

111<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

# H. R. 4906

To reauthorize the Advanced Research Projects Agency—Energy, and for other purposes.

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IN THE HOUSE OF REPRESENTATIVES

MARCH 22, 2010

Mr. GORDON of Tennessee introduced the following bill; which was referred to the Committee on Science and Technology

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## A BILL

To reauthorize the Advanced Research Projects Agency—  
Energy, 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 “ARPA–E Reauthoriza-  
5       tion Act of 2010”.

6       **SEC. 2. ARPA-E AMENDMENTS.**

7       Section 5012 of the America COMPETES Act (42  
8       U.S.C. 16538) is amended—

9               (1) in subsection (c)(2)—

1 (A) in subparagraph (A), by inserting  
2 “and applied” after “advances in fundamental”;

3 (B) by striking “and” at the end of sub-  
4 paragraph (B);

5 (C) by striking the period at the end of  
6 subparagraph (C) and inserting “; and”; and

7 (D) by adding at the end the following new  
8 subparagraph:

9 “(D) promoting the commercial application  
10 of advanced energy technologies.”;

11 (2) in subsection (e)(3), by amending subpara-  
12 graph (C) to read as follows:

13 “(C) research and development of ad-  
14 vanced manufacturing process and technologies  
15 for the domestic manufacturing of novel energy  
16 technologies; and”;

17 (3) by redesignating subsections (f) through  
18 (m) as subsections (g), (h), (i), (j), (l), (m), (n), and  
19 (o), respectively;

20 (4) by inserting after subsection (e) the fol-  
21 lowing new subsection:

22 “(f) AWARDS.—In carrying out this section, the Di-  
23 rector shall initiate and execute awards in the form of  
24 grants, contracts, cooperative agreements, cash prizes,  
25 and other transactions.”;

1           (5) in subsection (g), as so redesignated by  
2 paragraph (3) of this section—

3           (A) by redesignating paragraphs (1) and  
4 (2) as paragraphs (2) and (3), respectively;

5           (B) by inserting before paragraph (2), as  
6 so redesignated by subparagraph (A) of this  
7 paragraph, the following new paragraph:

8           “(1) IN GENERAL.—The Director shall establish  
9 and maintain within ARPA–E a staff, including  
10 legal counsel, contracting personnel, and program di-  
11 rectors, with sufficient qualifications and expertise  
12 to enable ARPA–E to carry out its responsibilities  
13 under this section separate and distinct from the op-  
14 erations of the rest of the Department.”;

15           (C) in paragraph (2)(A), as so redesi-  
16 gnated by subparagraph (A) of this paragraph,  
17 by striking “each of”;

18           (D) in paragraph (2)(B), as so redesi-  
19 gnated by subparagraph (A) of this paragraph—

20           (i) in clause (iv), by striking “, with  
21 advice under subsection (j) as appro-  
22 priate,”;

23           (ii) by redesignating clauses (v) and  
24 (vi) as clauses (vi) and (viii), respectively;

1 (iii) by inserting after clause (iv) the  
2 following new clause:

3 “(v) identifying innovative cost-shar-  
4 ing arrangements for ARPA–E projects,  
5 including through use of the authority  
6 under section 988(b)(3) of the Energy Pol-  
7 icy Act of 2005 (42 U.S.C. 16352(b)(3));”;

8 (iv) in clause (vi), as so redesignated  
9 by clause (ii) of this subparagraph, by  
10 striking “; and” and inserting a semicolon;  
11 and

12 (v) by inserting after clause (vi), as so  
13 redesignated by clause (ii) of this subpara-  
14 graph, the following new clause:

15 “(vii) identifying mechanisms for com-  
16 mercial application of successful energy  
17 technology development projects, including  
18 through establishment of partnerships be-  
19 tween awardees and commercial entities;  
20 and”;

21 (E) in paragraph (2)(C), as so redesi-  
22 gnated by subparagraph (A) of this paragraph,  
23 by inserting “up to” after “shall be”;

24 (F) in paragraph (3), as so redesignated  
25 by subparagraph (A) of this paragraph, by

