

Con Edison Effort on Reducing Local Emissions

Agenda

- Con Edison Generation
- R&D Projects
- REV Demo Projects
- Regulatory Changes

Con Edison Generations

Energy Generation:

- Average Annual: 6.26 TWh
- Average Electricity: 2.59 TWh
- Average Steam: 3.67 TWh

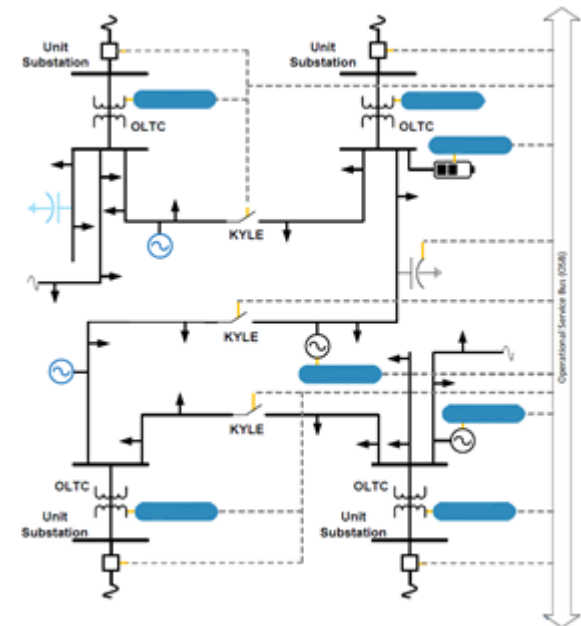
Emissions (2005 - 2015):

- CO₂: 1,947 → 1,384 lb/MWh
- NO_x: 0.98 → 0.40 lb/MWh
- SO₂: 0.27 → 0.05 lb/MWh



Research and Development Projects

- Conservation voltage optimization
- Solar ConnectDER
- Electric vehicle load management
- Street level methane sensor
- Subway regenerative braking
- Advanced steam heating control



REV Demo Projects

- Battery Storage

- Stack all potential value streams
- Commercial Battery Storage
 - 4.2 MW, 4.4MWh, 4 Customer Sites
- Storage on Demand
 - 1 MW, 4 MWh, Mobile System
- Clean Virtual Power Plant
 - Dispersed residential PV + battery

- EV Charging

- Test out new business models for EV charging and help finance EV school buses
- Attract private co-investment
- Funding: Up to \$25M



Regulatory Changes

- New emission requirements for CHP
 - Standby Exemption for CHP > 1MW
 - NO_x emission requirement = 1.6 lbs/MWh
 - Average annual efficiency = 60%
 - Standby Pilot Rate
 - More granular emission requirements
 - Peak efficiency increased to 65%
 - Reporting requirement to PSC
- BCA
 - Avoided NO_x and SO₂ will be valued in CARIS 20-year LBMP forecasts.
 - Avoided CO₂ will be valued at EPA SCC value of \$20-25 per MWh until the establishment of NY CES



Questions

William Slade – sladew@coned.com

Kai Wu – wuk@coned.com