

111TH CONGRESS
1ST SESSION

H. R. 3918

To amend the Internal Revenue Code of 1986 to provide a tax credit for qualified distributed thermal energy storage property, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

OCTOBER 22, 2009

Mr. THOMPSON of California (for himself, Mr. HERGER, Mr. POMEROY, Mr. LARSON of Connecticut, Mr. MICHAUD, and Ms. PINGREE of Maine) introduced the following bill; which was referred to the Committee on Ways and Means

A BILL

To amend the Internal Revenue Code of 1986 to provide a tax credit for qualified distributed thermal energy storage property, 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 “Thermal Energy Cool-
5 ing and Heating Act of 2009”.

1 **SEC. 2. CREDIT FOR QUALIFIED DISTRIBUTED THERMAL**
 2 **STORAGE PROPERTY INSTALLED IN A PRIN-**
 3 **CIPAL RESIDENCE.**

4 (a) IN GENERAL.—Subsection (a) of section 25D of
 5 the Internal Revenue Code of 1986 is amended by striking
 6 “and” at the end of paragraph (4), by striking the period
 7 at the end of paragraph (5) and inserting “, and”, and
 8 by adding at the end the following new paragraph:

9 “(6) 30 percent of the qualified distributed
 10 thermal energy storage property expenditures made
 11 by the taxpayer during such year.”.

12 (b) QUALIFIED DISTRIBUTED THERMAL ENERGY
 13 STORAGE PROPERTY EXPENDITURE.—Section 25D(d) of
 14 such Code is amended by adding at the end the following
 15 new paragraph:

16 “(6) QUALIFIED DISTRIBUTED THERMAL EN-
 17 ERGY STORAGE PROPERTY EXPENDITURE.—The
 18 term ‘qualified distributed thermal energy storage
 19 property expenditure’ means an expenditure for
 20 qualified distributed thermal energy storage property
 21 (as defined in section 48(e)) installed on or in con-
 22 nection with a dwelling unit located in the United
 23 States and used as a principal residence (within the
 24 meaning of section 121) by the taxpayer.”.

25 (c) MODIFICATION OF MAXIMUM CREDIT.—

1 (1) IN GENERAL.—Paragraph (1) of section
2 25D(b) of such Code is amended by striking “and”
3 at the end of subparagraph (B), by striking the pe-
4 riod at the end of subparagraph (C), and by adding
5 at the end the following new subparagraphs:

6 “(D) \$500 with respect to each half kilo-
7 watt of peak demand reduction (as defined in
8 section 48(e)(3)) by cooling systems which are
9 qualified distributed thermal energy storage
10 property (as defined in section 48(e)) for which
11 qualified distributed thermal energy storage
12 property expenditures are made, and

13 “(E) \$150 for each nameplate kilowatt
14 input of thermal heat storage by heating sys-
15 tems which are qualified distributed thermal en-
16 ergy storage property (as defined in section
17 48(e)) for which qualified distributed thermal
18 energy storage property expenditures are
19 made.”.

20 (2) CONFORMING AMENDMENTS.—Paragraph
21 (4) of section 25D(e) of such Code is amended—

22 (A) by amending so much of such para-
23 graph as precedes subparagraph (B) to read as
24 follows:

1 “(4) LIMITATIONS IN CASE OF JOINT OCCU-
2 PANCY.—In the case of any dwelling unit which is
3 jointly occupied and used during any calendar year
4 as a residence by two or more individuals the fol-
5 lowing rules shall apply:

6 “(A) MAXIMUM EXPENDITURES.—The
7 maximum amount of expenditures which may
8 be taken into account under subsection (a) by
9 all such individuals with respect to such dwell-
10 ing unit during such calendar year shall be—

11 “(i) \$1,667 in the case of each half
12 kilowatt of capacity of qualified fuel cell
13 property (as defined in section 48(c)(1))
14 for which qualified fuel cell property ex-
15 penditures are made,

16 “(ii) \$1,667 in case of each half kilo-
17 watt of peak demand reduction (as defined
18 in section 48(e)(3)) by cooling systems
19 which are qualified distributed thermal en-
20 ergy storage property (as defined in section
21 48(e)) for which qualified distributed ther-
22 mal energy storage property expenditures
23 are made, and

24 “(iii) \$333 in the case of each name-
25 plate kilowatt input of thermal heat stor-

1 age by heating systems which are qualified
 2 distributed thermal energy storage prop-
 3 erty (as defined in section 48(e)) for which
 4 qualified distributed thermal energy stor-
 5 age property expenditures are made.”, and
 6 (B) by adding at the end of subparagraph
 7 (B) the following:

8 “This subparagraph shall be applied separately
 9 with respect to qualified fuel cell property ex-
 10 penditures, qualified distributed thermal energy
 11 storage property expenditures with respect cool-
 12 ing systems, and qualified distributed thermal
 13 energy storage property with respect to heating
 14 systems.”.

15 (d) EFFECTIVE DATE.—The amendments made by
 16 this section shall apply to taxable years beginning after
 17 the date of the enactment of this Act.

