



One Massachusetts Avenue, NW
Suite 850
Washington, DC 20001

Tel 202-682-1700
Fax: 202-682-9478
www.hydro.org

The Honorable Samuel Bodman
Secretary
Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

Re: NHA Comments on Draft EISA Report on Environmental Effects of Marine and Hydrokinetic Energy Projects

To Secretary Bodman:

Pursuant to Section 633(b) of the Energy Independence and Security Act of 2007 (“EISA”), the U.S. Department of Energy (“DOE”) is charged with preparing a report for Congress to address the potential effects of marine and hydrokinetic energy projects (“MHK projects”). DOE released its draft report on November 21, 2008. Comments were due to the Department by December 9, 2008. The National Hydropower Association¹ (“NHA”) respectfully submits the following comments on the draft report.

Public Comment Timeline

NHA understands that the DOE must adhere to strict guidelines in order to issue the final report to the Congress on schedule and applauds the Department for its hard work on the draft report. However, because of the abbreviated comment schedule, the industry has had little time to examine the report in depth and develop detailed comments. Therefore, NHA’s comments focus broadly on the current state of marine and hydrokinetic industries, the analysis of potential impacts, and the need for continued research and development funding through the Department.

Since the passage of EISA, the Department has conducted several outreach sessions to the ocean, tidal and hydrokinetic industry. NHA strongly supports and participated in these events. We encourage the Department to continue this outreach to the new waterpower technology community beyond the comment period on, and submittal of, this report to Congress.

¹ NHA is a non-profit national association dedicated exclusively to advancing the interests of the U.S. hydropower industry, including new waterpower technologies, such as ocean, tidal and instream hydrokinetic power. NHA’s membership consists of more than 160 organizations including public utilities, investor owned utilities, independent power producers, project developers, equipment manufacturers, environmental and engineering consultants and attorneys. NHA’s Ocean, Tidal and New Technologies Council has nearly 30 member companies, many of whom have new ocean, tidal or instream projects under development.

State of the Marine and Hydrokinetic Industries

New marine and hydrokinetic energy technologies offer the promise of significantly expanding the nation's base of clean, renewable energy. Recent estimates indicate that approximately 33,000 MW of capacity is available in U.S. coastal waters.² This is a conservative estimate, and the untapped potential may in fact be much greater.

Just as the nation begins to recognize the potential of these energy resources, entrepreneurial industry members have taken the first steps to develop systems to tap that power. However, the new waterpower energy industry is a nascent one in the U.S, experiencing tremendous growth particularly in the last several years. Developers are actively investigating sites with the possibility of thousands of megawatts of capacity. However, only a handful of very small demonstration projects currently are approved for operation.

In the meantime, companies, most of them start-ups, have been fine-tuning their technologies, researching environmental impacts and testing equipment, and acquiring the necessary capital to pursue projects. The marine and hydrokinetic industry is battling to create a foothold here in the U.S., where government policy support lags far behind that of Europe and other parts of the world. Fewer economic incentives for project development, less funding for research and development, and the lack of a clear regulatory regime (including the resolution of the FERC/Minerals Management Service Outer Continental Shelf licensing jurisdiction question) all remain obstacles to growth in the U.S. Support for these technologies must recognize this environment less the U.S. stifle development rather than stimulate it.

Analysis of Potential Impacts

The Energy Independence and Security Act of 2007 charged the Department to study potential environmental impacts of MHK technologies as well as the options to prevent adverse impacts. Chapter 3 of the draft report certainly provides a thorough review of the potential affects and mitigation measures of these technologies. However, NHA and our member companies believe it is important that the report better emphasize that the extent of these impacts remains uncertain; that mitigation options should be explored on a case-by-case basis; and that pioneer developers should not shoulder the research burden of the entire industry.

