

113TH CONGRESS
1ST SESSION

S. 1739

To modify the efficiency standards for grid-enabled water heaters.

IN THE SENATE OF THE UNITED STATES

NOVEMBER 20, 2013

Mr. HOEVEN (for himself, Mr. PRYOR, Mr. CHAMBLISS, Ms. KLOBUCHAR, and Mr. BLUNT) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To modify the efficiency standards for grid-enabled water heaters.

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. GRID-ENABLED WATER HEATERS.**

4 Part B of title III of the Energy Policy and Conserva-
5 tion Act (42 U.S.C. 6291 et seq.) is amended—

6 (1) in section 325(e) (42 U.S.C. 6295(e)), by
7 adding at the end the following:

8 “(6) **ADDITIONAL STANDARDS FOR GRID-EN-**
9 **ABLED WATER HEATERS.—**

10 “(A) **DEFINITIONS.—**In this paragraph:

1 “(i) ACTIVATION KEY.—The term ‘ac-
2 tivation key’ means a physical device or
3 control directly on the water heater, a soft-
4 ware code, or a digital communication
5 means—

6 “(I) that must be activated to en-
7 able the product to operate continu-
8 ously and at its designed specifica-
9 tions and capabilities; and

10 “(II) without which activation
11 the product will provide not greater
12 than 50 percent of the rated first
13 hour delivery of hot water certified by
14 the manufacturer.

15 “(ii) GRID-ENABLED WATER HEAT-
16 ER.—The term ‘grid-enabled water heater’
17 means an electric resistance water heater
18 that—

19 “(I) has a rated storage tank vol-
20 ume of more than 75 gallons;

21 “(II) is manufactured on or after
22 April 16, 2015;

23 “(III) has—

24 “(aa) an energy factor of
25 not less than 1.061 minus the

1 product obtained by multi-
2 plying—

3 “(AA) the rated storage
4 volume of the tank, ex-
5 pressed in gallons; and

6 “(BB) 0.00168; or

7 “(bb) an efficiency level
8 equivalent to the energy factor
9 under item (aa) and expressed as
10 a uniform energy descriptor
11 based on the revised test proce-
12 dure for water heaters described
13 in paragraph (5);

14 “(IV) is equipped by the manu-
15 facturer with an activation key; and

16 “(V) bears a permanent label ap-
17 plied by the manufacturer that—

18 “(aa) is made of material
19 not adversely affected by water;

20 “(bb) is attached by means
21 of non-water-soluble adhesive;
22 and

23 “(cc) advises purchasers and
24 end-users of the intended and ap-
25 propriate use of the product with

1 the following notice printed in
2 16.5 point Arial Narrow Bold
3 font:

4 “‘IMPORTANT INFORMATION: This water heater is
5 intended only for use as part of an electric thermal storage
6 or demand response program. It will not provide adequate
7 hot water unless enrolled in such a program and activated
8 by your utility company or another program operator.
9 Confirm the availability of a program in your local area
10 before purchasing or installing this product.’.

11 “(B) REQUIREMENT.—The manufacturer
12 or private labeler shall provide the activation
13 key only to utilities or other companies oper-
14 ating electric thermal storage or demand re-
15 sponse programs that use grid-enabled water
16 heaters.

17 “(C) REPORTS.—

18 “(i) MANUFACTURERS.—The Sec-
19 retary shall require each manufacturer of
20 grid-enabled water heaters to report to the
21 Secretary annually the quantity of grid-en-
22 abled water heaters that the manufacturer
23 ships each year.

24 “(ii) OPERATORS.—The Secretary
25 shall require utilities and other demand re-

1 sponse and thermal storage program oper-
2 ators to report annually the quantity of
3 grid-enabled water heaters activated for
4 their programs using forms of the Energy
5 Information Agency or using such other
6 mechanism that the Secretary determines
7 appropriate after an opportunity for notice
8 and comment.

9 “(iii) CONFIDENTIALITY REQUIRE-
10 MENTS.—The Secretary shall treat ship-
11 ment data reported by manufacturers as
12 confidential business information.

13 “(D) PUBLICATION OF INFORMATION.—

14 “(i) IN GENERAL.—In 2017 and
15 2019, the Secretary shall publish an anal-
16 ysis of the data collected under subpara-
17 graph (C) to assess the extent to which
18 shipped products are put into use in de-
19 mand response and thermal storage pro-
20 grams.

21 “(ii) PREVENTION OF PRODUCT DI-
22 VERSION.—If the Secretary determines
23 that sales of grid-enabled water heaters ex-
24 ceed by 15 percent or greater the quantity
25 of such products activated for use in de-

1 mand response and thermal storage pro-
2 grams annually, the Secretary shall, after
3 opportunity for notice and comment, estab-
4 lish procedures to prevent product diver-
5 sion for non-program purposes.

6 “(E) COMPLIANCE.—

7 “(i) IN GENERAL.—Subparagraphs
8 (A) through (D) shall remain in effect
9 until the Secretary determines under this
10 section that grid-enabled water heaters do
11 not require a separate efficiency require-
12 ment.

13 “(ii) EFFECTIVE DATE.—If the Sec-
14 retary exercises the authority described in
15 clause (i) or amends the efficiency require-
16 ment for grid-enabled water heaters, that
17 action will take effect on the date de-
18 scribed in subsection (m)(4)(A)(ii).

19 “(iii) CONSIDERATION.—In carrying
20 out this section with respect to electric
21 water heaters, the Secretary shall consider
22 the impact on thermal storage and demand
23 response programs, including the con-
24 sequent impact on energy savings, electric

1 bills, electric reliability, integration of re-
 2 newable resources, and the environment.

3 “(iv) REQUIREMENTS.—In carrying
 4 out this subparagraph, the Secretary shall
 5 require that grid-enabled water heaters be
 6 equipped with communication capability to
 7 enable the grid-enabled water heaters to
 8 participate in ancillary services programs if
 9 the Secretary determines that the tech-
 10 nology is available, practical, and cost-ef-
 11 fective.”; and

12 (2) in section 332 (42 U.S.C. 6302)—

13 (A) in paragraph (5), by striking “or” at
 14 the end;

15 (B) in the first paragraph (6), by striking
 16 the period at the end and inserting a semicolon;

17 (C) by redesignating the second paragraph
 18 (6) as paragraph (7);

19 (D) in subparagraph (B) of paragraph (7)
 20 (as so redesignated), by striking the period at
 21 the end and inserting “; or”; and

22 (E) by adding at the end the following:

23 “(8) with respect to grid-enabled water heaters
 24 that are not used as part of an electric thermal stor-

1 age or demand response program, for any person
2 knowingly and repeatedly—

3 “(A) to distribute activation keys for those
4 grid-enabled water heaters;

5 “(B) otherwise to enable the full operation
6 of those grid-enabled water heaters; or

7 “(C) to remove or render illegible the la-
8 bels of those grid-enabled water heaters.”.

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