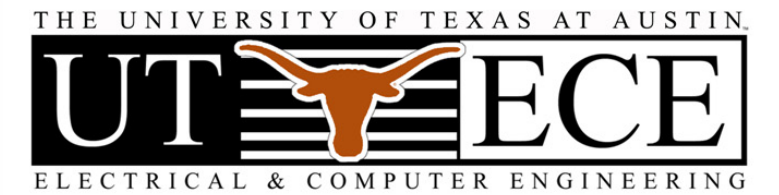
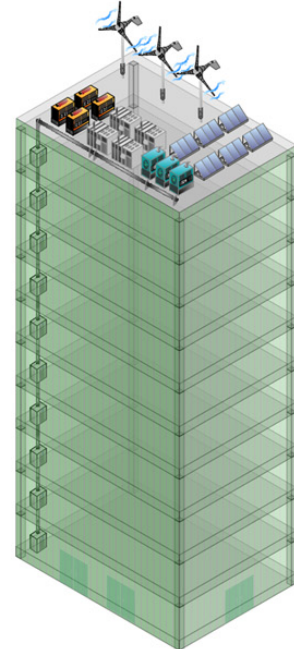
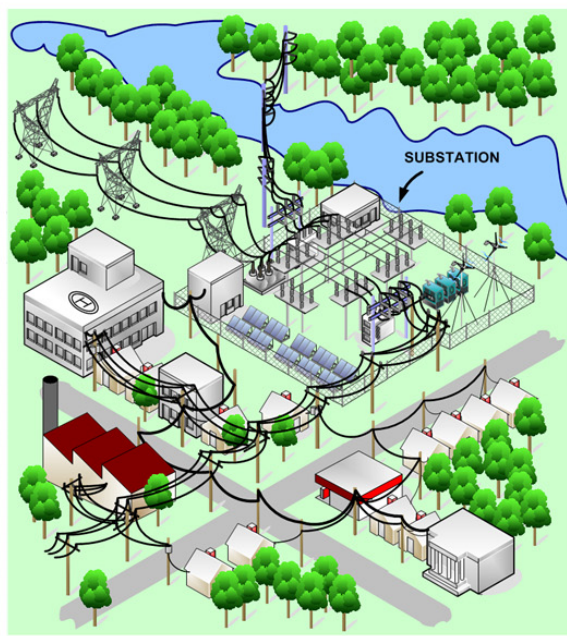


The University of Texas at Austin Power Electronics Research Group (PERG)

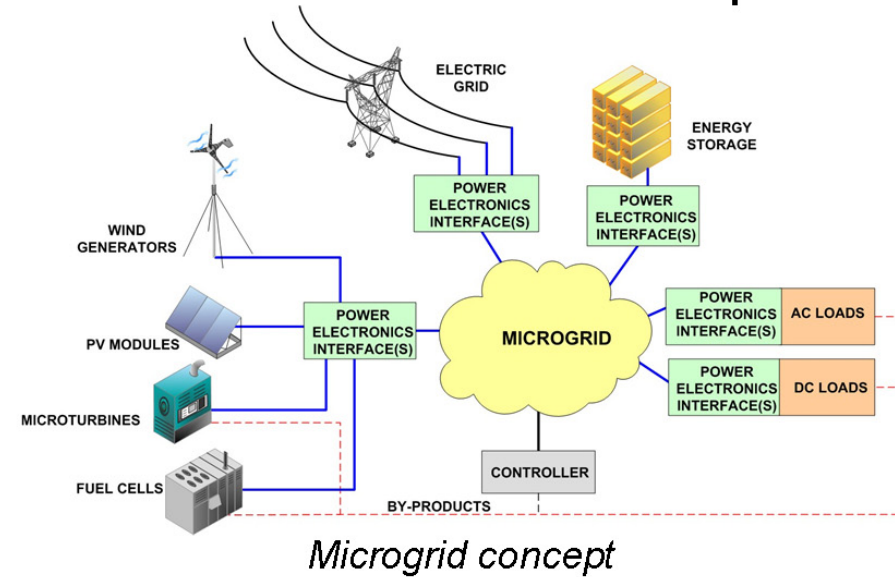
Prof. Alexis Kwasinski
Leading Investigator



