Prelim Title

Southern California microgrid emission and price optimization under differnet princng stuctures and control algorithms

Abstract

Intro

Background

Emissions

Pricing (Flat vs TOU)

Peak Shaving

Optimization

Simulation in Modelica

Experiment

Emissions and pricing under flat rate peak shaving

Emissions and pricing under TOU peak shaving

Emissions and pricing under flat rate optimization

Emissions and pricing under TOU optimization

\*If possible vary pricing structure with RPU, SCE, SDGE, LADWP, and PG&E

Results/Conclusion

Pricing table under 4 methods

Emissions table under 4 different methods

Discuss ideal scenarios under different methods

Discuss future control methods