
A BILL FOR AN ACT

RELATING TO RENEWABLE RESOURCES.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that the ocean represents
2 a vast natural energy resource in the form of waves that
3 generate energy. Wave energy has many benefits. For example:

4 (1) Wave energy is recognized as one of the most
5 consistent sources of renewable power available.

6 (2) The World Energy Council estimates that energy
7 equivalent to twice the world's electricity production
8 could be harvested from the world's oceans. If less
9 than one-tenth of one per cent of the renewable energy
10 within the oceans could be converted into electricity,
11 the present world demand for energy would be satisfied
12 more than five times over.

13 (3) There is growing awareness of the economic, energy
14 security, and environmental values of renewable
15 resources. The wind, sun, and ocean, for example, can
16 provide a local supply of clean energy that never runs
17 out. In addition to a clean environment, renewable
18 resources produce other public benefits, including



1 reduced dependency on foreign fuels and economic
2 development, resulting in new jobs and increased state
3 and local tax revenues.

4 (4) A wave energy facility in Hawaii would build our
5 State's reputation as a national leader of renewable
6 resource and ocean technology and coastal resource
7 management.

8 Presently, wave energy is being used by countries that have
9 extensive coastlines, such as Great Britain and Australia. In
10 2003, the Renewable Energy Trust and funders from other states
11 provided grants for the installation of an ocean wave
12 demonstration facility in Rhode Island. Demonstrating the
13 commercial viability of wave energy, the facility is projected
14 to produce up to five hundred kilowatts of electricity, enough
15 to power three hundred average households.

16 A particular project of interest is the development of the
17 Wave Hub Project in the United Kingdom. The Wave Hub Project is
18 an offshore electrical grid connection into which are linked
19 numerous wave energy conversion devices. As the wave energy
20 conversion devices produce energy, the electricity is
21 transmitted to a central "wave hub," which then transmits the
22 electricity via an under sea cable link to an onshore



1 electricity grid. Currently, at least one technology firm in
2 Hawaii has developed a prototype wave energy conversion device
3 that may be compatible with this type of system. A similar wave
4 energy project in Hawaii would create a multitude of benefits
5 for the State, including job creation, capital investment,
6 technology education and training, and a virtually endless
7 supply of clean renewable energy.

8 The purpose of this Act is to require the department of
9 business, economic development, and tourism to develop a wave
10 energy facility in the State of Hawaii.

11 SECTION 2. Chapter 196, Hawaii Revised Statutes, is
12 amended by adding a new section to be appropriately designated
13 and to read as follows:

14 "§196- Wave energy facility development. (a) The
15 department shall work with wave energy developers and the
16 electric utility companies to develop a facility for the
17 generation of wave energy in the State of Hawaii that shall be a
18 qualifying facility under the Public Utility Regulatory Policies
19 Act of 1978; provided that the wave energy qualifying facility
20 developed pursuant to this section shall be installed and
21 operational no later than January 1, 2010. The wave energy
22 facility shall be of a type similar to the Wave Hub Project,



1 currently under development in the United Kingdom, in which a
2 central offshore electrical grid connection links multiple wave
3 energy conversion devices to an onshore electrical grid.

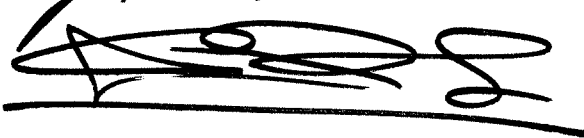
4 (b) The department shall submit an annual report to the
5 governor and the legislature on its work during the preceding
6 year, the development status of the project, any problems
7 encountered, and any legislative actions that may be needed
8 further to implement the intent of this section."

9 SECTION 3. New statutory material is underscored.

10 SECTION 4. This Act shall take effect upon its approval.

11

INTRODUCED BY:

Anthony Tridico


Barbara Marumoto

Della A. Bilatti

Scott K. Orr

Nanni Noui

Mele Carroll

JAN 17 2007



Report Title:

Renewable Resources; Ocean Wave Energy

Description:

Requires the department of business, economic development, and tourism to develop a wave energy facility.