1 striking subparagraph (B) and redesignating  
2 subparagraphs (C) and (D) as subparagraphs  
3 (B) and (C), respectively;

4 (G) by striking “program managers” each  
5 place it appears and inserting “program direc-  
6 tors”;

7 (H) by striking “program manager” each  
8 place it appears and inserting “program direc-  
9 tor”; and

10 (I) by adding at the end the following new  
11 paragraph:

12 “(4) FELLOWSHIPS.—The Director is author-  
13 ized to select exceptional early career and senior sci-  
14 entific, legal, business, and technical personnel to  
15 serve as fellows to work at ARPA–E for terms not  
16 to exceed two years. Responsibilities of fellows may  
17 include—

18 “(A) supporting program managers in pro-  
19 gram creation, design, implementation, and  
20 management;

21 “(B) exploring technical fields for future  
22 ARPA–E program areas;

23 “(C) assisting the Director in the creation  
24 of the strategic vision for ARPA–E referred to  
25 in subsection (h)(2);

1           “(D) preparing energy technology and eco-  
2           nomic analyses; and

3           “(E) any other appropriate responsibilities  
4           identified by the Director.”;

5           (6) in subsection (h)(2), as so redesignated by  
6           paragraph (3) of this section—

7           (A) by striking “2008” and inserting  
8           “2010”; and

9           (B) by striking “2011” and inserting  
10          “2013”;

11          (7) by amending subsection (j), as so redesign-  
12          nated by paragraph (3) of this section, to read as  
13          follows:

14          “(j) FEDERAL DEMONSTRATION OF TECH-  
15          NOLOGIES.—The Director shall seek opportunities to part-  
16          ner with purchasing and procurement programs of Federal  
17          agencies to demonstrate energy technologies resulting  
18          from activities funded through ARPA-E.”;

19          (8) by inserting after such subsection (j) the  
20          following new subsection:

21          “(k) EVENTS.—The Director is authorized to con-  
22          vene, organize, and sponsor events that further the objec-  
23          tives of ARPA-E, including events that assemble award-  
24          ees, the most promising applicants for ARPA-E funding,  
25          and a broad range of ARPA-E stakeholders (which may

1 include members of relevant scientific research and aca-  
2 demic communities, government officials, financial institu-  
3 tions, private investors, entrepreneurs, and other private  
4 entities), for the purposes of—

5           “(1) demonstrating projects of ARPA–E award-  
6 ees;

7           “(2) demonstrating projects of finalists for  
8 ARPA–E awards and other energy technology  
9 projects;

10           “(3) facilitating discussion of the commercial  
11 application of energy technologies developed under  
12 ARPA–E and other government-sponsored research  
13 and development programs; or

14           “(4) such other purposes as the Director con-  
15 siders appropriate.”;

16           (9) in subsection (m)(1), as so redesignated by  
17 paragraph (3) of this section, by striking “4 years”  
18 and inserting “6 years”;

19           (10) in section (m)(2)(B), as so redesignated by  
20 paragraph (3) of this section, by inserting “, and  
21 how those lessons may apply to the operation of  
22 other programs within the Department of Energy”  
23 after “ARPA-E”;

1           (11) by amending subsection (o)(2), as so re-  
2           designated by paragraph (3) of this section, to read  
3           as follows:

4           “(2) AUTHORIZATION OF APPROPRIATIONS.—  
5           Subject to paragraph (4), there are authorized to be  
6           appropriated to the Director for deposit in the  
7           Fund, without fiscal year limitation—

8                   “(A) \$300,000,000 for fiscal year 2011;

9                   “(B) \$500,000,000 for fiscal year 2012;

10                   “(C) \$700,000,000 for fiscal year 2013;

11                   “(D) \$900,000,000 for fiscal year 2014;

12                   “(E) \$1,000,000,000 for fiscal year 2015;

13           and

14                   “(F) such sums as are necessary for each  
15           of fiscal years 2016 through 2020.”; and

16           (12) in subsection (o), as so redesignated by  
17           paragraph (3) of this section, by—

18                   (A) striking paragraph (4); and

19                   (B) redesignated paragraph (5) as para-  
20           graph (4).

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