

113TH CONGRESS
1ST SESSION

S. _____

To promote research, development, and demonstration of marine and hydrokinetic renewable energy technologies, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Mr. WYDEN (for himself and Ms. MURKOWSKI) introduced the following bill; which was read twice and referred to the Committee on

A BILL

To promote research, development, and demonstration of marine and hydrokinetic renewable energy technologies, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “Marine and Hydrokinetic Renewable Energy Act of
6 2013”.

7 (b) TABLE OF CONTENTS.—The table of contents of
8 this Act is as follows:

Sec. 1. Short title; table of contents.

TITLE I—MARINE AND HYDROKINETIC RENEWABLE ENERGY
TECHNOLOGIES

- Sec. 101. Definition of marine and hydrokinetic renewable energy.
 Sec. 102. Marine and hydrokinetic renewable energy research and development.
 Sec. 103. National Marine Renewable Energy Research, Development, and
 Demonstration Centers.
 Sec. 104. Authorization of appropriations.

TITLE II—MARINE AND HYDROKINETIC RENEWABLE ENERGY
REGULATORY EFFICIENCY

- Sec. 201. Marine and hydrokinetic renewable energy projects and facilities.

1 **TITLE I—MARINE AND**
 2 **HYDROKINETIC RENEWABLE**
 3 **ENERGY TECHNOLOGIES**

4 **SEC. 101. DEFINITION OF MARINE AND HYDROKINETIC RE-**
 5 **NEWABLE ENERGY.**

6 Section 632 of the Energy Independence and Security
 7 Act of 2007 (42 U.S.C. 17211) is amended in the matter
 8 preceding paragraph (1) by striking “electrical”.

9 **SEC. 102. MARINE AND HYDROKINETIC RENEWABLE EN-**
 10 **ERGY RESEARCH AND DEVELOPMENT.**

11 Section 633 of the Energy Independence and Security
 12 Act of 2007 (42 U.S.C. 17212) is amended to read as
 13 follows:

14 **“SEC. 633. MARINE AND HYDROKINETIC RENEWABLE EN-**
 15 **ERGY RESEARCH AND DEVELOPMENT.**

16 “The Secretary, in consultation with the Secretary of
 17 the Interior, the Secretary of Commerce, and the Federal
 18 Energy Regulatory Commission, shall carry out a program
 19 of research, development, demonstration, and commercial

1 application to expand marine and hydrokinetic renewable
2 energy production, including programs—

3 “(1) to assist technology development to im-
4 prove the components, processes, and systems used
5 for power generation from marine and hydrokinetic
6 renewable energy resources;

7 “(2) to establish critical testing infrastructure
8 necessary—

9 “(A) to cost effectively and efficiently test
10 and prove marine and hydrokinetic renewable
11 energy devices; and

12 “(B) to accelerate the technological readi-
13 ness and commercialization of those devices;

14 “(3) to support efforts to increase the efficiency
15 of energy conversion, lower the cost, increase the
16 use, improve the reliability, and demonstrate the ap-
17 plicability of marine and hydrokinetic renewable en-
18 ergy technologies by participating in demonstration
19 projects;

20 “(4) to investigate variability issues and the ef-
21 ficient and reliable integration of marine and
22 hydrokinetic renewable energy with the utility grid;

23 “(5) to identify and study critical short- and
24 long-term needs to create a sustainable marine and

1 hydrokinetic renewable energy supply chain based in
2 the United States;

3 “(6) to increase the reliability and survivability
4 of marine and hydrokinetic renewable energy tech-
5 nologies, including development of corrosion-resist-
6 ant and anti-fouling materials;

7 “(7) to verify the performance, reliability, main-
8 tainability, and cost of new marine and hydrokinetic
9 renewable energy device designs and system compo-
10 nents in an operating environment;

11 “(8) to coordinate and avoid duplication of ac-
12 tivities across programs of the Department and
13 other applicable Federal agencies, including National
14 Laboratories;

15 “(9) to identify opportunities for joint research
16 and development programs and development of
17 economies of scale between—

18 “(A) marine and hydrokinetic renewable
19 energy technologies; and

20 “(B) other renewable energy and fossil en-
21 ergy programs, offshore oil and gas production
22 activities, and activities of the Department of
23 Defense; and

24 “(10) to support in-water technology develop-
25 ment with international partners using existing co-

1 operative procedures (including memoranda of un-
2 derstanding)—

3 “(A) to allow cooperative funding and
4 other support of value to be exchanged and le-
5 veraged; and

6 “(B) to encourage the participation of
7 international research centers and companies in
8 the United States and the participation of re-
9 search centers and companies of the United
10 States in international projects.”.

