaching methods for modern power and energy systems" - Panos Kotsampopoulos and/or Nikos Hatziargyriou
   - Panos provided an update on Task Force activities.
   - Main outcome PES technical report – working on it. (best experience and practices around the world), expected to be completed Dec 2022.
• Organizing a panel session at PES GM 2022, Wednesday, 1 pm, Mountain time, Governor’s square 9. (Innovative teaching methods for modern power and energy systems)
• Online panel at European sustainable energy week organized by European union.
• Preparing a paper, ready for submission in 1 month
• Task force meeting at PES GM (online version available). Panos will present more progress on task force activity here.

6. PEEC Survey Working Group
• Ara introduced the WG formed after Covid delay, committee of 6 people
• Ara and Olga to present to PEEC main meeting at PES GM 2022
• Use online questionnaire for survey. A representative to collect information from faculty and input the data.
• Options: Survey monkey, Qualtrics ($$$), D2 creatives ($25k-$30k)
• Challenges in making it an international survey – different models and course and degree formats
• Will have two versions: (1) US/Canada, (2) rest of the world.
• Request subcommittee to help connect to representatives from different regions: region 8 (Africa & Europe), region 9 (Latin America), region 10 (Asia & Pacific).
• Muyeen – make the survey generalized (degree, domains, years). Everybody has option to add what they think fits best.
• Timeline – contingent on approval from PES – if obtained can get the survey out by September; target data collection by December; and draft report by next year
• Another extension – how you are planning to use the survey and how the information be used. Increase in cost due to this.
• Need support on analyzing data and creating report (volunteer? Budget for administrative support?)
• Muyeen – share the questionnaire for the survey before sending out and suggested others to provide feedback.
• Ned asks if there is data from past 5 years on student enrollment. University enrollment (in undergraduate program) is going down. From high-school reduction in students into engineering and fewer students in
EE. Crisis in power engineering education. Suggested that the committee take a look at it.

7. 2022 panel session proposals
   - Discussions on how power systems industry requirements are changing compared to “traditional” power systems syllabus.
   - Ned – pay attention to undergraduate education. Few domestic students. Need to teach fundamentals of power system to support our traditional industry as it is evolving into decarbonized grid. New topics are great but can’t forget about foundational topics.
   - Bose – pipeline for power systems students. What kind of jobs they are getting. Innovation in power industry vs state-of-the-art. Innovation is not visible (c.f., jobs in machine learning). Modern career pathways are not visible (not just utilities).
   - Olga – need educational outreach in collaboration with PES. Need for sharing outreach material for power students.
   - Panos – Organizing task force on this. Interested in furthering the effort on power workforce development.
   - Irfan – power systems professors do not typically writing teaching grants.
   - Luke – suggests to coordinate with Career Promotion and Workforce Development on panel for renewal of power curriculum.