HOUSE BILL REPORT
E2SHB 3216

As Passed House:
February 15, 2008

Title: An act relating to hydrokinetic energy.

Brief Description: Developing wave and tidal energy technologies in Washington.

Sponsors: By House Committee on Apps Subcom GG (originally sponsored by Representatives Seaquist, Morris, Upthegrove, Hudgins, Loomis, Kelley, Morrell, VanDeWege, Ericks, Hankins and Eddy).

Brief History:
Committee Activity:
Technology, Energy & Communications: 1/25/08 [DPS];
Appropriations Subcommittee on General Government & Audit Review: 2/5/08, 2/7/08 [DP2S(w/o sub TEC)].
Floor Activity:
Passed House: 2/15/08, 91-3.

Brief Summary of Engrossed Second Substitute Bill

- Requires the Department of Community, Trade and Economic Development and the Energy Facility Site Evaluation Council to convene and co-chair a work group on hydrokinetic energy.
- Specifies that the work group is responsible for developing recommendations on the creation of the Washington State Center for Excellence in Hydrokinetic Energy and mechanisms to streamline and make more efficient current permitting processes for wave and tidal power projects..

HOUSE COMMITTEE ON TECHNOLOGY, ENERGY & COMMUNICATIONS

Majority Report: The substitute bill be substituted therefor and the substitute bill do pass. Signed by 12 members: Representatives McCoy, Chair; Eddy, Vice Chair; Crouse, Ranking Minority Member; McCune, Assistant Ranking Minority Member; Hankins, Herrera, Hudgins, Hurst, Kelley, Morris, Takko and Van De Wege.

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.

Staff: Scott Richards (786-7156).

HOUSE COMMITTEE ON APPROPRIATIONS SUBCOMMITTEE ON GENERAL GOVERNMENT & AUDIT REVIEW

Majority Report: The second substitute bill be substituted therefor and the second substitute bill do pass and do not pass the substitute bill by Committee on Technology, Energy & Communications. Signed by 12 members: Representatives Linville, Chair; Ericks, Vice Chair; Armstrong, Ranking Minority Member; Skinner, Assistant Ranking Minority Member; Blake, Kretz, Lantz, Liias, Miloscia, Morris, Nelson and Van De Wege.

Minority Report: Do not pass. Signed by 2 members: Representatives Alexander and Chandler.

Staff: Owen Rowe (786-7391).

Background:

Washington has over 150 miles of ocean coastline and approximately 2,500 miles of shoreline in Puget Sound. In a 2004 survey and characterization of potential offshore wave energy sites in Washington, the Electric Power Research Institute (ERPI), rated the state with excellent offshore wave energy resources. Washington's tidal energy resource are unique in that a number of potential tidal energy sites are located near population centers, matching the resource to the load. The major benefits of wave and tidal energy are that they are non-polluting, reliable, and predictable.

Federal Energy Regulatory Commission
Under the Federal Power Act, the Federal Energy Regulatory Commission (FERC) is authorized to issue preliminary permits to study the feasibility of hydroelectric projects and licenses for the construction and operation of all hydroelectric projects in navigable waters of the United States.

Recent Wave and Tidal Power Activities
Currently, there are eight tidal power projects and one wave power under development in Washington. Tacoma Power is developing a tidal power project located in the Tacoma Narrows and Snohomish County Public Utility District (SnoPUD) is developing seven tidal power projects located throughout Puget Sound in Spieden Channel, San Juan Channel, Guemes Channel, Agate Pass, Rich Passage, Admiralty Inlet, and Deception Pass. Finavera Renewables is responsible for developing the sole wave power project in Washington. It is located in the Pacific Ocean in Makah Bay in Clallam County.

In early 2007 Tacoma Power and SnoPUD received preliminary permits from FERC that allows the utilities to conduct environmental, technical, and economic feasibility studies and evaluate tidal energy potential at their sites. The preliminary permits issued by FERC reserves a project location for the permit holder for up to three years while these studies are conducted. Construction activities are not permitted while a project is being studied. At the end of the

three years, a license application must be filed by the permit holder or they lose priority to develop the location.

In December 2007 FERC issued the first ever operating license for a wave, tidal, or current (hydrokinetic) energy project in the United States to Finavera Renewables for its Makah Bay Pilot Project. The decision by FERC gives Finavera Renewables a conditional five-year license for the proposed project. The FERC license is conditional on the company obtaining all necessary additional federal and state permits before construction may begin.

Regulatory Uncertainty

Because wave and tidal power is in its early stages of development, there remains uncertainty over which federal and state agencies have regulatory jurisdiction over particular wave and tidal projects. For example on the federal level, in addition to FERC, the Minerals Management Service (MMS), the National Oceanic and Atmospheric Administration, the Environmental Protection Agency, the U.S. Army Corps of Engineers, and the U.S. Coast Guard may be involved in the siting and operations of a wave or tidal power project, depending on the project's location or the project's impacts. On the state level, the Department of Ecology, the Department of Natural Resources, and the Department of Fish and Wildlife may be involved in the siting and operations of a wave or tidal power project, depending on the project's location or the project's impacts. In addition, a local government and electrical utility may be involved if the project or parts of the project are located in its jurisdiction or service area, respectively.

The Department of Community, Trade and Economic Development

The Department of Community, Trade and Economic Development (DCTED) is grouped into six divisions: Community Services, Housing, Local Government, Trade and Economic Development, Public Works Board, and Energy Policy. The DCTED Energy Policy Division provides information and analysis to support for energy policy decision making; assists in developing energy policies and programs; ensures effective responses to energy emergencies and disruptions; and provides long-term planning to minimize the total cost of energy service.

Energy Facility Site Evaluation Council

The Energy Facility Site Evaluation Council (Council) was created in 1970 to provide one-stop licensing for large energy projects. The Council membership includes: the Council Chair, the Department of Ecology; the Department of Fish and Wildlife; the Department of Natural Resources; the Department of Community, Trade and Economic Development; and the Utilities and Transportation Commission. The following agencies are not regular members of the Council, but can elect to appoint a Council representative for the siting of new projects: the Department of Agriculture; the Department of Health; the Department of Transportation; and the Military Department. The Council's membership may include representatives from the particular city, county, or port district where potential projects may be located.

Summary of Engrossed Second Substitute Bill:

The DCTED and the Council are required to convene and co-chair a work group to develop the Washington State Center for Excellence in Hydrokinetic Energy (Center) and to explore mechanisms to streamline and make more efficient current permitting processes for wave and tidal power projects.

The work group must consist of, but not be limited to, representatives from the following entities:

- the Department of Natural Resources;
- the Department of Ecology;
- the Department of Fish and Wildlife;
- the Utilities and Transportation Commission;
- a wave energy company or tidal energy company, or both;
- a wave energy industry association or tidal energy industry association, or both;
- either a state or private university researching wave energy or a state or private university researching tidal energy, or both;
- the Northwest Indian Fisheries Commission;
- an electrical utility;
- a commercial fishing association;
- a local government;
- a conservation group with expertise in energy-related issues;
- a conservation group with expertise in marine ecology; and
- a marine recreation group.

State agencies that are members of the Council must provide their existing designee members to serve on the work group.

The Center for Excellence in Hydrokinetic Energy

The work group must ensure that the Center is a public-private entity and that the Center supports a sustainable approach to hydrokinetic energy development aimed at economic development, environmental protection, and community stability.

The work group must make recommendations to the Legislature to include, but not be limited to:

- how the Center will conduct and support research and demonstrations of wave and tidal energy technologies in order to facilitate the deployment and commercialization of these technologies in Washington;
- how the Center will establish and operate wave and tidal energy test ranges that allow developers to demonstrate their wave and tidal energy technologies;
- how the Center will maintain processes to assist developers in permitting their wave and tidal energy technologies;
- how the Center will collect, manage, and disseminate data necessary to assess statewide wave and tidal resources;
- how the Center will promote Washington as the optimal location for the development and deployment of wave and tidal energy technologies;
- what the public-private governance structure of the Center will be, considering the Life Sciences Discovery Fund as a model;

- how the Center will coordinate with other governmental wave and tidal institutions and initiatives in the Pacific Northwest economic region;
- how the Center will be funded through either state, federal, or private sources of funding, or a combination of these funding sources;
- how the Center will assist the state and various other entities in reducing greenhouse gas emissions;
- how the Center will assist other forms of hydrokinetic energy technologies in addition to wave and tidal energy;
- how the center will identify and develop protocols to manage issues involving competing uses of water space; and
- what types of review and data are necessary to ensure that hydrokinetic energy will be designed and sited so as to avoid negative impacts on marine ecosystems.

