

FLORIDA STATE UNIVERSITY
Microgrids for a Sustainable Energy Future

PI: Chris S. Edrington

Co-PIs: Jim Zheng, Mischa Steurer, Dave Cartes, Hui (Helen) Li, Juan Ordonez

Students: Brian Hacker, Jianwu Cao

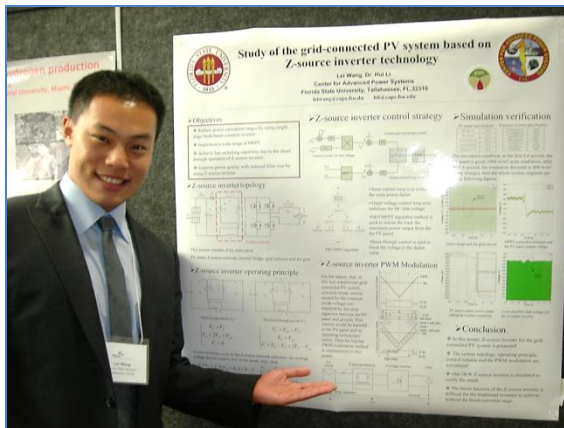
Description The primary aim of the project was to address research and development in the area of microgrids. Specifically the focus was in the area of PV and Plug in Hybrid Electric Vehicles integration, microgrid modeling and control, grid-tying inverters/converters, energy storage, tri-generation, and standards development for smart grids.

Budget: \$719,333.00

University: FSU

Progress Summary

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. This project is complete.



Clockwise from bottom left: Lei Wang, Brian Hacker, and Hang Wei at the 2010 FESC Summit





Dr. Helen Li, second from left, and FSU Center of Advanced Power Systems students participated in the FESC summit and were also part of the Microgrids for a Sustainable Energy Future Project.

Proposals:

Faculty	Source/Agency	Project Title	Date Submitted	Amount
Chris S. Edrington, Saritha Balathandayuthapani, and Shawn Henry	National Science Foundation	PV Inverters with Anti-islanding and Grid-Support Functions	2010-10-07	\$303,054
Chris S. Edrington	Department of Energy	Advanced Computational Tools for DER-Integrated Power Systems	2010-10-30	\$752,727

Funded Awards:

Faculty	Source/ Agency	Project Title	Start Date	End Date	Amount
Chris S. Edrington and Sanjeev Srivastava	National Science Foundation – Engineering Research Center	Addressing Nonlinearities and Complexity in FREEDM Systems	2010-09-01	2011-08-31	\$40,000
Chris S. Edrington	Department of Energy	A Nationwide Consortium of Universities to Revitalize Electric Power Engineering Education by State-of-the-Art Laboratories	2010-06-01	2013-05-31	\$25,000

