

DRAFT

OCEAN ENERGY TASK FORCE  
SUB COMMITTEE 5  
*Tidal Energy*  
DRAFT REPORT (3)

10-22-09

ITEM

1 **Remove Environmental Regulatory Deterrent to the Development and Commercialization of Tidal Energy Technologies**

*(Prepared by John Ferland, ORPC)*

The Ocean Energy Task Force (OETF) recognizes that environmental permitting could pose a significant barrier to the development of tidal energy. In most instances tidal energy projects will need federal, state, and local review and approval. OETF is aware that several marine **hydrokinetic projects have been delayed in various regions of the United States due to lengthy** environmental permitting requirements, particularly imposed by federal resource agencies, and that such requirements are unreasonable given the scope and size of the pilot projects currently proposed. **These onerous requirements could render tidal power development uneconomic in the State of Maine.**

**OETF also recognizes that these same federal resource agencies could impose onerous permitting requirements on offshore wind projects, and that the successful resolution of this issue is important to the development of Maine's renewable ocean energy resources in general.**

OETF recommends that the State of Maine continue to foster an enabling environment for the R&D and commercial development needed to deploy a commercial scale, grid-connected tidal power generation project in State of Maine waters no later than 2011, and that the following action steps be undertaken by the State of Maine in order to ensure timely tidal power development consistent with all applicable environmental protections:

- The State of Maine resource agencies and the Governor's Office will work with the appropriate federal agencies to ensure that the Federal Energy Regulatory Commission (FERC) Hydrokinetic Pilot Project License process is fully implemented in Maine. This process is designed to ensure that licenses can be issued within six months of application to allow for project installation, operation, and environmental testing as soon as possible, while maintaining FERC oversight and agency input throughout the testing process to guard against adverse environmental effects. The six month application processing time is essential for timely development of tidal power as a part of the renewable power generation resource of Maine.
- The State of Maine will work with federal counterparts to emphasize the critical need for full federal and state agency cooperation in issuance of both FERC Pilot Project licenses and full scale commercial licenses for tidal power generation in order to meet the needs and state policy goals of Maine citizens for a reliable, emissions free source of renewable energy, and in order to develop alternative energy technology to increase its energy independence, and reduce carbon emissions for the entire United States.

- The Office of the Governor will request the full assistance of the entire Maine Congressional Delegation to request that the White House Office of Energy and Climate Change Policy, working with the Council on Environmental Quality Oceans Policy Committee, or other appropriate senior-level management coordination group, immediately exercise direct leadership to ensure that federal agencies coordinate effectively and efficiently to expedite the FERC Pilot Project license and the development of marine hydrokinetic commercial scale development.
- The State of Maine will work with the appropriate federal agencies to develop a permit by rule, or standard set of license conditions for marine hydrokinetic licenses as soon as possible.
- The State of Maine will work with representatives of the public, academic, non-profit research, and private sectors in order to develop protocols for baseline studies needed to assist federal and state environmental agencies in assessment of environmental impacts of marine hydrokinetic projects in Maine and federal waters off the coast of Maine, and to develop federal and private funding sources for the implementation of such baseline studies. The baseline studies should be designed to minimize the need for duplicative baseline and monitoring studies, and all data should be made publicly available in order to reduce the need for duplicative studies.
- The State of Maine shall assume a national leadership role to work with federal and private sector partners in order to develop an environment in Maine coastal waters where marine hydrokinetic project R&D and commercial development can be developed as swiftly as possible, while protecting the environment, in order to meet the critical energy needs of Maine, the region, and the United States.
- The Governor's Office, or its state agency designee, shall report on the status of implementation of these goals to the Legislature annually, submitting a report to the Legislative Leadership no later than January 15 of each year.

## 2 Evaluate Potential Environmental Impacts of Renewable Energy Projects.

*(Prepared by Gayle Zydlewski, UMO)*

- Determine the environmental effects of developing these resources in Maine. To do so, it is critical to first understand the existing status of aquatic species (fish, mammals, plants, etc.) in areas of interest.
- A balanced approach must be reached where environmental effects and development of hydrokinetic energy solutions can be cooperatively achieved.