While the statutory charge to the Department and thus the focus of the report is on potential adverse impacts, NHA notes that MHK technologies will make significant positive environmental contributions as well. Global climate change remains a top environmental issue for the U.S., with several proposed pieces of legislation under consideration by the Congress and the Administration. It cannot be emphasized enough that MHK projects are clean and renewable, and will help reduce U.S. demand for energy sources that create pollution and exacerbate the climate problem. In particular, the cumulative impacts of MHK projects implemented throughout the country will have widespread climatic and air quality benefits – an analysis the report currently does not adequately consider. Other potential positive

² Assessment of Waterpower Potential and Needs, Electric Power Research Institute, Table 3-2, Report Number 1014762, 2007.

environmental impacts of MHK projects, tangentially referenced in the report, should also be emphasized.

The Executive Summary of the draft report on P.iii states, “Most of these [MHK] technologies remain at the conceptual stage – they have not yet been tested in the field or as prototype, full scale devices.” NHA agrees, and notes this is exactly the reason that the industry needs to get more MHK projects in the water.³ Because of the various technologies being considered and the different geographic areas and local conditions associated with different projects, it is important the report strongly emphasize that the industry cannot fully understand the nature and extent of potential impacts until more MHK projects are deployed and data collected.

Additionally, as more projects are deployed and scaled up, the industry will be better positioned to evaluate potential cumulative effects. It is important the final report emphasize that existing procedures are in place to evaluate projects impacts, including cumulative effects. Cumulative effects are included as part of the National Environmental Policy Act’s environmental impact review conducted to determine whether to permit and license MHK projects. Permits required pursuant to environmental statutes such as the Marine Mammal Protection Act and the Clean Water Act are also a part of the MHK project permitting and licensing process. These existing processes will help ensure that the environmental effects of approved MHK projects, including cumulative impacts, will be minimal.

Finally, NHA appreciates the efforts of DOE to explore and include mitigation options in the draft report; however, the final report should clarify that the same mitigation strategies should not automatically apply to all projects. Because MHK projects may differ vastly in the technologies employed and the chosen project environments, there cannot be one predetermined formula for dealing with a given environmental impact. Projects should be evaluated on a case-by-case basis, and specific monitoring, mitigation, and adaptive management processes should be incorporated to ensure environmentally responsible development.

DOE R&D Program

Given nationwide enthusiasm for supporting the development of MHK projects and other clean, renewable, domestic energy sources, it is important that the industry continue to conduct studies to eliminate the uncertainties surrounding the environmental impacts of MHK projects. Particularly in light of the tough economic climate for renewable energy developers, it would greatly facilitate the development of MHK projects if the first few developers were not responsible for carrying the costs of funding studies on their backs alone.

NHA strongly supported re-instating the DOE Waterpower R&D program and the inclusion of MHK technologies alongside conventional hydropower resources. NHA believes significant additional funding above the current \$10 million program level is needed to address the R&D needs of the MHK and conventional hydropower industries. Accordingly, NHA

³ NHA agrees with the statement in the Executive Summary on P.iii that some potential impacts of MHK technologies are expected to be minor and notes that preliminary data from the handful of projects currently in the water and conducting studies indicate impacts should be minimal.

requests that in its final EISA report, DOE address the need for more government-funded research on the environmental effects of MHK projects.

Conclusion

There is tremendous promise in MHK technologies for clean, renewable energy generation, energy independence, and tremendous job creation in the U.S. These and other benefits should receive greater attention in the final report to Congress. In order for the industry to prove and realize this potential, the federal government must: establish a framework that provides regulatory certainty, support economic incentives for deployment of MHK technologies, and fund needed environmental R&D studies. NHA believes a healthy MHK industry and healthy rivers and oceans are compatible. By cooperating on such an environmentally responsible development strategy, we can harness the vast amount of energy contained in our waterways, clean our air, and power our future.

Sincerely,

A handwritten signature in cursive script that reads "Linda Church Ciocci". The signature is written in black ink on a light-colored background.

Linda Church Ciocci
Executive Director