11 **SEC. 103. NATIONAL MARINE RENEWABLE ENERGY RE-**
12 **SEARCH, DEVELOPMENT, AND DEMONSTRA-**
13 **TION CENTERS.**

14 Section 634 of the Energy Independence and Security
15 Act of 2007 (42 U.S.C. 17213) is amended by striking
16 subsection (b) and inserting the following:

17 “(b) PURPOSES.—The Centers (in coordination with
18 the Department and National Laboratories) shall—

19 “(1) advance research, development, demonstra-
20 tion, and commercial application of marine and
21 hydrokinetic renewable energy technologies;

22 “(2) support in-water testing and demonstra-
23 tion of marine and hydrokinetic renewable energy
24 technologies, including facilities capable of testing—

1 “(A) marine and hydrokinetic renewable
2 energy systems of various technology readiness
3 levels and scales;

4 “(B) a variety of technologies in multiple
5 test berths at a single location; and

6 “(C) arrays of technology devices; and

7 “(3) serve as information clearinghouses for the
8 marine and hydrokinetic renewable energy industry
9 by collecting and disseminating information on best
10 practices in all areas relating to developing and
11 managing marine and hydrokinetic renewable energy
12 resources and energy systems.”.

13 **SEC. 104. AUTHORIZATION OF APPROPRIATIONS.**

14 Section 636 of the Energy Independence and Security
15 Act of 2007 (42 U.S.C. 17215) is amended by striking
16 “2008 through 2012” and inserting “2014 through
17 2017”.

18 **TITLE II—MARINE AND**
19 **HYDROKINETIC RENEWABLE**
20 **ENERGY REGULATORY EFFI-**
21 **CIENCY**

22 **SEC. 201. MARINE AND HYDROKINETIC RENEWABLE EN-**
23 **ERGY PROJECTS AND FACILITIES.**

24 Part I of the Federal Power Act (16 U.S.C. 792 et
25 seq.) is amended by adding at the end the following:

1 **“SEC. 34. PILOT LICENSE FOR MARINE AND HYDROKINETIC**
2 **RENEWABLE ENERGY PROJECTS.**

3 “(a) DEFINITION OF HYDROKINETIC PILOT
4 PROJECT.—

5 “(1) IN GENERAL.—In this section, the term
6 ‘hydrokinetic pilot project’ means a facility that gen-
7 erates energy from—

8 “(A) waves, tides, or currents in an ocean,
9 estuary, or tidal area; or

10 “(B) free-flowing water in a river, lake, or
11 stream.

12 “(2) EXCLUSIONS.—The term ‘hydrokinetic
13 pilot project’ does not include a project that uses a
14 dam or other impoundment for electric power pur-
15 poses.

16 “(b) PILOT LICENSES AUTHORIZED.—The Commis-
17 sion may issue a pilot license to construct, operate, and
18 maintain a hydrokinetic pilot project that meets the cri-
19 teria listed in subsection (c).

20 “(c) LICENSE CRITERIA.—The Commission may
21 issue a pilot license for a hydrokinetic pilot project if the
22 project—

23 “(1) will have an installed capacity of not more
24 than 10 megawatts;

25 “(2) is for a term of not more than 10 years;

1 “(3) will not cause a significant adverse envi-
2 ronmental impact or interfere with navigation;

3 “(4) is removable and can shut down on reason-
4 able notice in the event of a significant adverse safe-
5 ty, navigation, or environmental impact;

6 “(5) can be removed, and the site can be re-
7 stored, by the end of the license term, unless the
8 project has obtained a new license or the Commis-
9 sion has determined, based on substantial evidence,
10 that the project should not be removed because it
11 would be preferable for environmental or other rea-
12 sons not to; and

13 “(6) is primarily for the purpose of—

14 “(A) testing new hydrokinetic technologies;

15 “(B) locating appropriate sites for new
16 hydrokinetic technologies; or

17 “(C) determining the environmental and
18 other effects of a hydrokinetic technology.

19 “(d) LEAD AGENCY.—In carrying out this section,
20 the Commission shall act as the lead agency—

21 “(1) to coordinate all applicable Federal author-
22 izations; and

23 “(2) to comply with the National Environ-
24 mental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

25 “(e) SCHEDULE GOALS.—

1 “(1) IN GENERAL.—Not later than 30 days
2 after the date on which the Commission receives a
3 completed application, and following consultation
4 with Federal, State, and local agencies with jurisdic-
5 tion over the hydrokinetic pilot project, the Commis-
6 sion shall develop and issue pilot license approval
7 process scheduling goals that cover all Federal,
8 State, and local permits required by law.

9 “(2) COMPLIANCE.—Applicable Federal, State,
10 and local agencies shall comply with the goals estab-
11 lished under paragraph (1) to the maximum extent
12 practicable, consistent with applicable law.

13 “(3) 1-YEAR GOAL .—It shall be the goal of the
14 Commission and the other applicable agencies to
15 complete the pilot license process by not later than
16 1 year after the date on which the Commission re-
17 ceives the completed application.

18 “(f) SIZE LIMITATIONS.—

19 “(1) IN GENERAL.—The Commission may grant
20 a pilot license for a project located in the ocean if
21 the project covers a surface area of not more than
22 1 square nautical mile.

23 “(2) EXCEPTION.—The Commission, at the dis-
24 cretion of the Commission and for good cause, may

1 grant a pilot license for a project that covers a sur-
2 face area of more than 1 square nautical mile.

3 “(3) LIMITATION.—For proposed projects lo-
4 cated in an estuary, tidal area, river, lake, or
5 stream, the Commission shall determine the size
6 limit on a case-by-case basis, taking into account all
7 relevant factors.

8 “(g) EXTENSIONS AUTHORIZED.—On application by
9 a project, the Commission may make a 1-time extension
10 of a pilot license for a term not to exceed 5 years.”.