

## Union Calendar No. 102

114<sup>TH</sup> CONGRESS  
1<sup>ST</sup> SESSION

# H. R. 906

[Report No. 114-142]

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

---

### IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 11, 2015

Mr. WHITFIELD (for himself, Mr. WELCH, Mr. LATTA, Mr. LOEBSACK, Mr. CRAMER, and Mr. MICHAEL F. DOYLE of Pennsylvania) introduced the following bill; which was referred to the Committee on Energy and Commerce

JUNE 9, 2015

Additional sponsors: Mr. BYRNE, Mr. EMMER of Minnesota, Mr. DUNCAN of South Carolina, Mr. MULVANEY, Mr. NOLAN, Mr. GIBSON, Mr. PETERSON, Mr. GOWDY, Mr. MESSER, Mr. BUCSHON, Mr. BLUM, and Mr. WOMACK

JUNE 9, 2015

Reported with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

[Strike out all after the enacting clause and insert the part printed in italic]

[For text of introduced bill, see copy of bill as introduced on February 11, 2015]

# **A BILL**

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

1 **SECTION 1. GRID-ENABLED WATER HEATERS.**

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

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

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

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

9 *“(i) ACTIVATION LOCK.—The term ‘ac-*  
10 *tivation lock’ means a control mechanism*  
11 *(either a physical device directly on the*  
12 *water heater or a control system integrated*  
13 *into the water heater) that is locked by de-*  
14 *fault and contains a physical, software, or*  
15 *digital communication that must be acti-*  
16 *vated with an activation key to enable the*  
17 *product to operate at its designed specifica-*  
18 *tions and capabilities and without which*  
19 *activation the product will provide not*  
20 *greater than 50 percent of the rated first*  
21 *hour delivery of hot water certified by the*  
22 *manufacturer.*

23 *“(ii) GRID-ENABLED WATER HEAT-*  
24 *ER.—The term ‘grid-enabled water heater’*  
25 *means an electric resistance water heater*  
26 *that—*

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

3                   “(II) is manufactured on or after  
4                   April 16, 2015;

5                   “(III) has—

6                   “(aa) an energy factor of not  
7                   less than 1.061 minus the product  
8                   obtained by multiplying—

9                   “(AA) the rated storage  
10                  volume of the tank, expressed  
11                  in gallons; and

12                  “(BB) 0.00168; or

13                  “(bb) an equivalent alter-  
14                  native standard prescribed by the  
15                  Secretary and developed pursuant  
16                  to paragraph (5)(E);

17                  “(IV) is equipped at the point of  
18                  manufacture with an activation lock;  
19                  and

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

22                  “(aa) is made of material  
23                  not adversely affected by water;

24                  “(bb) is attached by means of  
25                  non-water-soluble adhesive; and

1                   “(cc) advises purchasers and  
2                   end-users of the intended and ap-  
3                   propriate use of the product with  
4                   the following notice printed in  
5                   16.5 point Arial Narrow Bold  
6                   font:

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

14                   “(B) *REQUIREMENT.*—*The manufacturer or*  
15                   *private labeler shall provide the activation key*  
16                   *for a grid-enabled water heater only to a utility*  
17                   *or other company that operates an electric ther-*  
18                   *mal storage or demand response program that*  
19                   *uses such a grid-enabled water heater.*

20                   “(C) *REPORTS.*—

21                   “(i) *MANUFACTURERS.*—*The Secretary*  
22                   *shall require each manufacturer of grid-en-*  
23                   *abled water heaters to report to the Sec-*  
24                   *retary annually the quantity of grid-en-*

1            *abled water heaters that the manufacturer*  
2            *ships each year.*

3            “(ii) *OPERATORS.—The Secretary*  
4            *shall require utilities and other demand re-*  
5            *sponse and thermal storage program opera-*  
6            *tors to report annually the quantity of grid-*  
7            *enabled water heaters activated for their*  
8            *programs using forms of the Energy Infor-*  
9            *mation Agency or using such other mecha-*  
10           *nism that the Secretary determines appro-*  
11           *priate after an opportunity for notice and*  
12           *comment.*

13           “(iii) *CONFIDENTIALITY REQUIRE-*  
14           *MENTS.—The Secretary shall treat shipment*  
15           *data reported by manufacturers as con-*  
16           *fidential business information.*

