### 110TH CONGRESS 1ST SESSION

# H. R. 2036

To promote the development and use of marine and hydrokinetic renewable energy technologies, and for other purposes.

# IN THE HOUSE OF REPRESENTATIVES

April 25, 2007

Mr. Inslee (for himself, Mr. Holt, Mr. Hall of New York, Ms. Bordallo, Mr. Delahunt, and Mr. Blumenauer) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Science and Technology, Ways and Means, and Natural Resources, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

# A BILL

To promote the development and use 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.
- 4 This Act may be cited as the "Marine and
- 5 Hydrokinetic Renewable Energy Promotion Act".

### 1 SEC. 2. DEFINITION.

- 2 For purposes of this Act, the term "marine and
- 3 hydrokinetic renewable energy' means electrical energy
- 4 from—
- 5 (1) waves, tides, and currents in oceans, estu-
- 6 aries, and tidal areas;
- 7 (2) free flowing water in rivers, lakes, and
- 8 streams;
- 9 (3) free flowing water in man-made channels,
- including projects that utilize nonmechanical struc-
- tures to accelerate the flow of water for electric
- 12 power production purposes; and
- 13 (4) differentials in ocean temperature (ocean
- thermal energy conversion).
- 15 The term shall not include energy from any source that
- 16 utilizes a dam, diversionary structure, or impoundment for
- 17 electric power production purposes, except as provided in
- 18 paragraph (3).

### 19 SEC. 3. RESEARCH AND DEVELOPMENT.

- 20 (a) Program.—The Secretary of Energy, in con-
- 21 sultation with the Secretary of Commerce and the Sec-
- 22 retary of the Interior, shall establish a program of marine
- 23 and hydrokinetic renewable energy research focused on—
- 24 (1) developing and demonstrating marine and
- 25 hydrokinetic renewable energy technologies;

- 1 (2) reducing the manufacturing and operation 2 costs of marine and hydrokinetic renewable energy 3 technologies;
  - (3) increasing the reliability and survivability of marine and hydrokinetic renewable energy facilities;
  - (4) integrating marine and hydrokinetic renewable energy into electric grids;
  - (5) identifying opportunities for cross fertilization and development of economies of scale between offshore wind and marine and hydrokinetic renewable energy sources;
  - (6) identifying, in consultation with the Secretary of Commerce and the Secretary of the Interior, the environmental impacts of marine and hydrokinetic renewable energy technologies and ways to address adverse impacts, and providing public information concerning technologies and other means available for monitoring and determining environmental impacts; and
  - (7) standards development, demonstration, and technology transfer for advanced systems engineering and system integration methods to identify critical interfaces.
- 24 (b) AUTHORIZATION OF APPROPRIATIONS.—There 25 are authorized to be appropriated to the Secretary of En-

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

- 1 ergy for carrying out this section \$50,000,000 for each
- 2 of the fiscal years 2008 through 2017.

# 3 SEC. 4. ADAPTIVE MANAGEMENT AND ENVIRONMENTAL

- 4 FUND.
- 5 (a) FINDINGS.—The Congress finds that—
- (1) the use of marine and hydrokinetic renewable energy technologies can avoid contributions to global warming gases, and such technologies can be produced domestically;
- 10 (2) marine and hydrokinetic renewable energy 11 is a nascent industry; and
- 12 (3) the United States must work to promote 13 new renewable energy technologies that reduce con-14 tributions to global warming gases and improve our 15 country's domestic energy production in a manner 16 that is consistent with environmental protection, 17 recreation, and other public values.
- 18 (b) ESTABLISHMENT.—The Secretary of Energy
  19 shall establish an Adaptive Management and Environ20 mental Fund, and shall lend amounts from that fund to
  21 entities described in subsection (f) to cover the costs of
  22 projects that produce marine and hydrokinetic renewable
  23 energy. Such costs include design, fabrication, deploy-

ment, operation, monitoring, and decommissioning costs.

- 1 related loans provided by commercial lending institutions
- 2 to the extent the Secretary of Energy considers appro-
- 3 priate.
- 4 (c) Reasonable Access.—As a condition of receiv-
- 5 ing a loan under this section, a recipient shall provide rea-
- 6 sonable access, to Federal or State agencies and other re-
- 7 search institutions as the Secretary considers appropriate,
- 8 to the project area and facilities for the purposes of inde-
- 9 pendent environmental research.
- 10 (d) Public Availability.—The results of any as-
- 11 sessment or demonstration paid for, in whole or in part,
- 12 with funds provided under this section shall be made avail-
- 13 able to the public, except to the extent that they contain
- 14 information that is protected from disclosure under sec-
- 15 tion 552(b) of title 5, United States Code.
- 16 (e) Repayment of Loans.—
- 17 (1) IN GENERAL.—The Secretary of Energy
- shall require a recipient of a loan under this section
- to repay the loan, plus interest at a rate of 2.1 per-
- cent per year, over a period not to exceed 20 years,
- beginning after the commercial generation of electric
- 22 power from the project commences. Such repayment
- shall be required at a rate that takes into account
- the economic viability of the loan recipient and en-
- sures regular and timely repayment of the loan.

