- Selected technologies and studies:
  • Disaggregated power consumption data from 1000 homes at 15 second intervals.
  • 25% PV power penetration.
  • More than 100 electric vehicles within 1 sq. mile.
  • Residential and community level energy storage.

- Modeling efforts:
  • Effect of EV charging on distribution transformers.
  • Effect of high PV and EV penetration on electric grid.
  • Relationship between diverse PV deployment and energy storage.

- Pecan Street Mueller area smart grid demonstration project:
  • A real-life test bed within 2 miles from The University of Texas at Austin main campus.

- Residential-level research
  • EV charge management.
  • Data time resolution
  • Interoperability.
  • HEMS operation - energy management strategies
  • Pricing strategies.
  • Load pattern recognition
  • Optimal PV orientation.

- Data storage, processing and analysis