- Identify public and private funding that can be used for ocean energy research and development, resource assessment, baseline environmental studies and evaluations, and on-going monitoring.
- Recognize and take advantage of the vital role of higher educational institutions, state agencies and NGOs play in acquiring baseline environmental information and knowledge
- Develop a list of required baseline studies/conditions for new hydrokinetic energy developers.

### 3 **Secure Funding Assistance for the continued Development of Hydro Kinetic Energy Sources.**

*(Prepared by John Ferland, ORPC)*

- A need exists for a funding program that addresses continued ocean energy technology R&D and commercialization, including pilot projects and other technology demonstration. The funding would include grants, loans and loan guarantees for ocean energy projects to maximize the amount of leverage necessary to attract private financing for ocean energy projects.
- Creation of an Ocean Energy Industry co-investment fund to be used in conjunction with MTI programs. These would be funded and managed similar to existing MTI co-investment programs, such as the North Star Alliance, which addresses comprehensive opportunities for growth in the Composites Technology Cluster, as well as the Maine Marine Research Fund and the Maine Biomedical Research Fund).
- Continue and increase resources for the MTI's competitive funding programs as well as the Maine Technology Asset Fund.
- Assess the appropriateness of existing Maine business financing programs for their suitability for ocean energy development, and make changes/improvements where specific modifications are needed (FAME, state managed programs and others.)
- Identify and implement opportunities for partnering state resources with federal resources that address R&D and project financing opportunities in ocean energy development.
- Attract increased private investment opportunities that can help provide a match with the public resources

4 **Facilitate Transmission Strategies to Support Remote Renewable Energy Sources.**

*(Prepared by Parker Hadlock, CIANBRO)*

- Modify the PUC mandate to move from purely **lowest cost** criteria to a criteria that provides lowest cost, while meeting the RPS, energy independence and greenhouse gas reduction goals of the State.
- Require utilities to demonstrate how their transmission planning will insure the state can meet its wind goals, insuring their plan is the most cost effective approach **but NOT necessarily competitive with traditional fossil energy sources.**
- Provide cost relief to utilities that host renewables in their service area by requiring all utilities in the ISO to share the additional cost of renewable transmission proportionally based on consumption
- Provide a cost structure framework that **affords the opportunity** for generators to provide “host “ communities lower electrical costs if so inclined to enhance siting potential.
- Mandate utilities transition to “time of use ” pricing that will encourage movement of consumption to “off-Peak”. This will reduce transmission build-out needs, and provide increased energy storage capacity in the system off setting intermittency of other renewable sources.

5 **Establish “Best Practices” for Stakeholder and Public Engagement in Siting Ocean Energy Projects.**

*(Prepared by Ron Beard, UM Co-op Extension)*

- **Careful Planning and Preparation**

Through adequate and inclusive planning, ensure that the design, organization, and convening of the process serve both a clearly defined purpose and the needs of the participants.

- **Inclusion and Demographic Diversity**

Equitably incorporate diverse people, voices, ideas, and information to lay the groundwork for quality outcomes and democratic legitimacy.

- **Collaboration and Shared Purpose**

Support and encourage participants, government and community institutions, and

others to work together to advance the common good.

- **Openness and Learning**

Help all involved listen to each other, explore new ideas unconstrained by predetermined outcomes, learn and apply information in ways that generate new options, and rigorously evaluate public engagement activities for effectiveness.

- **Transparency and Trust**

Be clear and open about the process, and provide a public record of the organizers, sponsors, outcomes, and range of views and ideas expressed.

- **Impact and Action**

Ensure each participatory effort has real potential to make a difference, and that participants are aware of that potential.

- **Sustained Engagement and Participatory Culture**

Promote a culture of participation with programs and institutions that support ongoing quality public engagement.

- **Local Benefit**

Insure through employment practices, procurement of materials, and contracting for services, that host communities and regions benefit economically from the project development and operation.

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## 6 **Create an “umbrella” Ocean Energy Advocacy Organization.**

*(Prepared by Robert Blackmore, CIANBRO)*

- **By Executive Order**, establish a private organization by year end, governed by a Board of Directors, whose single responsibility is to develop ocean renewable energy resources
- **The Organization Membership** will be comprised of relevant private sector enterprises, public agencies and educational institutions committed to the advancement of ocean renewable energy resources, providing a world class, cohesive, complimentary array of capabilities from its membership to developers advancing development.