IEEE Power and Energy Society

Working Group Meeting

Data-Driven Modeling, Monitoring, and Control in Power Distribution Networks

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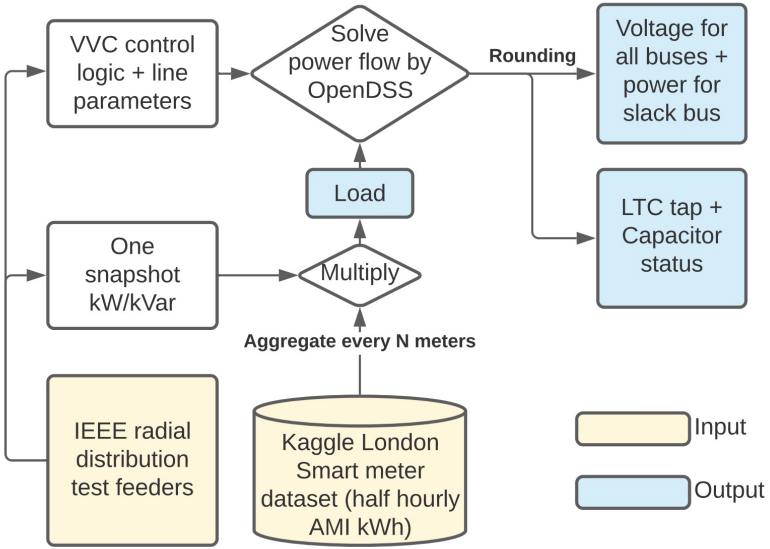
Activities from Last Year

- 2022 PES GM Panel Session
  - Data-Driven State and Parameter Estimation
    - Tuesday 10 am – 12 pm
    - Attendance: 50
    - 5 Speakers
    - State and parameter estimation
    - Inverter-connected renewable resource estimation
  - Testbed and Dataset for Machine Learning Applications in Power Systems
    - Thursday 10 am – 12 pm

Activities from Last Year

- Gym Environment for Data-Driven (RL-based) VVC
  - Yuanqi Gao, https://github.com/yg-smile/RL_VVC_dataset
  - Yubo Wang, https://github.com/siemens/powergym



Tasks Group: Data-Driven Control in Power Distribution Systems

- Held a virtual meeting to discuss plans to prepare a technical report on data-driven control in power distribution systems
- 60% complete
- Control applications identified
- Algorithms summarized
- Plan to meet virtually in August
- Looking for Volunteers

Planned Activities

- Panel Session Proposal for GM 2023
- Technical Report for Task Group
  - Data-driven topology and parameter estimation in power distribution systems