18 **SEC. 3. BUSINESS CREDIT FOR QUALIFIED DISTRIBUTED**
 19 **THERMAL ENERGY STORAGE PROPERTY.**

20 (a) IN GENERAL.—Subparagraph (A) of section
 21 48(a)(3) of the Internal Revenue Code of 1986 is amended
 22 by deleting “or” at the end of clause (vi), by inserting
 23 “or” at the end of clause (vii), and by inserting clause
 24 (vii) the following new clause:

1 “(viii) qualified distributed thermal
 2 energy storage property but only with re-
 3 spect to periods ending before January 1,
 4 2017,”.

5 (b) 30 PERCENT CREDIT.—Clause (i) of section
 6 48(a)(2)(A) of such Code is amended by striking “and”
 7 at the end of subclause (III) and by inserting after sub-
 8 clause (IV) the following new subclause:

9 “(V) qualified distributed ther-
 10 mal energy storage property, and”.

11 (c) QUALIFIED DISTRIBUTED THERMAL ENERGY
 12 STORAGE PROPERTY.—Section 48 of such Code is amend-
 13 ed by adding at the end the following new subsection:

14 “(e) QUALIFIED DISTRIBUTED THERMAL ENERGY
 15 STORAGE PROPERTY.—For the purposes of this section:

16 “(1) IN GENERAL.—The term ‘qualified distrib-
 17 uted thermal energy storage property’ means a heat-
 18 ing or cooling system which—

19 “(A) consists of mechanical thermal heat
 20 storage or cooling storage components which
 21 are designed to create, store, and supply off
 22 peak or renewable electric distributed thermal
 23 energy or to reduce or avoid peak electrical de-
 24 mand of conventional mechanical cooling or
 25 heating equipment,

“(B) has a nameplate operational capability to deliver a minimum of 29,000 Btu per hour of cooling capacity or a minimum of installed nameplate thermal heat storage capacity of 85,000 Btu,

“(C) is designed to deliver such cooling capacity for a minimum continuous period of 3 hours, available daily from May 1 through September 30, or a minimum of 15,000 Btu per hour of heating capacity for a minimum continuous period of 3 hours, available daily from October 1 through April 30, coincident with daytime peak load periods,

“(D) is designed so as to utilize off-peak or renewable electricity or reduce peak kilowatt demand by 90 percent for the heating and cooling load served, and

“(E) is certified by the manufacturer as designed so as not to exceed the energy consumption of conventional HVAC equipment by more than 10 percent.

“(2) INCLUSION OF RELATED EQUIPMENT.—
Such term shall include any secondary components which integrate the distributed thermal energy storage system described in paragraph (1) with the con-

1 ventional heating or cooling system, including equip-
2 ment and controls for measuring and reporting oper-
3 ation and performance, but shall not include any
4 portion of the conventional heating or cooling sys-
5 tem.

6 “(3) LIMITATION.—

7 “(A) IN GENERAL.—In case of qualified
8 distributed thermal energy storage property
9 placed in service during the taxable year, the
10 credit otherwise determined under this section
11 for such year with respect to such property
12 shall not exceed an amount equal to \$500 for
13 each 0.5 kilowatt of peak demand reduction for
14 property placed in service for cooling or \$150
15 for each nameplate kilowatt input for property
16 placed in service for heating.

17 “(B) PEAK DEMAND REDUCTION.—For
18 purposes of this subsection, the term ‘peak de-
19 mand reduction’ means the removal or avoid-
20 ance of electrical demand (kW) on the utility
21 grid system during the daily time period of high
22 electrical demand. The peak demand reduction
23 for air conditioning property shall be deter-
24 mined based on Energy Efficiency Ratio (EER)
25 standards for residential and commercial air

1 conditioning equipment, established under the
 2 Energy Policy and Conservation Act of 1975.”.

3 (d) EFFECTIVE DATE.—The amendments made by
 4 this Act shall apply to taxable years beginning after the
 5 date of the enactment of this Act.

6 **SEC. 4. QUALIFIED DISTRIBUTED THERMAL ENERGY STOR-**
 7 **AGE PROPERTY MADE ELIGIBLE FOR NEW**
 8 **CLEAN RENEWABLE ENERGY BONDS.**

9 (a) IN GENERAL.—Paragraph (1) of section 54C(d)
 10 of the Internal Revenue Code of 1986 is amended to read
 11 as follows:

12 “(1) QUALIFIED RENEWABLE ENERGY FACIL-
 13 ITY.—The term ‘qualified renewable energy facility’
 14 means—

15 “(A) any qualified facility (as determined
 16 under section 45(d) without regard to para-
 17 graphs (8) and (10) thereof and to any placed
 18 in service date), and

19 “(B) any qualified distributed thermal en-
 20 ergy storage property (as defined in section
 21 48(e)),

22 owned by a public power provider, a governmental
 23 body, or a cooperative electric company.”.

1 (b) EFFECTIVE DATE.—The amendments made by
2 this section shall apply to obligations issued after the date
3 of the enactment of this Act.

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