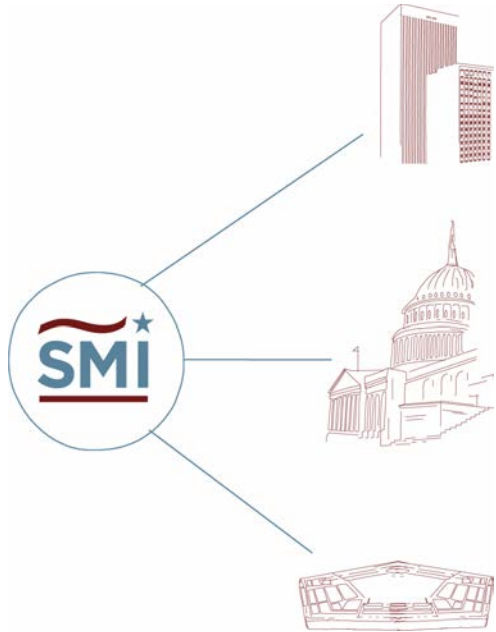


The background of the slide is a photograph of ocean waves, tinted with a teal or cyan color. The waves are breaking, creating white foam and spray. The overall mood is dynamic and focused on marine energy.

# Federal Support for Water Power and Wind Energy Research and Development

Advocacy Efforts Key to Securing Additional  
Resources to Support Technology  
Demonstration and Deployment

Established in 1993, SMI is a full service government relations firm supporting companies, universities, non-profits and industry associations seeking to partner with the U.S. Federal Government to develop and commercialize advanced technologies. SMI has secured over \$1 billion in client contract activity over the past seven years and is at the forefront of efforts to establish a marine renewable energy industry in the United States and around the world.



Helped form and provide ongoing leadership for the National Hydropower Association's Marine Energy Council, the national trade group promoting marine energy technology development.

Secured approval of over \$420m to date in DOE funding to support marine energy R&D and demonstration projects:

- DOE Water Power work restarted in FY 2008 (\$10m)
- Separate Water Power Office in FY 2016
- \$105m for DOE Water Power in FY 2018 & 2019
- Over \$125m for DOD/Navy marine energy (FY 2003-2018)

# Key Points

- Current Events
- Marine Energy Council Overview
- Advocacy Counts
- Federal Funding/Program Direction Update

# Current Events

- Each day is an adventure with the Trump Administration!
- Despite the constant breaking news cycles, Congress is making impressive progress on the annual funding bills.
- Last week, Congress approved the Energy and Water Development Appropriations bill which funds DOE and contains historic water power funding. Defense bill passed by Senate this morning.
- Will the President sign these bills and avoid a government shutdown?
- The Marine Energy Council is delivering results!

# Marine Energy Council Overview

## *Providing Industry Leadership*

- **Marine Energy Council Established in January 2015** — The National Hydropower Association (NHA) is the unified voice for all forms of water power in Washington, D.C. NHA formed the Marine Energy Council (MEC) to strengthen the emerging marine energy sector in the United States and around the globe.
- **Increased Member Participation and Engagement** — 33 NHA organizations participate in the MEC
- **Higher Profile within NHA** — Board Members & Strategic Planning
- **Special Briefings** by the National Laboratories
- **Successful 2020 ICOE Bid** — Supported by NHA and DOE

# Marine Energy Council Officers

<b>Co-Chair</b>	<b>Jason Busch</b> , Pacific Ocean Energy Trust
<b>Co-Chair</b>	<b>Paul Gay</b> , SMI
<b>Co-Chair</b>	<b>Reenst Lesemann</b> , Columbia Power
<b>Co-Chair</b>	<b>Tim Oakes</b> , Kleinschmidt Group
<b>Vice Chair</b>	<b>Tim Mundon</b> , Oscilla Power
<b>Vice Chair</b>	<b>Damian Kunko</b> , SMI
<b>Membership</b>	<b>Jonathan Colby</b> , Verdant Power
<b>Secretary</b>	<b>Matt Sanders</b> , Pacific Ocean Energy Trust
<b>NHA Staff</b>	<b>Jeff Leahey and LeRoy Coleman</b>

# MEC Policy & Funding Requests

- Increased funding for DOE/DOD for technology advancement, verification and acceptance through support for research, development, testing and deployment;
- A clear, timely, predictable and workable regulatory framework for siting and permitting of early stage and pilot demonstration marine energy projects.
- Implementation of a stable and predictable incentive regime structure that facilitates rapid advancement of technology deployment.
- Continued funding for university-based marine energy technology research, development and testing centers which support private sector efforts.
- Federal agency coordination on lessons learned from here and abroad in marine energy technology development and deployment, including standards and certifications that will provide confidence to customers and financial markets.

