



University of Hawaii, Manoa Integrated Education and Research in Clean Energy and Island Sustainability – Electric Power Sector Training

Project Description

This project will create a new cross-disciplinary program at the University of Hawaii Manoa (UHM) that includes Responsive and Dynamic (RAD) training coupled with foundational research-based curricula in clean energy technologies, renewable energy production, storage, grid integration and Smart Grid technologies. The program leverages industry expertise to train B.S., M.S., and Ph.D. level students in multiple disciplines across the electricity and power sectors. Each student will have a broad cross-disciplinary knowledge of clean energy and sustainability issues, including engineering, science, social and economic impacts. Students will learn through formal and foundational coursework, labs/group research projects and rotational training. Special attention will be given to the unique challenges that the Hawaiian islands face with integrating an increasing amount of renewable energy to its isolated grid.

Goals/Objectives

- Development of a Responsive and Dynamic (RAD) educational and research program to assist the utilities and industry in training a sustainable smart energy workforce
- Development of a RAD foundational curriculum to keep pace with the needs of the next-generation energy/power workforce, whilst ensuring a solid technical knowledge, a sound engineering basis and an atmosphere that encourages innovation to ensure U.S. leadership in the clean energy sector
- Assist Hawaii's near-term (immediate) and medium-term (less than five years) workforce development challenges by creating a local resource base of educators and knowledgeable researchers that support a pipeline of new workers
- Enable formal and tailored training techniques to be developed for community outreach, education and technology transfer

Benefits

- A technically proficient workforce for energy companies, and as energy managers for the tourism, healthcare and military sectors of the Hawaiian economy
- Opportunity for graduate level degrees



CONTACTS

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PARTNERS

Hawaiian Electric Company Inc

PROJECT DURATION

5/4/2010–6/30/2013

COST

Total Project Value
\$2,500,000

DOE/Non-DOE Share
\$277,778/\$2,777,778

PROJECT LOCATION

Hawaii

CID: OE0000394

*Managed by the National Energy Technology
Laboratory for the Office of Electricity
Delivery and Energy Reliability*

