

Coordination and Support of DOE/OE R&D Initiatives
Submitted to the U.S. Department of Energy
Under Award DE-FC-06NT42847, Amendment No. 004
Letter Report Summarizing Activities
New Task 6.0 Deliverable
December 23, 2008

This letter report will serve as the deliverable under new Task 6.0, summarizing activities undertaken in technical support to DOE/OE.

Technical Support to DOE/OE

As part of this task, the staff and management of the Hawai'i Natural Energy Institute (HNEI) supported the Department of Energy (DOE) Office of Electricity Reliability and Energy Security (OE) in two areas. The first, supported by Dr. Terry Surles, focused on developing a new set of metrics to use as part of OE's strategic planning activities. The second, supported by the Institute Director, Dr. Richard Rocheleau, provided input to the planning process as part of the integration working group in the Hawai'i Clean energy Initiative.

Dr. Surles has served on two National Academy of Sciences committees evaluating prospective benefits of the Department of Energy's research and technology development programs. As part of this activity, some projects that are now part of the OE portfolio were evaluated. It was evident that, by using standard models such as NEMS, the proper attribution of benefits was not being addressed in examining the OE program mix. The new effort described below attempted to develop metrics that would allow for a better estimation of benefits that accrue from OE research and technology development programs.

Therefore, OE management developed a working group to better evaluate and develop metrics and tools for strategic planning and portfolio analysis. Specifically, OE proposed to develop and apply a new methodology to better estimate electricity reliability and other associated benefits. This new methodology could then be applied to other attributes related to the OE portfolio in determining the value of their existing and prospective research, development, and demonstration (RD&D) activities.

Joseph Paladino led this project activity. Members of the working group were from a variety of consulting organizations in the Washington, DC area, such as Energetics, Inc., national laboratories, for example, Lawrence Berkeley National Laboratory (LBNL), and universities (e.g., Cornell and the University of Hawai'i).

Several conference calls ensued. Following a number of suggestions from all parties, it was agreed that a smaller working group from LBNL and Energetics would develop a more complete approach for supporting this process as part of projecting what the OE program portfolio should contain and the justifications and analyses that supported that portfolio. For a variety of reasons, no further meetings of the broader group were convened.

In 2007, the DOE Office of Energy Efficiency and Renewable Energy initiated a new program, the Hawai'i Clean Energy Initiative (HCEI). As part of this program, a number of working groups were convened and have met a number of times to consider aspects of this initiative. Dr. Richard Rocheleau, HNEI Director, continues to serve on the Integration Working Group.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Richard Rocheleau". The signature is fluid and cursive, with a prominent initial "R" and a long, sweeping tail.

Richard E. Rocheleau
Director
Hawai'i Natural Energy Institute
University of Hawai'i