# MEC Funding Recommendations



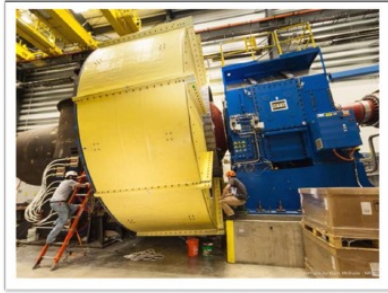
## MARINE ENERGY COUNCIL

601 New Jersey Avenue N.W. - Suite 600 - Washington, D.C. 20001 - (202) 682-1700

### RECOMMENDATIONS FOR FEDERAL R&D FUNDING TO COMMERCIALIZE MARINE RENEWABLE ENERGY TECHNOLOGIES

November 28, 2017

The National Hydropower Association's Marine Energy Council (MEC) calls for robust federal investments to support industry-led efforts to commercialize new marine energy technologies. These advanced water power generation devices tap into vast amounts of globally available wave, tidal, current and riverine resources. Marine energy technologies can produce significant sums of clean and predictable renewable power, creating new market opportunities and thousands of engineering, manufacturing and related jobs here in the United States.



Columbia Power Technologies' Wave Energy Converter Undergoing Testing at the National Renewable Energy Laboratory.

#### Proposed Federal Water Power R&D Investment

The MEC recommends a minimum of \$100 million for the U.S. Department of Energy (DOE) Water Power Technologies Office (WPTO), along with \$35 million for the U.S. Navy Energy Program and the Office of Naval Research, to support commercialization of new water power generation technologies. These investments must be informed by the needs of industry in order to sustain a long-term approach to technology innovation and system integration efforts.

#### MARINE ENERGY COUNCIL LEADERSHIP

Jason Beach	Co-Chair
Paul Gay	Co-Chair
Raeanne Lewemann	Co-Chair
Tim O'Brien	Co-Chair
Rahaf Shandura	Vice Chair
Jonathan Colby	Membership Chair
Michael Walter	Secretary
Jeff Leasing	NHA Deputy Executive Director

Each year the Marine Energy Council collaboratively drafts a memo providing recommendations to the White House Office of Management and Budget, the Department of Energy and Congress on the industry's priorities for federal R&D technology commercialization investments. The document guides the Council's lobbying and federal marketing efforts during the following year.



