

Session Title: Digital Technology for Distributed Energy Resources

Name: Koshichi Nemoto

Position: Director, Energy Innovation Center, Central Research Institute of Electric Power Industry

Much distributed energy resources (DERs) including about 50GW PV have already been connected to power distribution network and secondary network. Depending on connected line voltage classes, centralized control or autonomous decentralized control should be chosen for DER management. Many parameters such as electric power quality, power flow, power demand, and so on should be considered. CRIEPI is developing simulation tools for analyzing a demand area power distribution system, and they are inevitable to design a DER management platform. We will show the demand response potential of EV charging and discharging, and the effectiveness of EcoCute for compensating surplus power from PV.