- (2) Beginning of Repayment Required.—
  No repayments shall be required under this subsection until after the project generates net proceeds. For purposes of this paragraph, the term "net proceeds" means proceeds from the commercial sale of electricity after payment of project-related costs, including taxes and regulatory fees that have not been paid using funds from a loan provided for the project under this section.
  - (3) TERMINATION.—Repayment of a loan made under this section shall terminate as of the date that the project for which the loan was provided ceases commercial generation of electricity if a governmental permitting authority has ordered the closure of the facility because of a finding that the project has unacceptable adverse environmental impacts, except that the Secretary shall require a loan recipient to continue making loan repayments for the cost of equipment, obtained using funds from the loan that have not otherwise been repaid under rules established by the Secretary, that is utilized in a subsequent project for the commercial generation of electricity.
- 24 (f) Adaptive Management Plan.—In order to re-25 ceive a loan under this section, an applicant for a Federal

- 1 license or permit to construct, operate, or maintain a ma-
- 2 rine or hydrokinetic renewable energy project shall provide
- 3 to the Federal agency with primary jurisdiction to issue
- 4 such license or permit an adaptive management plan for
- 5 the proposed project. Such plan shall—
- 6 (1) be prepared in consultation with other par-7 ties to the permitting or licensing proceeding, includ-8 ing all Federal, State, municipal, and tribal agencies 9 with authority under applicable Federal law to re-10 quire or recommend design or operating conditions, 11 for protection, mitigation, and enhancement of fish 12 and wildlife resources, water quality, navigation, 13 public safety, land reservations, or recreation, for in-14 corporation into the permit or license;
  - (2) set forth specific and measurable objectives for the protection, mitigation, and enhancement of fish and wildlife resources, water quality, navigation, public safety, land reservations, or recreation, as required or recommended by governmental agencies described in paragraph (1), and shall require monitoring to ensure that these objectives are met;
  - (3) provide specifically for the modification or, if necessary, removal of the marine or hydrokinetic renewable energy project based on findings by the licensing or permitting agency that the marine or

15

16

17

18

19

20

21

22

23

24

25

- 1 hydrokinetic renewable energy project has not at-
- 2 tained or will not attain the specific and measurable
- 3 objectives set forth in paragraph (2); and
- 4 (4) be approved and incorporated in the Fed-
- 5 eral license or permit.
- 6 (g) Sunset.—The Secretary of Energy shall trans-
- 7 mit a report to the Congress when the Secretary of Energy
- 8 determines that the technologies supported under this Act
- 9 have achieved a level of maturity sufficient to enable the
- 10 expiration of the programs under this Act. The Secretary
- 11 of Energy shall not make any new loans under this section
- 12 after the report is transmitted under this subsection.
- 13 SEC. 5. PROGRAMMATIC ENVIRONMENTAL IMPACT STATE-
- 14 MENT.
- 15 The Secretary of Commerce and the Secretary of the
- 16 Interior shall, in cooperation with the Federal Energy
- 17 Regulatory Commission and the Secretary of Energy, and
- 18 in consultation with appropriate State agencies, jointly
- 19 prepare programmatic environmental impact statements
- 20 which contain all the elements of an environmental impact
- 21 statement under section 102 of the National Environ-
- 22 mental Policy Act of 1969 (42 U.S.C. 4332), regarding
- 23 the impacts of the deployment of marine and hydrokinetic
- 24 renewable energy technologies in the navigable waters of
- 25 the United States. One programmatic environmental im-

- 1 pact statement shall be prepared under this section for
- 2 each of the Environmental Protection Agency regions of
- 3 the United States. The agencies shall issue the pro-
- 4 grammatic environmental impact statements under this
- 5 section not later than 18 months after the date of enact-
- 6 ment of this Act. The programmatic environmental impact
- 7 statements shall evaluate among other things the potential
- 8 impacts of site selection on fish and wildlife and related
- 9 habitat. Nothing in this section shall operate to delay con-
- 10 sideration of any application for a license or permit for
- 11 a marine and hydrokinetic renewable energy technology
- 12 project.
- 13 SEC. 6. PRODUCTION CREDIT FOR ELECTRICITY PRO-
- 14 DUCED FROM MARINE RENEWABLES.
- (a) In General.—Paragraph (1) of section 45(c) of
- 16 the Internal Revenue Code of 1986 (relating to resources)
- 17 is amended by striking "and" at the end of subparagraph
- 18 (G), by striking the period at the end of subparagraph
- 19 (H) and inserting ", and", and by adding at the end the
- 20 following new subparagraph:
- 21 "(I) marine and hydrokinetic renewable en-
- 22 ergy.".
- 23 (b) Marine Renewables.—Subsection (c) of sec-
- 24 tion 45 of such Code is amended by adding at the end
- 25 the following new paragraph:

1	"(10) Marine and hydrokinetic renew-
2	ABLE ENERGY.—
3	"(A) IN GENERAL.—The term 'marine and
4	hydrokinetic renewable energy' means energy
5	derived from—
6	"(i) waves, tides, and currents in
7	oceans, estuaries, and tidal areas,
8	"(ii) free flowing water in rivers,
9	lakes, and streams,
10	"(iii) free flowing water in man-made
11	channels, including projects that utilize
12	nonmechanical structures to accelerate the
13	flow of water for electric power production
14	purposes, or
15	"(iv) differentials in ocean tempera-
16	ture (ocean thermal energy conversion).
17	"(B) Exceptions.—Such term shall not
18	include any energy which is—
19	"(i) described in subparagraphs (A)
20	through (H) of paragraph (1), or
21	"(ii) derived from any source that uti-
22	lizes a dam, diversionary structure, or im-
23	poundment for electric power production
24	purposes, except as provided in subpara-
25	graph (A)(iii).".

- 1 (c) Definition of Facility.—Subsection (d) of
- 2 section 45 of such Code is amended by adding at the end
- 3 the following new paragraph:
- 4 "(11) Marine and hydrokinetic renew-
- 5 ABLE ENERGY FACILITIES.—In the case of a facility
- 6 producing electricity from marine and hydrokinetic
- 7 renewable energy, the term 'qualified facility' means
- 8 any facility owned by the taxpayer which is origi-
- 9 nally placed in service after the date of the enact-
- ment of this paragraph and before January 1,
- 11 2009.".
- 12 (d) Effective Date.—The amendments made by
- 13 this section shall apply to electricity produced and sold
- 14 after the date of the enactment of this Act, in taxable
- 15 years ending after such date.
- 16 SEC. 7. INVESTMENT CREDIT AND 5-YEAR DEPRECIATION
- 17 FOR EQUIPMENT WHICH PRODUCES ELEC-
- 18 TRICITY FROM MARINE AND HYDROKINETIC
- 19 RENEWABLE ENERGY.
- 20 (a) In General.—Subparagraph (A) of section
- 21 48(a)(3) of the Internal Revenue Code of 1986 (relating
- 22 to energy property) is amended by striking "or" at the
- 23 end of clause (iii), by inserting "or" at the end of clause
- 24 (iv), and by adding at the end the following new clause:

1	"(v) equipment which uses marine
2	and hydrokinetic renewable energy (as de-
3	fined in section $45(c)(10)$ ) but only with
4	respect to periods ending before January
5	1, 2018,".
6	(b) 30 Percent Credit.—Clause (i) of section
7	48(a)(2)(A) of such Code is amended by striking "and"
8	at the end of subclause (II) and by adding at the end the
9	following new subclause:
10	"(IV) energy property described
11	in paragraph (3)(A)(v), and".
	in paragraph (3)(A)(v), and".  (c) Credits Allowed for Investment and Pro-
11	
11 12	(c) Credits Allowed for Investment and Pro-
<ul><li>11</li><li>12</li><li>13</li></ul>	(c) Credits Allowed for Investment and Production.—Paragraph (3) of section 48(a)(3) is amended
11 12 13 14	(c) Credits Allowed for Investment and Production.—Paragraph (3) of section 48(a)(3) is amended by inserting "(other than property described in subpara-
11 12 13 14 15	(c) CREDITS ALLOWED FOR INVESTMENT AND PRODUCTION.—Paragraph (3) of section 48(a)(3) is amended by inserting "(other than property described in subparagraph (A)(v))" after "any property" in the last sentence
11 12 13 14 15 16	(c) CREDITS ALLOWED FOR INVESTMENT AND PRODUCTION.—Paragraph (3) of section 48(a)(3) is amended by inserting "(other than property described in subparagraph (A)(v))" after "any property" in the last sentence thereof.
<ul><li>11</li><li>12</li><li>13</li><li>14</li><li>15</li><li>16</li><li>17</li></ul>	(c) CREDITS ALLOWED FOR INVESTMENT AND PRODUCTION.—Paragraph (3) of section 48(a)(3) is amended by inserting "(other than property described in subparagraph (A)(v))" after "any property" in the last sentence thereof.  (d) Effective Date.—The amendments made by

 $\bigcirc$