

United States Senate

WASHINGTON, DC 20510

October 21, 2016

The Honorable Ernest Moniz
Secretary of Energy
U.S. Department of Energy
1000 Independence Ave SW
Washington, DC 20585

Dear Secretary Moniz,

We write in support of the grant application submitted by the Northwest National Marine Renewable Energy Center (NNMREC) to the Department of Energy's (DOE) Wave Energy Test Facility funding opportunity (DE-FOA-0001419). NNMREC would build upon existing DOE investments to construct a grid connected test facility for utility scale wave energy converters (WECs) at the Pacific Marine Energy Center South Energy Test Site (PMEC-SETS), located six nautical miles off the coast of Newport, Oregon. This project is critical to advancing the ability to capture and utilize the abundant marine and freshwater renewable energy resources found in our nation's waves, currents, and tides.

NNMREC, a consortium of the University of Washington, the University of Alaska Fairbanks, and Oregon State University, is a global leader in researching, developing, and testing marine energy technologies. Since its establishment in 2008 through a DOE grant, NNMREC has coordinated closely with researchers, technology developers, community stakeholders, and regulatory and resource agencies to advance wave, tidal, and in-river energy research and test projects. With a non-grid wave energy test facility in place, NNMREC has now turned to the next step of developing a grid connected test facility for utility scale WEC arrays. This would facilitate WEC performance, environmental interaction, and survivability testing in an ocean environment. It would also help bridge a critical gap in technology commercialization and make marine renewable energy viable in the United States and globally, ultimately helping address clean power needs and climate change.

NNMREC has assembled a strong team to support construction and operation of PMEC-SETS. In addition to the University of Washington, the University of Alaska Fairbanks, and Oregon State University, the team includes the Pacific Northwest National Laboratory, the National Renewable Energy Laboratory, Sandia National Laboratory, and other leaders in their respective fields.

This proposal is the product of more than ten years of work and over \$11 million in federal and non-federal funding to develop the PMEC-SETS, beginning with an initial \$4 million DOE grant to NNMREC in 2012. NNMREC has worked extensively with Oregon's coastal communities to build support for and address any potential concerns

regarding wave energy research and testing projects, and will continue to work with communities and stakeholders in Oregon, Washington and Alaska as the project moves forward. Particularly important has been NNMREC's engagement with Fishermen Involved in Natural Energy (FINE), who helped identify the location for the P MEC-SETS test facility. In addition, NNMREC developed an environmental baseline within the P MEC-SETS study area to inform design, post-installation and adaptive management plans, monitoring activities, and potential mitigation to ensure compatibility with the natural environment and prevent harm to the environment and marine life.

The United States has extensive marine renewable energy resources. DOE estimates that technically recoverable domestic marine and hydrokinetic resources are between 1,285 and 1,846 terawatt-hours (TWh) per year – roughly half of total U.S. retail electricity demand in 2015. Developing new advanced marine energy power systems represents a substantial opportunity for the United States to lead the world in an emerging area of energy science and discovery, while also meeting our increasing electricity needs with a clean source of energy that stimulates a broad range of job-creating industries. NNMREC's proposal for a full-scale, deepwater, technology test facility would accelerate deployment of advanced water power technologies, further research already underway by the University of Washington, the University of Alaska Fairbanks, Oregon State University, and others, and help attract private capital.

NNMREC and its team have made significant strides toward development of a grid connected test facility and this funding opportunity would help bring it to completion. We urge you to give full and fair consideration to NNMREC's proposal.

Thank you in advance for your consideration of this request.

Sincerely



Ron Wyden
U.S. Senator



Lisa Murkowski
U.S. Senator



Maria Cantwell
U.S. Senator



Jeffrey A. Merkley
U.S. Senator



Patty Murray
U.S. Senator



Dan Sullivan
U.S. Senator