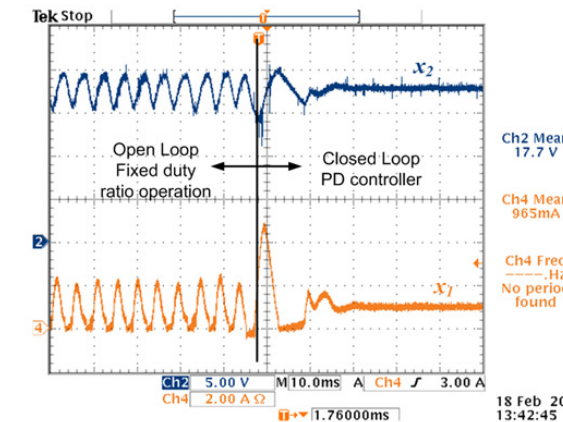
- **Microgrids:** Microgrids are independently controlled (small) electric networks, powered by local power units (distributed generation). Distributed generation units are often renewable or alternative power sources (PV modules, fuel cells, etc.).



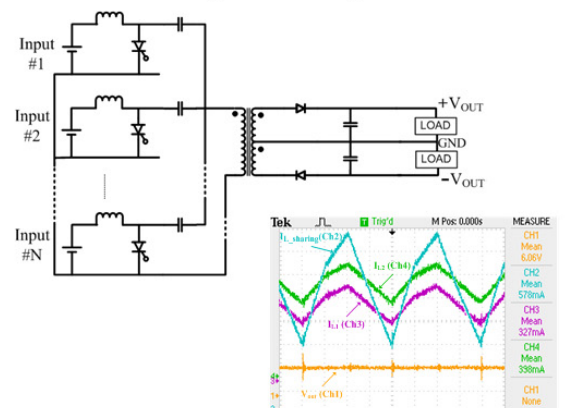
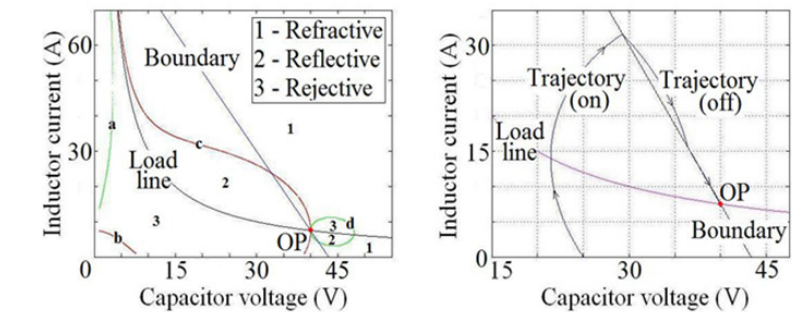
New electric utility market concepts based on providing services and not just kWh



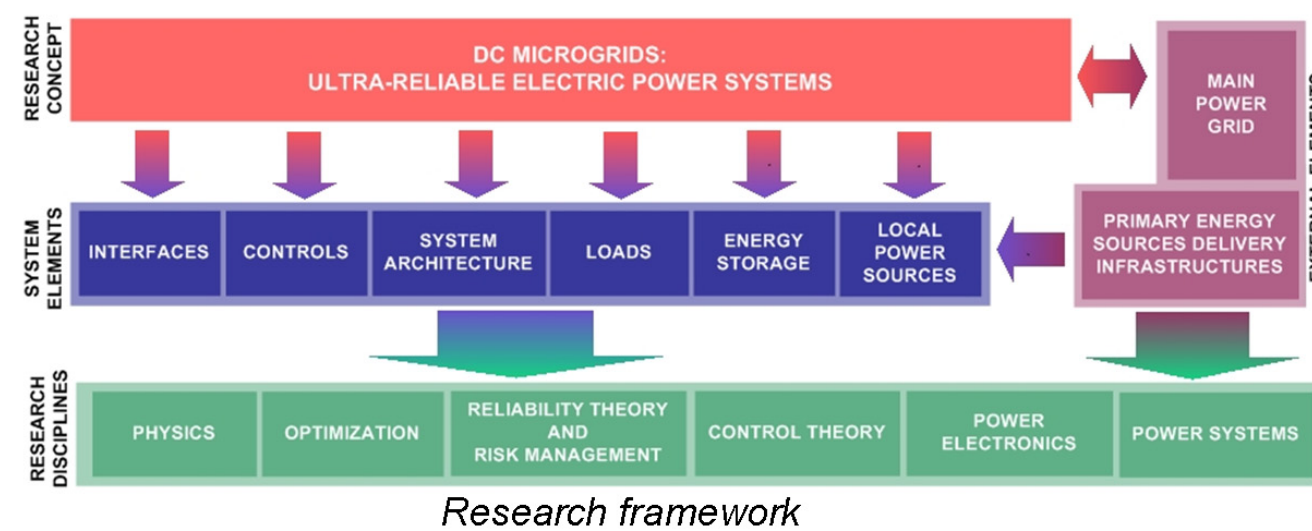
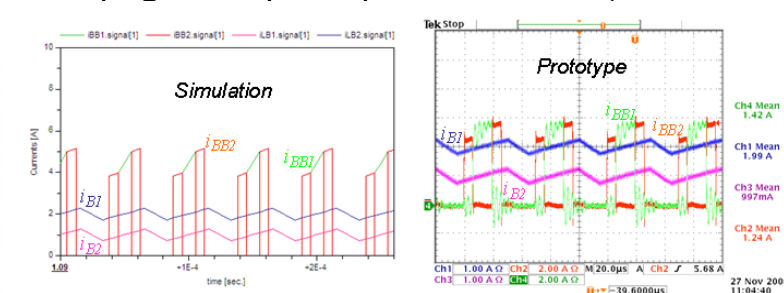
Microgrid concept