# 2018 MEC Accomplishments

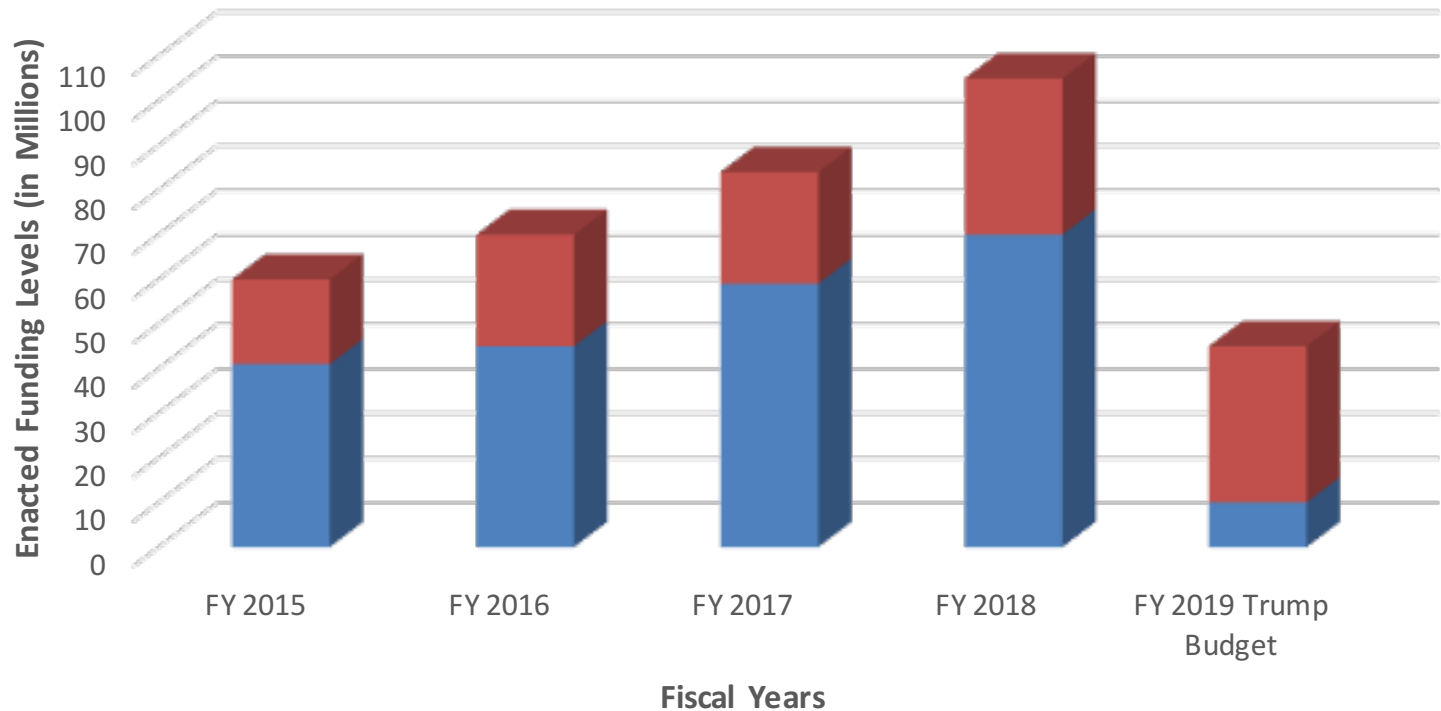
- **Record levels of federal funding support**  
Fiscal Years 2018/2019 DOE WPTO & U.S. Navy
- **Higher profile on Capitol Hill**  
Member request letters and floor amendments
- **Favorable program direction**  
Conference report language
- **Increased engagement with DOE**  
Commercialization strategy/Maritime markets stakeholder meetings
- **Marine energy legislation/Water Power Research Act of 2018**  
Senator Ron Wyden and Rep. Ted Deutch
- **Submitted comments** on several issues

**Advocacy is Critical to Protect  
and Grow Federal Investments in  
R&D for the Water Power and  
Wind Energy Industries!**

