

Department of Ocean & Resources Engineering

Seminar

RESULTS OF TESTING THE 50 KW OTEC SYSTEM AT THE NATURAL ENERGY LABORATORY OF HAWAII

by

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Abstract

Makai Ocean Engineering recently completed testing a 50 KW Ocean Thermal Energy Conversion (OTEC) plant at the Natural Energy Laboratory of Hawaii. The goal of this multi-agency project was to test new heat exchangers under OTEC conditions and to gain significant operational experience running an OTEC plant. Makai's testing showed that the new heat exchangers are more cost effective than current technology.

The presentation will cover the thermodynamic system design, forensic testing results of some early failures, final test results and an economic comparison. Both the opportunities and pitfalls of projects involving different agencies at numerous locations will also be presented.