17           “(D) *PUBLICATION OF INFORMATION.—*

18           “(i) *IN GENERAL.—In 2017 and 2019,*  
19           *the Secretary shall publish an analysis of*  
20           *the data collected under subparagraph (C)*  
21           *to assess the extent to which shipped prod-*  
22           *ucts are put into use in demand response*  
23           *and thermal storage programs.*

24           “(ii) *PREVENTION OF PRODUCT DIVER-*  
25           *SION.—If the Secretary determines that*

1           *sales of grid-enabled water heaters exceed by*  
2           *15 percent or greater the quantity of such*  
3           *products activated for use in demand re-*  
4           *sponse and thermal storage programs annu-*  
5           *ally, the Secretary shall, after opportunity*  
6           *for notice and comment, establish proce-*  
7           *dures to prevent product diversion for non-*  
8           *program purposes.*

9           “(E) COMPLIANCE.—

10           “(i) IN GENERAL.—Subparagraphs (A)  
11           *through (D) shall remain in effect until the*  
12           *Secretary determines under this section*  
13           *that—*

14           “(I) *grid-enabled water heaters do*  
15           *not require a separate efficiency re-*  
16           *quirement; or*

17           “(II) *sales of grid-enabled water*  
18           *heaters exceed by 15 percent or greater*  
19           *the quantity of such products activated*  
20           *for use in demand response and ther-*  
21           *mal storage programs annually and*  
22           *procedures to prevent product diversion*  
23           *for non-program purposes would not be*  
24           *adequate to prevent such product di-*  
25           *version.*

1           “(i) *EFFECTIVE DATE.*—If the Sec-  
2           retary exercises the authority described in  
3           clause (i) or amends the efficiency require-  
4           ment for grid-enabled water heaters, that  
5           action will take effect on the date described  
6           in subsection (m)(4)(A)(i).

7           “(iii) *CONSIDERATION.*—In carrying  
8           out this section with respect to electric  
9           water heaters, the Secretary shall consider  
10          the impact on thermal storage and demand  
11          response programs, including any impact  
12          on energy savings, electric bills, peak load  
13          reduction, electric reliability, integration of  
14          renewable resources, and the environment.

15          “(iv) *REQUIREMENTS.*—In carrying  
16          out this paragraph, the Secretary shall re-  
17          quire that grid-enabled water heaters be  
18          equipped with communication capability to  
19          enable the grid-enabled water heaters to  
20          participate in ancillary services programs  
21          if the Secretary determines that the tech-  
22          nology is available, practical, and cost-effec-  
23          tive.”;

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

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

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

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

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

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

11          “(8) for any person to—

12               “(A) activate an activation lock for a grid-  
13               enabled water heater with knowledge that such  
14               water heater is not used as part of an electric  
15               thermal storage or demand response program;

16               “(B) distribute an activation key for a grid-  
17               enabled water heater with knowledge that such  
18               activation key will be used to activate a grid-en-  
19               abled water heater that is not used as part of an  
20               electric thermal storage or demand response pro-  
21               gram;

22               “(C) otherwise enable a grid-enabled water  
23               heater to operate at its designed specification  
24               and capabilities with knowledge that such water

1 heater is not used as part of an electric thermal  
2 storage or demand response program; or

3 “(D) knowingly remove or render illegible  
4 the label of a grid-enabled water heater described  
5 in section 325(e)(6)(A)(ii)(V).”;

6 (3) in section 333(a) (42 U.S.C. 6303(a))—

7 (A) by striking “section 332(a)(5)” and in-  
8 serting “paragraph (5), (6), (7), or (8) of section  
9 332(a)”; and

10 (B) by striking “paragraph (1), (2), or (5)  
11 of section 332(a)” and inserting “paragraph (1),  
12 (2), (5), (6), (7), or (8) of section 332(a)”; and  
13 (4) in section 334 (42 U.S.C. 6304)—

14 (A) by striking “section 332(a)(5)” and in-  
15 serting “paragraph (5), (6), (7), or (8) of section  
16 332(a)”; and

17 (B) by striking “section 332(a)(6)” and in-  
18 serting “section 332(a)(7)”.



Union Calendar No. 102

114<sup>TH</sup> CONGRESS  
1<sup>ST</sup> Session

**H. R. 906**

[Report No. 114-142]

---

---

**A BILL**

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

---

---

JUNE 9, 2015

Reported with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed