Washington State
House of Representatives
Office of Program Research

BILL ANALYSIS

Technology, Energy & Communications Committee

HB 3216

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

Sponsors: Representatives Seaquist and Morris.

Brief Summary of 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 a one-stop wave and tidal project permitting program.

Hearing Date: 1/25/08

Staff: Scott Richards (786-7156).

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.

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.

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 it 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 & 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 Bill:

The Department of Community, Trade and Economic Development (DCTED) and the Energy Facility Site Evaluation Council (Council) are required to convene and co-chair a work group to develop the Washington State Center for Excellence in Hydrokinetic Energy (Center) and develop a unique one-stop permit process for both wave power 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 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, the following:
- 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; and
- how hydrokinetic energy may 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 develop recommendations for a streamlined one-stop permitting program that utilizes interagency review of projects to permit wave and tidal power projects.

By June 30, 2009, the work group must develop a detailed work plan of the process to develop the one-stop programmatic permitting for wave and tidal projects for review by the Legislature and update every six months. If the work group determines that additional time is required to develop the one-stop programmatic 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.

In creating one-stop programmatic permitting processes for wave and tidal power projects, the work group shall:

- develop and prioritize a list of permit streamlining opportunities, specifically identifying substantive and procedural duplications and recommendations for resolving those duplications;
- evaluate flexible approaches that promote wave and tidal power development and protect environmental interests;
- make recommendations regarding where those approaches should be implemented;
- identify whether legislative measures are required to implement the one-stop programmatic permitting process for wave and tidal power projects; and
- determine how to maximize possible use of programmatic approaches to simplify issuance of federally required permits and project approvals.

In developing recommendations for a one-stop programmatic permit, the work group must consider additional issues that may be associated with permitting a wave or tidal energy project, which include:

- disturbance or destruction of marine life;

- 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; and
- tidal power plants that dam estuaries that can impede sea life migration and build up silt behind such facilities, impacting local ecosystems.

By June 30, 2010, the work group is required to provide a final report to the Legislature on the one-stop programmatic permitting process proposed by the work group.

This act expires January 1, 2011.

Appropriation: None.

Fiscal Note: Requested on January 23, 2008.

Effective Date: The bill takes effect 90 days after adjournment of session in which bill is passed.