October 13, 2021, 9:00 a.m. to 1:00 p.m. MDT

Description:

High levels of Inverter-Based Resources (IBR), e.g., wind, solar, batteries, can create challenges and advantages for power system stability. Join WECC and the Energy Systems Integration Group (ESIG) in a virtual workshop to explore mitigation options with a focus on grid-forming inverter technology. The workshop will start at a high-level, then discuss the details of weak grids, export stability, zero inertia, and IBR considerations. This grid-forming inverter-based resources workshop is meant to be accessible to a broad audience. This is an opportunity for discussing, asking questions, and sharing information. ESIG is a nonprofit educational organization that provides a forum for the industry to address technical challenges in grid transformation.

1. **Welcome, Call to Order**—Travis English

2. **Review WECC Antitrust Policy**—Travis English

   WECC Antitrust Policy

   Please contact WECC legal counsel if you have any questions.

3. **Introduction to Workshop**

   - Steve Ashbaker, WECC—Reliability Initiatives Director
   - Dr. Debbie Lew, ESIG—Associate Director

4. **Advantages and Challenges of High Penetrations of IBR and Introduction to Grid-Forming IBR**

   - Jason MacDowell, GE Energy Consulting—Senior Technical Director

5. **Applications of Grid-Forming IBR**

   - Dr. Julia Matevosyan, ERCOT—Lead Planning Engineer
6. Break

7. Weak Grid Experiences in ERCOT
   - Dr. Julia Matevosyan, ERCOT—Lead Planning Engineer

8. Export Stability Study Comparing Grid-Following IBR, Grid-Forming IBR, and Synchronous Machines
   - Nick Miller, HickoryLedge—Principal

9. Break

10. Modeling of Grid-Forming IBR and Frequency Response in a 100% IBR Grid
    - Dr. Deepak Ramasubramanian, EPRI—Technical Leader

11. Grid-Forming IBR in Wind, Solar, Battery Plants
    - Sebastian Achilles, GE Energy Consulting—Managing Director

12. Question and Answers

13. Adjourn