The work group must provide a report to the appropriate committees of the Legislature containing its recommendations, as well as draft legislation implementing its recommendations, by December 1, 2008.

Wave and Tidal Power Permit Streamlining

The DCTED and the Council are required to convene and staff the work group to explore mechanisms to streamline and make more efficient current permitting processes for wave and tidal power projects. The work group may recommend development of a permit process which allows for concurrent public review, consolidated appeals, and other mechanisms which result in permit process efficiency.

The work group shall consider and make recommendations regarding research relating to the marine environment. In making the recommendations, the work group shall consider how future marine research would add value to the existing understanding of the overall marine environment and provide guidance on future research with the goal of eliminating redundant research activities.

The work group in developing recommendations for permit streamlining, must consider additional issues that may be associated with permitting a wave or tidal energy project, which include, but are not limited to:

- disturbance or destruction of marine life, including acoustic impacts;
- toxic releases from leaks or accidental spills of liquids used in those systems with working hydraulic fluids;
- possible threat to navigation from collisions;
- interference of mooring and anchorage lines with commercial and sport fishing;
- tidal power plants that dam estuaries that can impede sea life migration and build up silt behind such facilities, impacting local ecosystems; and
- potential impacts of tidal power on tides, currents, and flushing.

By June 30, 2009, the work group must develop a work plan that details critical issues that need to be resolved to develop efficient, streamlined permitting processes for wave and tidal power projects. The work group shall provide the work plan to the Legislature for review every six months. If the work group determines that additional time is required to develop

recommendations for the permitting process for wave power projects, the work group must report to the Legislature on the need for additional time and update the work plan accordingly.

By June 30, 2010, the work group must provide a final report to the Legislature on its findings and recommendations.

Appropriation: None.

Fiscal Note: Available.

Effective Date: The bill takes effect 90 days after adjournment of session in which bill is passed. However, the bill is null and void unless funded in the budget.

Staff Summary of Public Testimony: (Technology, Energy & Communications)

(In support) This bill is a good step forward on wave and tidal energy development in Washington. It starts the process of what the state needs to do from a permit perspective so there are reduced permitting barriers when the technologies are ready for deployment in Washington.

(With concerns) There are concerns about the development of a programmatic permit and the potential to reduce environmental review. This is a new technology and may be premature to begin a discussion on a one-stop programmatic permit.

(Opposed) None.

Staff Summary of Public Testimony: (Appropriations Subcommittee on General Government & Audit Review)

(In support) Puget Sound and other marine areas around Washington offer the potential for energy generation. The work group created in this bill will allow for important discussion linking government to industry to explore the development of tidal power to generate electricity. There is a need to look into innovative permitting, and there is a need for more research into the potential of hydrokinetic energy. Work should be conducted to make sure that these efforts are environmentally sound.

Wave and tidal power have tremendous potential in Snohomish County as the potential sources are close to population centers, so there is not a need to transmit power over long distances.

There is a need for language to provide for greater comfort for the environmental community. There is interesting potential for the mitigation of global warming through this technology, however there is a need to be protective of aquatic ecosystems.

(Opposed) None.

Persons Testifying: (Technology, Energy & Communications) (In support) Representative Morris; and Dave Arbaugh, Snohomish Public Utility District.

(With concerns) Bruce Wishart, People for Puget Sound; and Ed Owens, Coalition of Coastal Fisheries.

Persons Testifying: Representative Seaquist, prime sponsor; Dave Arbaugh, Snohomish Public Utility District; and Bruce Wishart, People for Puget Sound.

Persons Signed In To Testify But Not Testifying: (Technology, Energy & Communications) None.

Persons Signed In To Testify But Not Testifying: (Appropriations Subcommittee on General Government & Audit Review) None.