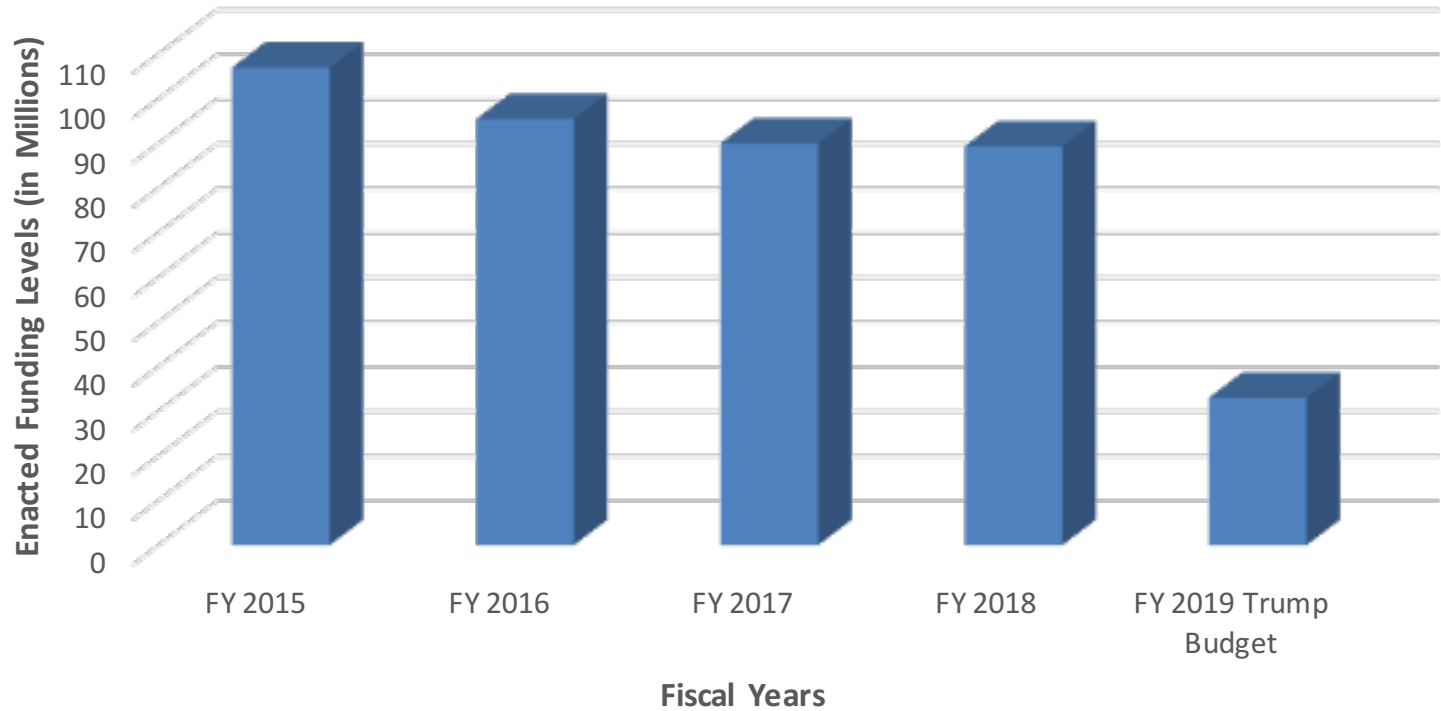
# Lobbying Counts!

- President Trump has proposed deep, debilitating cuts to non-defense R&D accounts two years in a row.
- Fortunately, the first amendment protects the people's right to petition the federal government for a redress of grievances.
- Due to overwhelming opposition to these harmful budget reductions across the country, Congress has ignored most of these proposals. Instead, water power now at historic levels!
- Earmarks still forbidden, but programmatic increases with directive report language setting up competitive funding opportunities can be secured.
- FY 2020 budget planning well underway.

# DOE Water Power Funding FY15-19



# DOE Wind Energy Funding FY 2015-19



# Capitol Hill Water Power Support

*Over Ten Percent of the House Supports “Robust” Funding for Water Power!*

- 45 Representatives signed FY 2019 funding letter — 12 more than last year.
- This total includes eight Republicans.
- Ten members from California.
- Support from 23 States and Territories.
- Did your Member of Congress sign? If not, why not?
- Individual advocacy makes all the difference – Get involved!!!

# House FY 2019 Water Power Letter

Congress of the United States  
Washington, DC 20515

March 16, 2018

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 your support of robust funding for the U.S. Department of Energy's (DOE) Water Power Technologies Office (WPTO) in the Fiscal Year 2019 Energy and Water Development Appropriations legislation.

The United States has significant under-deployed water power resources, from non-powered dams, pumped storage and conduits to waves, ocean currents and tidal flows. Commercialization of new advanced water power systems to capture these resources represents a substantial opportunity for the United States to lead the world in an emerging area of energy production while also stimulating a broad range of job-creating industries.

Although hydropower is one of the most affordable and reliable renewable electricity resources, more can be done to significantly expand generation from this resource. For example, only three percent of the 80,000 dams in the United States currently generate electricity. The 2016 Hydropower Vision Report, developed by industry and DOE, offers pathways, including development of advanced water power technologies, for tapping into hydropower's potential to increase installed capacity by nearly 50 GW by 2050.

Marine energy converters use advanced, pre-commercial technologies to generate electricity from waves, currents, tides and in-river resources, and has the potential to become a major source of electricity for the United States and the world. The majority of the U.S. population lives adjacent to significant water power resources, which reduces transmission costs and environmental consequences. Marine energy technologies also facilitate newly emerging market opportunities off the grid, such as recharging various unmanned underwater vehicles and providing power during disaster recovery efforts.

