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Smart Grid Inverters for High-Penetration Photovoltaic Applications

This Hawai?i Natural Energy Institute (HNEI) project is being funded by the US Department of Energy (DOE), SEGIS-AC Program Office. The objective is to create a Smart Grid inverter (SGI) and then demonstrate the ability of such SGIs to mitigate adverse impacts of high penetrations of photovoltaic (PV) systems onto electric grids. Two project sites will be involved, one on the island of Maui in Hawai?i and the other in Oklahoma. In addition to HNEI, project partners include the Hawaiian Electric Company Maui Electric Company, Silver Spring Networks, Fronius USA LLC, Oklahoma Gas & Electric, SolarCity, NEDO, and DOE.

The HNEI contacts for this project are Leon Roose [1] and Christian Rawson [2]. For more information concerning the project, see the Smart Grid Inverters for High-Penetration Photovoltaic Applications [3]pdf document. Another effort of interest regarding PV arrays is the Energy Efficiency Research Using a School Classroom [4] project. HNEI has additional projects involving research, test, and evaluation of grid management efforts. For details, refer to the Energy Storage [5], Fuel Cells [6],Grid Systems [7], Hydrogen [8], and Photovoltaics [9] research sections of our website.

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Links:
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