

Thrust Area 7: Storage & Delivery *Microgrids for a Sustainable Energy Future*

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Description: The primary aim of the project was to address R&D in the area of microgrids. Specifically the focus was in the area of PV and PHEV integration, microgrid modeling and control, grid-tying inverters/converters, energy storage, tri-generation, and standards development for smart grids.

Budget: \$719,333

Universities: FSU

Executive Summary

Project Impact and Conclusions: Several students were able to participate in the research effort and thus able to obtain their graduate degrees, this helping in the overall goal of increasing an educated energy-oriented workforce. Additionally many publications were written that helped not only to disseminate the results of the work, but also to improve the reputation of research initiatives in the State of Florida.

Proposed Future Activities and their Potential Impact: It is hoped that additional funding in this area will continue to be awarded, especially in the areas of grid-impact studies as it pertains to PV's and PHEV's, as well as those in the areas of energy storage and management. It is essential that the impact of renewable and intermittent energy sources be thoroughly explored in order to ensure their reliability. Additionally, energy storage, its placement, and coordinated and controlled usage is essential in creating a fossil-fuel-free society.

This project has been completed.