Robust funding for the DOE Water Power Technologies Office will support investments in high-risk, early-stage technologies that the private sector is unable to address on its own. Continued investments by DOE in private-sector led technology advancement will accelerate deployment of new water power technologies, give confidence to investors, and reduce our nation's dependence on foreign suppliers. In addition, a growing U.S. water power industry will advance our national economic goals by creating high-quality employment, 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.

Therefore, we respectfully request that the Subcommittee on Energy and Water Development support funding DOE's Water Power Technologies Office at a robust level for Fiscal Year 2019. Thank you for your consideration of this request.

Sincerely,

  
Suzanne Bonamici  
Member of Congress

  
Chelcie Pingree  
Member of Congress

  
Peter A. DeFazio  
Member of Congress

  
Earl Blumenauer  
Member of Congress

  
Kurt Schrader  
Member of Congress

  
Riek Larsen  
Member of Congress

  
Scott Perry  
Member of Congress

  
Don Young  
Member of Congress

  
Dave Reichert  
Member of Congress

  
Elise M. Stefanik  
Member of Congress

  
Richard Hudson  
Member of Congress

  
Claudia Tenney  
Member of Congress

PRINTED ON RECYCLED PAPER

# House FY 2019 Water Power Letter



Mark DeSaulnier  
Member of Congress



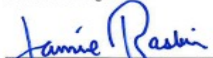
Donald M. Payne, Jr.  
Member of Congress



