## Congress of the United States Washington, DC 20515

March 15, 2016

The Honorable Mike Simpson Chairman Appropriations Subcommittee on Energy and Water Development Washington, D.C. 20515 The Honorable Marcy Kaptur Ranking Member Appropriations Subcommittee on Energy and Water Development Washington, D.C. 20515

Dear Chairman Simpson and Ranking Member Kaptur:

We are writing to ask for your continued support of the Water Power Technologies Office (WPTO) within the Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE) at a level of \$125 million in the Fiscal Year 2017 Energy and Water Development Appropriations legislation.

Development of new advanced water 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. Commercialization of new advanced technologies to harness our significant water power resources requires increased and targeted federal funding to augment research and development efforts already underway in the private sector. The DOE Water Power Technologies Office invests in high-risk, early-stage technologies that the private sector is unable to address on its own.

Hydropower is one of the nation's most affordable and reliable renewable electricity resources. With 100 Gigawatts of installed capacity, including pumped storage, hydropower accounts for seven percent on average of all U.S. annual electricity generation. It is the single largest source of renewable electricity, representing 49 percent of all renewable energy generation in 2014. But more can be done to significantly expand generation from this highly valuable, flexible, and base load energy resource. The funds we are requesting will build on years of investment to improve energy and water use efficiency as well as the environmental performance of turbines. It will also reduce costs of new small hydropower and conduit applications and promote the role of hydropower, particularly pumped storage, to ensure grid stability, reliability, and the integration of variable energy resources.

Marine renewable energy, including wave and currents (ocean, river, and tidal), has the potential to become a major source of electricity for the United States, and its growth could be substantially supported through increased and focused funding for the DOE Water Power Technologies Office. DOE has estimated that the technically extractable marine energy resource potential is almost 900 TWh/yr for wave energy and under 400 TWh/yr for tidal and ocean current, which represents up to 25 percent of projected U.S. electricity generation requirements by 2050. Increased investments by DOE in research and development and technology advancement, along with expansion of full-scale technology testing centers, will accelerate deployment of advanced water power technologies and also give confidence to investors and help attract private capital. In addition, federal commitment to creating a robust U.S. marine

renewables industry will advance our national economic goals by creating high-quality employment in coastal communities, increasing long-term production in shipyards, expanding development of fleets of vessels for deployment and servicing, and strengthening the thousands of businesses that make up the U.S. industrial supply chain.

Just as other power generation technologies have historically enjoyed substantial and ongoing federal research and development support, similar investments are required to encourage private companies and universities to develop promising new water power technologies and to help them progress toward commercial viability. Strong funding in support of water power systems will reduce our nation's dependence on foreign suppliers and create a significant opportunity to expand our economic competitiveness in this emerging clean energy sector.

We respectfully request that the Subcommittee on Energy and Water Development support funding DOE's Water Power Technologies Office at a level of \$125 million for Fiscal Year 2017. Thank you for your consideration of this request.

Sincerely,

Suzanne Bonamici

Member of Congress

Chellie Pingree

Member of Congress



Earl Blumenauer Member of Congress

Theodore E. Deutch Member of Congress

Matt Cartwright
Member of Congress

John Conyers Jr. Member of Congress

Doris Matsui
Member of Congress

Charles B. Rangel Member of Congress

Sheila Jackson Lee Member of Congress Peter DeFazio
Member of Congress

Mark Takai Member of Congress

Lois Capps Member of Congress

Frederica S. Wilson Member of Congress

Barbara Lee
Member of Congress

Alcee L. Hastings Member of Congress

Eleanor Holmes Norton Member of Congress



Scott Peters Member of Congress

Mark Takano Member of Congress

Elijah E. Cummings Member of Congress

Donald M. Paynedr Member of Congress Chaka Fattah Member of Congress

Rick Larsen

Member of Congress

Stacey E. Plaskett

Member of Congress

Donald S. Beyer Jr.

Member of Congress

Grace F. Napolitano
Member of Congress

Steve Cohen

Member of Congress

Jim Costa
Member of Congress

William Keating Member of Congress