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Data-Enhanced Hierarchical Control to Improve Distribution Voltage with Extremely High PV Penetration

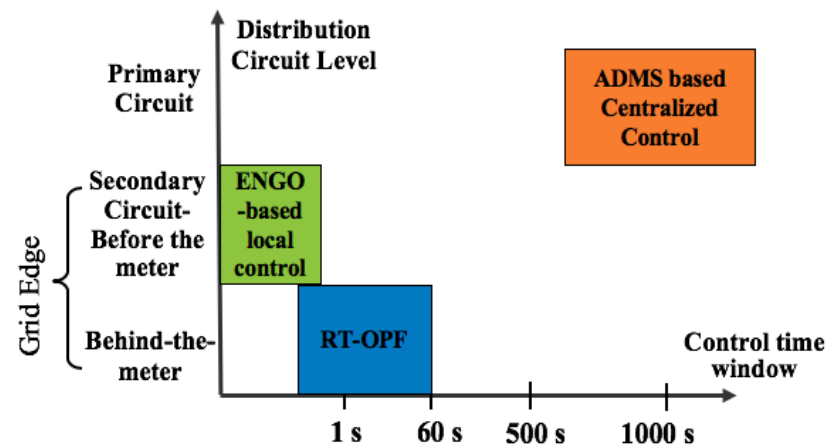
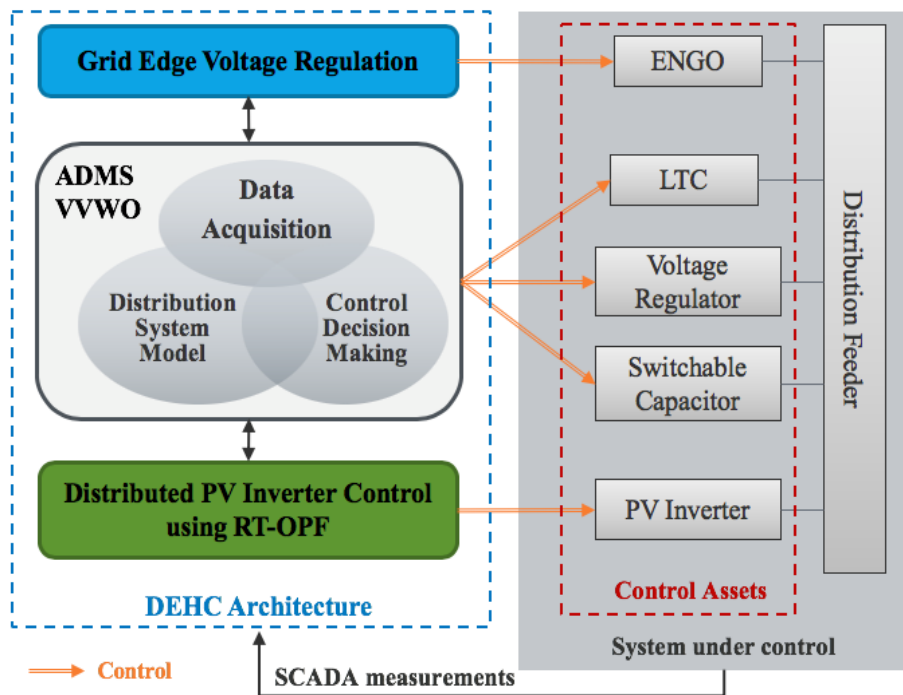
Fei Ding, Senior Researcher
National Renewable Energy Laboratory
Fei.Ding@nrel.gov
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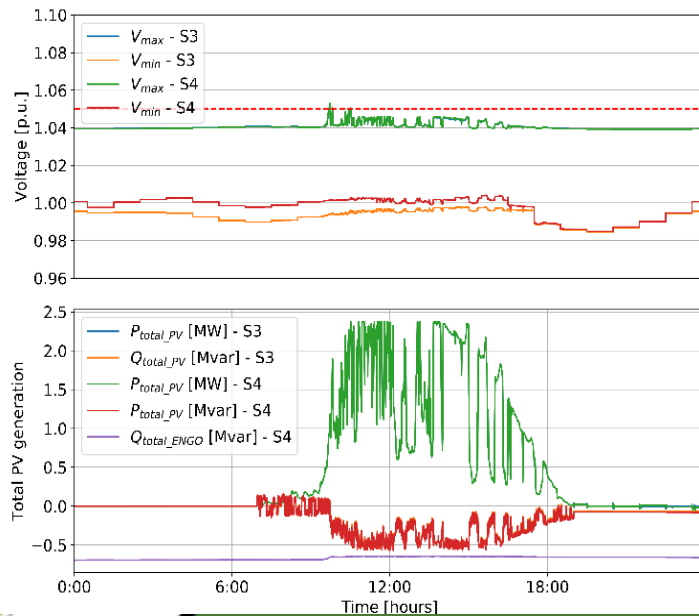
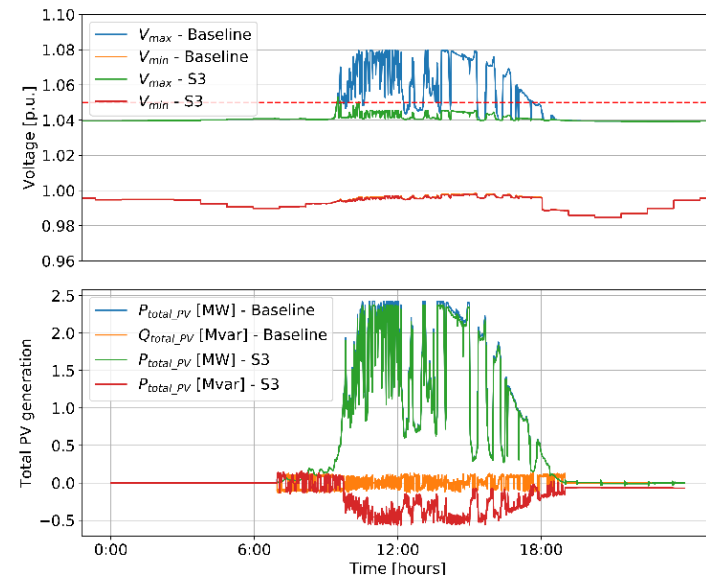
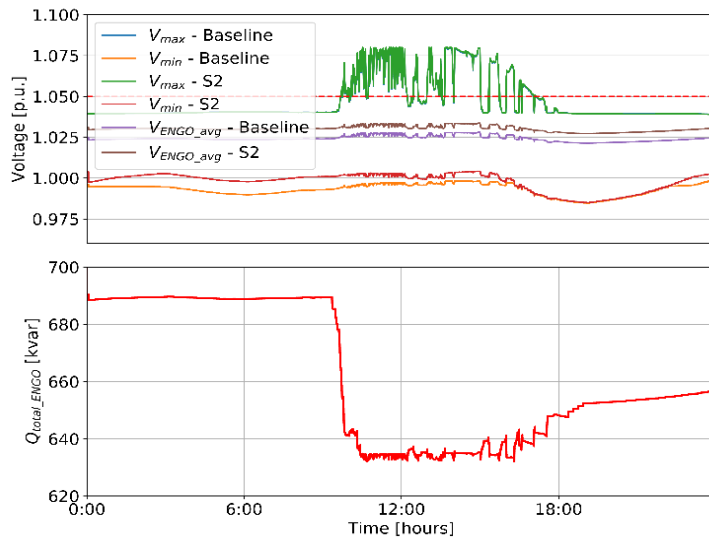
Background

- Develop, validate and deploy Data-Enhanced Hierarchical Control (DEHC) architecture that addresses the challenges associated with high penetration of distributed PV.
- A hierarchical architecture where a fast-acting layer of control interacts with a centralized ADMS system is one of the unique and innovative aspects of this project.
- Offers a unique approach to distribution system operation that has not been developed, tested, and validated before.

DEHC Architecture



Result



- S1 – baseline
- S2 – ENGO enabled
- S3 – RTO PF enabled
- S4 – ENGO & RTO PF enabled

Thank You!

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