Salud O. Carbajal  
Member of Congress



Pramila Jayapal  
Member of Congress



Jamie Raskin  
Member of Congress



Debbie Wasserman Schultz  
Member of Congress



Scott Peters  
Member of Congress



Ami Bera, M.D.  
Member of Congress



David B. McKinley, P.E.  
Member of Congress



Bob Gibbs  
Member of Congress



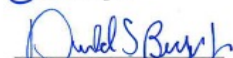
Alma S. Adams  
Member of Congress



Stacey E. Plaskett  
Member of Congress



James A. McGovern  
Member of Congress



Donald S. Beyer Jr.  
Member of Congress



Darren Soto  
Member of Congress



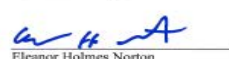
Tulsi Gabbard  
Member of Congress



Mark Takano  
Member of Congress



Jim Costa  
Member of Congress



Eleanor Holmes Norton  
Member of Congress



Elijah E. Cummings  
Member of Congress



Bobby L. Rush  
Member of Congress



Jerry McCreary  
Member of Congress



Doris Matsui  
Member of Congress



Steve Cohen  
Member of Congress



Grace F. Napolitano  
Member of Congress



Diana DeGette  
Member of Congress



Danny K. Davis  
Member of Congress



Sheila Jackson Lee  
Member of Congress



Terri A. Sewell  
Member of Congress



Barbara Lee  
Member of Congress



Alice L. Hastings  
Member of Congress



Ted Deutch  
Member of Congress



Stephanie Murphy  
Member of Congress

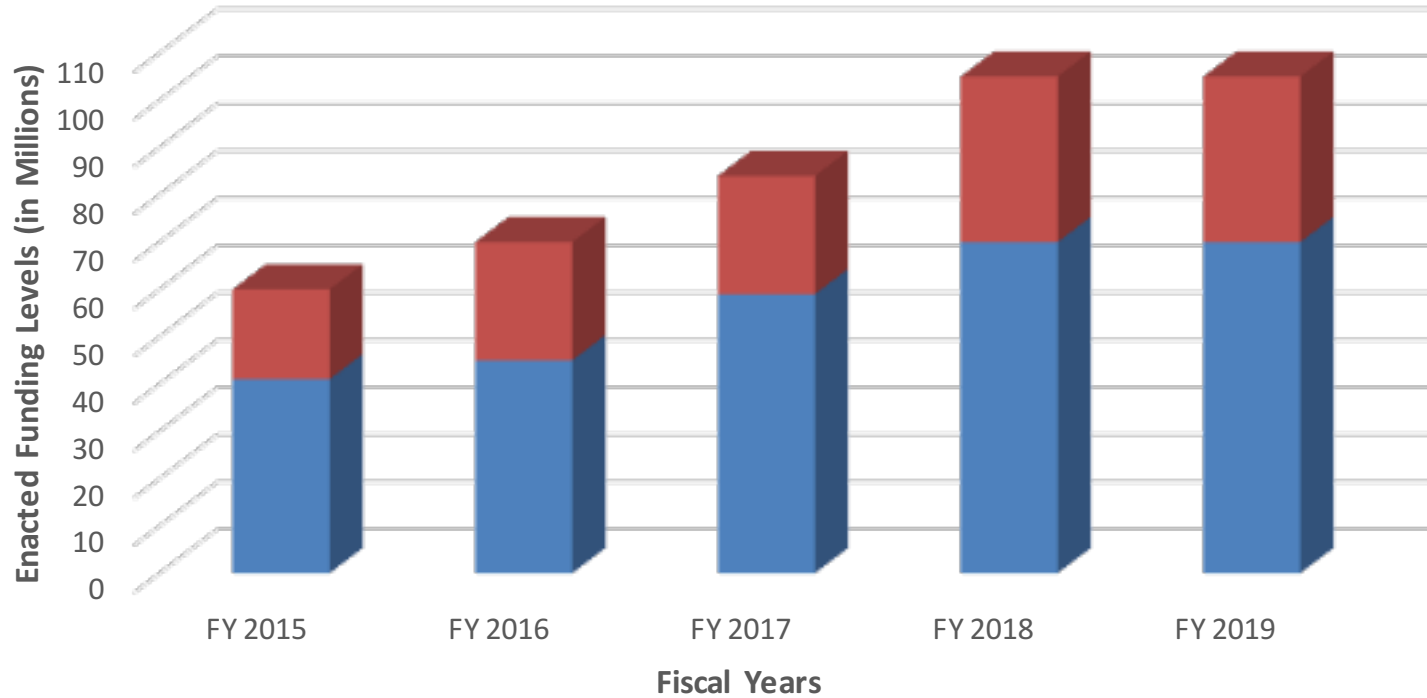


# Capitol Hill Water Power Support

- **Alabama (1)**, Terri A. Sewell D-7<sup>th</sup> – **Alaska (1)**, Don Young R – **California (10)**, Ami Bera, M.D. D-7<sup>th</sup>, Salud O. Carbajal D-24<sup>th</sup>, Jim Costa D-16<sup>th</sup>, Mark DeSaulnier D-11<sup>th</sup>, Barbara Lee D-13<sup>th</sup>, Doris Matsui D-6<sup>th</sup>, Jerry McNerney D-9<sup>th</sup>, Grace F. Napolitano D-32<sup>nd</sup>, Scott Peters D-52<sup>nd</sup>, Mark Takano D-41<sup>st</sup> – **Colorado (1)**, Diana DeGette D- 1<sup>st</sup> - **District of Columbia (1)**, Eleanor Holmes Norton D – **Florida (5)**, Ted Deutch D-22<sup>nd</sup>, Alcee Hastings D-20<sup>th</sup>, Stephanie Murphy D-7<sup>th</sup>, Darren Soto D-9<sup>th</sup>, Debbie Wasserman Shultz D-23<sup>rd</sup> – **Hawaii (1)**, Tulsi Gabbard D-2<sup>nd</sup> – **Illinois (2)**, Danny K. Davis D-7<sup>th</sup>, Bobby L Rush D-1<sup>st</sup> – **Maine (1)**, Chellie Pingree D-1<sup>st</sup> – **Maryland (2)**, Elijah E. Cummings D-7<sup>th</sup>, Jamie Raskin D-8<sup>th</sup> – **Massachusetts (1)**, James P. McGovern D-2<sup>nd</sup> - **New Jersey (1)**, Donald M. Payne, Jr. D-10<sup>th</sup> **New York (2)**, Elise Stefanik R-21<sup>st</sup>, Claudia Tenney R-22<sup>nd</sup> - **North Carolina (2)**, Alma S. Adams D-12<sup>th</sup>, Richard Hudson R-8<sup>th</sup> – **Ohio (1)**, Bob Gibbs R-7<sup>th</sup> – **Oregon (4)**, Earl Blumenauer D-3<sup>th</sup>, Suzanne Bonamici D-1<sup>st</sup>, Peter DeFazio D-4<sup>th</sup>, Kurt Schrader D-5<sup>th</sup> **Pennsylvania (1)**, Scott Perry R-4<sup>th</sup> – **Tennessee (1)**, Steve Cohen D-9<sup>th</sup> – **Texas (1)**, Sheila Jackson Lee D-18<sup>th</sup> **Virginia (1)**, Donald Beyer Jr. D-8<sup>th</sup> – **Virgin Islands (1)**, Stacey E. Plaskett D – **Washington (3)**, Pramila Jayapal D-7<sup>th</sup>, Rick Larsen D-2<sup>nd</sup>, Dave Reichert R-8<sup>th</sup> **West Virginia (1)**, David McKinley R-1<sup>st</sup>
- **Support from 45 Members representing 23 States/Territories!!!**