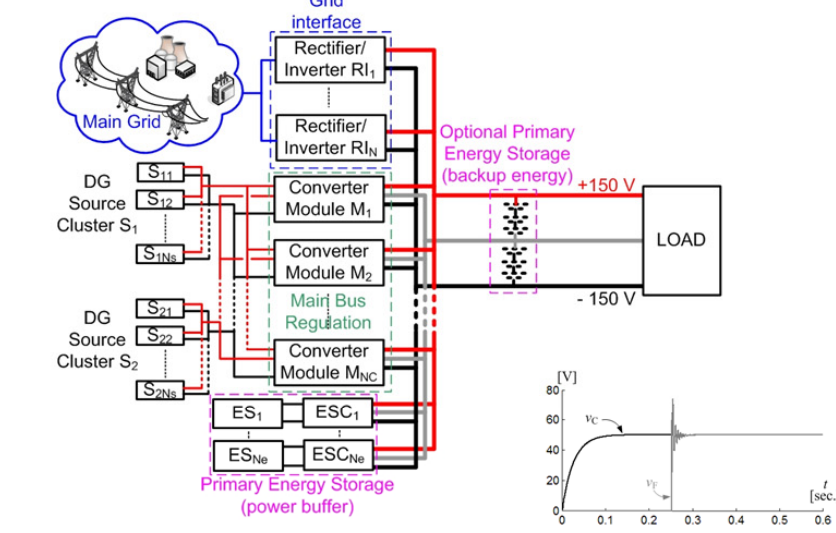
Advanced controls



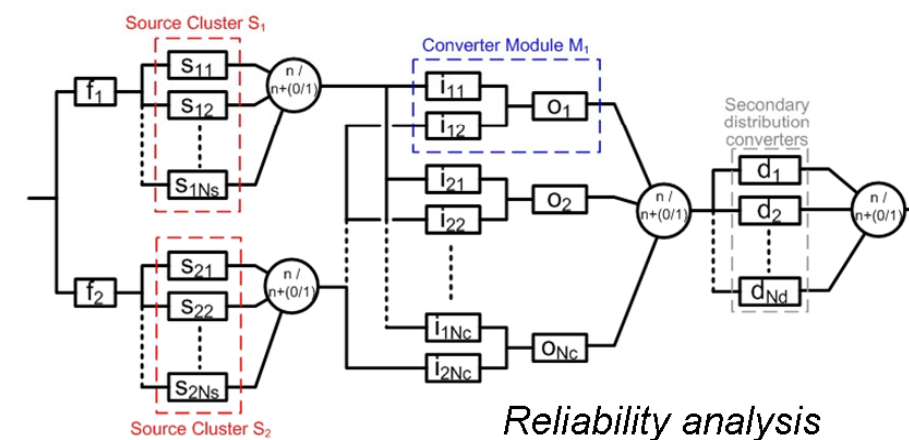
Research in power electronics interfaces (e.g. multiple-input converters)



Research framework



Novel power architectures



Reliability analysis

