**Description:** The Power Center for Utility Explorations (PCUE) proposes to simulate the effects of a renewable energy generation system in a microgrid context to the distribution grid system. The proposed project is to simulate the combination of renewable distributed generation and a battery system to assess the effects during critical conditions such as power system peak.

A research opportunity is to investigate how existing tools can be applied to properly representing dynamic and transient behaviors of microgrids. Therefore, in this project we propose using simulation tools to model a microgrid and investigate how well we can reproduce its measured behavior in the field.

**Budget:** $485,184

**Universities:** USF

**Progress Summary**

Dr. Domijan has left USF and this project has been suspended. USF is undergoing an internal process to find a new PI to lead the research.