# DOE FY 2019 Water Power and Wind Energy Funding and Program Direction

# DOE Water Power Funding FY 2015-19



■ Marine Energy ■ Hydro/Pumped Storage

# FY 2019 DOE Water Power Directive Report Language

***“Water Power*** - Within available funds, the agreement provides \$70,000,000 for marine and hydrokinetic technology research, development, and deployment activities, including research into mitigation of marine ecosystem impacts of these technologies.

The Department is directed to continue development of the open-water wave energy test facility with previously provided funds. Within available funds, the agreement provides \$30,000,000 for a balanced portfolio of competitive solicitations to support industry- and university-led research, development, and deployment of marine and hydrokinetic technologies; and support wave, ocean current, tidal and in-river energy conversion components and systems across the high- and low-technology readiness spectrum to increase energy capture, reliability, survivability, and integration into local or regional grids for lower costs and to assess and monitor environmental effects.

# FY 2019 DOE Water Power Directive Report Language

Within this amount, the agreement provides not less than \$8,000,000 to support collaborations between universities, Marine Renewable Energy Centers, and the national laboratories and not less than \$5,000,000 to prioritize infrastructure needs at the marine and hydrokinetic technology testing sites operated by the Marine Renewable Energy Centers. In addition, the Department is directed to continue its coordination with the U.S. Navy on marine energy technology development for national security applications at the Wave Energy Test Site and other locations.

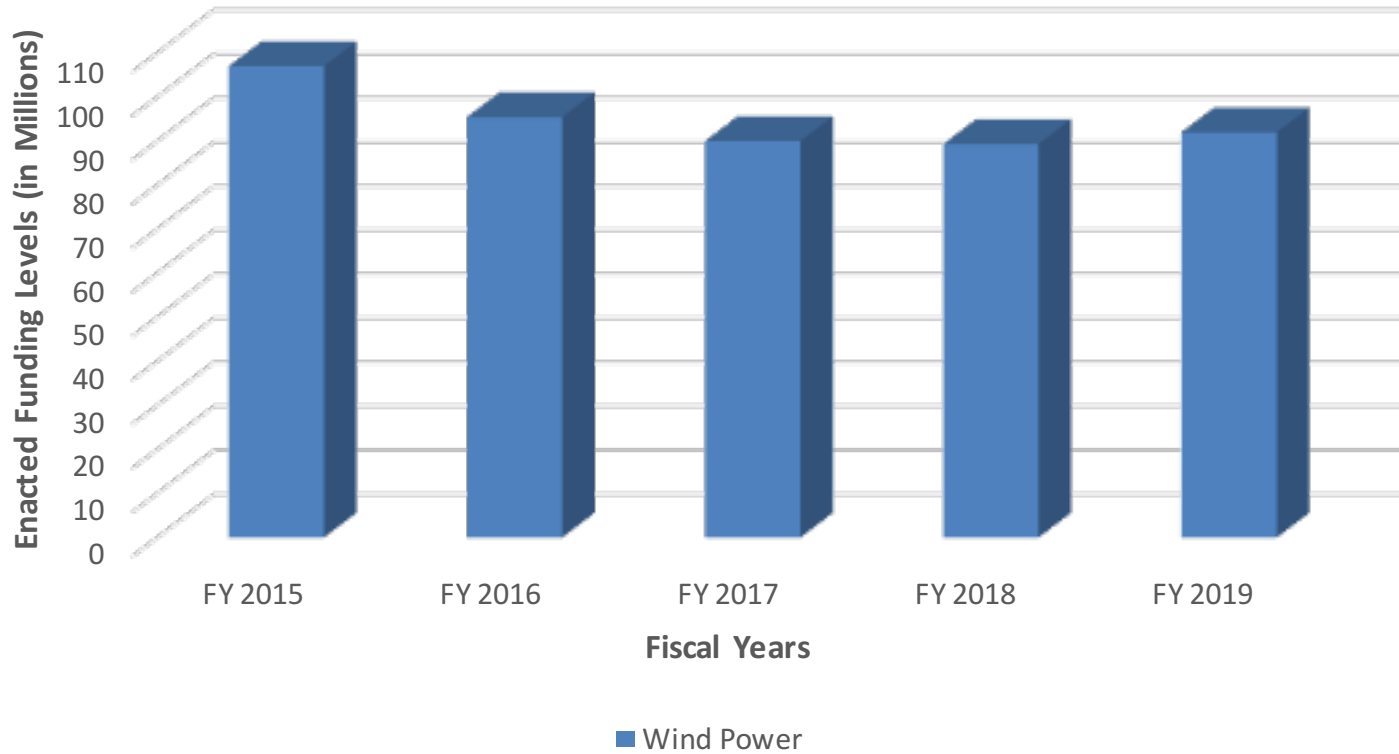
Within available funds, \$35,000,000 is provided for conventional hydropower and pumped storage activities, including \$6,600,000 for the purposes of section 242 of the Energy Policy Act of 2005. The agreement provides \$5,000,000 for a competitive funding opportunity for industry-led research, development, and deployment of cross-cutting energy converter technologies for run-of-river and tailrace applications to better utilize underdeveloped low-head and other hydropower resources.”

