

NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY



An Authority of the State of Hawaii attached to the Department of Business, Economic Development & Tourism

News Release

Hawaii Gets Funds for Distributed Energy Systems at NELHA

(KAILUA-KONA, HI, May 29, 2012) – The Island of Hawaii will receive more than \$400,000 from the U.S. Department of Energy (DOE) to fund the development and deployment of distributed energy systems at the Hawaii Ocean Science and Technology Park (HOST Park) in Kailua-Kona, which is run by the Natural Energy Laboratory of Hawaii Authority (NELHA).

The funds will be used to analyze how advanced energy technologies could improve energy performance at HOST Park with the development of a small micro-grid and provide related updates to the State of Hawaii's renewable energy and distributed energy resources strategy. DOE's National Renewable Energy Laboratory (NREL) serves as a project manager at HOST Park.

"The unique features and transmission constraints make Hawaii Island an ideal location for testing and evaluating new distributed generation and power management technologies that are designed to improve the performance of the grid. We are pleased work with NELHA on these key areas," said NREL Manager for Distributed Energy Systems Integration Dr. Bill Kramer.

Major components of the project include: 1) the development of a solar energy test bed at the HOST Park Research Campus; 2) an industrial control system for seawater system equipment combined with a system to monitor, collect, and report data about electricity use at NELHA; 3) the collection of system and solar resource data at the NELHA site; and, 4) the updating of the Renewable Energy and Distributed Electric Resources Strategy to increase the utilization of the Hawaii Gateway Energy Center.

"The NREL partnership will allow us to implement a solar test bed at NELHA's research campus and continue to develop distributed energy resources at NELHA," said Gregory Barbour, NELHA Executive Director. "We are very grateful to NREL for the opportunity to work closer with them to better understand the electricity cost and performance for our facilities and especially the seawater distribution system at HOST Park. The control and data acquisition system will provide a backbone that NELHA can build out further in the coming years and greatly assist in making the seawater system more cost efficient."

About NELHA: NELHA administers the world's premier energy and ocean technology park. This unique master-permitted park is located on 870 acres of prime coastal property in Kailua-Kona Hawaii and offers research support facilities for the development of renewable energy and other demonstration projects that utilize the unique resources found at the park. It is the world's only facility that continually brings ashore high quality, pristine supplies of both warm surface and cold deep seawater 24 hours a day which allows for various tests to take place with views to reap economic potentials from the dual temperature seawater delivery system and high solar insolation. Tenants located in HOST Park work at the pre-commercial, commercial, research and educational levels. It is the largest diversified economic development project in the State and is solely focused on developing green economic projects. For more information, go to www.nelha.org.

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