# FY 2018 DOD Marine Energy Funding Language

Congress provided \$35 million in the FY 2018 Defense appropriations bill for the U.S. Navy to support Alternative and Renewable Energy research and development. These funds include the Navy's various marine energy investments, such as the Wave Energy Test Site in Hawaii and other programs nationwide. These investments are important for developers to access as there are no cost-share requirements.

***“Navy Alternative Energy Research.***- The Committee notes the fiscal and operational value of investing in alternative energy research and encourages the Navy to continue research, development, test and deployment of advanced energy systems that have the potential to reduce the cost of energy and increase energy security, reliability and resiliency at Department of Defense facilities. The Committee understands that the integration of emerging land- and ***ocean-based energy generation*** and energy efficiency technologies could potentially improve the operational security and resiliency of critical physical and cyber-physical infrastructure and encourages the Navy to invest in energy demonstration activities relating to Department of Defense facilities and activities in coordination with other Federal agencies and entities.”

# DOE Wind Energy Funding FY 2015-19



# FY 2019 DOE Wind Energy Directive Report Language

"Within available funds, the agreement provides \$10,000,000 for distributed wind and not less than \$10,000,000 for existing national-level offshore wind test facilities. The agreement provides not less than \$30,000,000 for the National Wind Technology Center, which shall include the development of a large-scale research platform to support next-generation wind energy science and manufacturing and systems integration of multiple energy generation, consumption, and storage technologies with the grid. The Department is directed to support the advancement of innovative technologies for offshore wind development, including freshwater, deep water, shallow water, and transitional depth installations. Further, the Department is directed to support innovative offshore wind demonstration projects, including efforts to optimize development, design, construction methods, testing plans, and economic value proposition.



# FY 2019 DOE Wind Energy Directive Report Language

The agreement provides \$10,000,000 for a competitively awarded solicitation for additional project development for offshore wind demonstration projects. The Department is also directed to support the deployment and testing of scale floating wind turbines designed to reduce energy costs. Within available funds, the agreement provides not less than \$30,000,000 for the Department to prioritize early-stage research on materials and manufacturing methods and advanced components that will enable accessing high-quality wind resources, on development that will enable these technologies to compete in the marketplace without the need for subsidies, and on activities that will accelerate fundamental offshore-specific research and development, such as those that target technology and deployment challenges unique to U.S. waters."

# Questions? Thank you!

Happy Hour  
Tonight @ 7:30 pm  
Sidebar — Lompoc Brewing

**Paul Gay**  
**paul@strategicmi.com**  
**202.467.5459**

