

113TH CONGRESS
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H. R. 2685

To incorporate smart grid capability into the Energy Star Program, to reduce peak electric demand, to reauthorize a energy efficiency public information program to include Smart Grid information, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 11, 2013

Mr. MCNERNEY (for himself and Mr. CARTWRIGHT) introduced the following bill; which was referred to the Committee on Energy and Commerce

A BILL

To incorporate smart grid capability into the Energy Star Program, to reduce peak electric demand, to reauthorize a energy efficiency public information program to include Smart Grid information, 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 “Smart Grid Advance-
5 ment Act of 2013”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act:

1 (1) ADMINISTRATOR.—The term “Adminis-
2 trator” means the Administrator of the Environ-
3 mental Protection Agency.

4 (2) APPLICABLE BASELINE.—The term “appli-
5 cable baseline” means the average of the highest
6 three annual peak demands a load-serving entity has
7 experienced during the 5 years immediately prior to
8 the date of enactment of this Act.

9 (3) COMMISSION.—The term “Commission”
10 means the Federal Energy Regulatory Commission.

11 (4) LOAD-SERVING ENTITY.—The term “load-
12 serving entity” means an entity that provides elec-
13 tricity directly to retail consumers with the responsi-
14 bility to assure power quality and reliability, includ-
15 ing such entities that are investor-owned, publicly
16 owned, owned by rural electric cooperatives, or other
17 entities.

18 (5) PEAK DEMAND.—The term “peak demand”
19 means the highest point of electricity demand, net of
20 any distributed electricity generation or storage from
21 sources on the load-serving entity’s customers’ prem-
22 ises, during any hour on the system of a load-serving
23 entity during a calendar year, expressed in mega-
24 watts (MW), or more than one such high point as
25 a function of seasonal demand changes.

1 (6) PEAK DEMAND REDUCTION.—The term
2 “peak demand reduction” means the reduction in
3 annual peak demand as compared to a previous
4 baseline year or period, expressed in megawatts
5 (MW), whether accomplished by—

6 (A) diminishing the end-use requirements
7 for electricity;

8 (B) use of locally stored energy or gen-
9 erated electricity to meet those requirements
10 from distributed resources on the load-serving
11 entity’s customers’ premises and without use of
12 high-voltage transmission; or

13 (C) energy savings from efficient operation
14 of the distribution grid resulting from the use
15 of a Smart Grid.

16 (7) PEAK DEMAND REDUCTION PLAN.—The
17 term “peak demand reduction plan” means a plan
18 developed by or for a load-serving entity that it will
19 implement to meet its peak demand reduction goals.

20 (8) PEAK PERIOD.—The term “peak period”
21 means the time period on the system of a load-serv-
22 ing entity relative to peak demand that may warrant
23 special measures or electricity resources to maintain
24 system reliability while meeting peak demand.

1 (9) SECRETARY.—The term “Secretary” means
2 the Secretary of Energy.

3 (10) SMART GRID.—The term “Smart Grid”
4 has the meaning provided by section 1301 of the
5 Energy Independence and Security Act of 2007 (42
6 U.S.C. 17381).

7 **SEC. 3. ASSESSMENT OF SMART GRID COST EFFECTIVE-**
8 **NESS IN PRODUCTS.**

9 (a) ASSESSMENT.—Not later than 1 year after the
10 date of enactment of this Act, the Secretary and the Ad-
11 ministrators shall each assess the potential for cost-effec-
12 tive integration of Smart Grid technologies and capabili-
13 ties in all products that are reviewed by the Department
14 of Energy and the Environmental Protection Agency, re-
15 spectively, for potential designation as Energy Star prod-
16 ucts.

17 (b) ANALYSIS.—(1) Not later than 2 years after the
18 date of enactment of this Act, the Secretary and the Ad-
19 ministrators shall each prepare an analysis of the potential
20 energy savings, greenhouse gas emission reductions, and
21 electricity cost savings that could accrue for each of the
22 products identified by the assessment in subsection (a) in
23 the following optimal circumstances:

1 (A) The products possessed Smart Grid capa-
2 bility and interoperability that is tested and proven
3 reliable.

4 (B) The products were utilized in an electricity
5 utility service area which had Smart Grid capability
6 and offered customers rate or program incentives to
7 use the products.

8 (C) The utility's rates reflected national average
9 costs, including average peak and valley seasonal
10 and daily electricity costs.

11 (D) Consumers using such products took full
12 advantage of such capability.

13 (E) The utility avoided incremental investments
14 and rate increases related to such savings.

15 (2) The analysis under paragraph (1) shall be consid-
16 ered the "best case" Smart Grid analysis. On the basis
17 of such an analysis for each product, the Secretary and
18 the Administrator shall determine whether the installation
19 of Smart Grid capability for such a product would be cost
20 effective. For purposes of this paragraph, the term "cost
21 effective" means that the cumulative savings from using
22 the product under the best case Smart Grid circumstances
23 for a period of one-half of the product's expected useful
24 life will be greater than the incremental cost of the Smart
25 Grid features included in the product.

1 (3) To the extent that including Smart Grid capa-
2 bility in any products analyzed under paragraph (2) is
3 found to be cost effective in the best case, the Secretary
4 and the Administrator shall, not later than 3 years after
5 the date of enactment of this Act take each of the fol-
6 lowing actions:

7 (A) Inform the manufacturer of such product of
8 such finding of cost effectiveness.

9 (B) Assess the potential contributions the devel-
10 opment and use of products with Smart Grid tech-
11 nologies bring to reducing peak demand and pro-
12 moting grid stability.

13 (C) Assess the potential national energy savings
14 and electricity cost savings that could be realized if
15 Smart Grid potential were installed in the relevant
16 products reviewed by the Energy Star program.

17 (D) Assess and identify options for providing
18 consumers information on products with Smart Grid
19 capabilities, including the necessary conditions for
20 cost-effective savings.

21 (E) Submit a report to Congress summarizing
22 the results of the assessment for each class of prod-
23 ucts, and presenting the potential energy and green-
24 house gas savings that could result if Smart Grid

1 capability were installed and utilized on such prod-
2 ucts.

3 **SEC. 4. INCLUSIONS OF SMART GRID CAPABILITY ON AP-**
4 **PLIANCE ENERGY GUIDE LABELS.**

5 Section 324(a)(2) of the Energy Policy and Conserva-
6 tion Act (42 U.S.C. 6294(a)(2)) is amended by adding the
7 following at the end:

8 “(J)(i) Not later than 1 year after the date
9 of enactment of this subparagraph, the Federal
10 Trade Commission shall initiate a rulemaking
11 to consider making a special note in a promi-
12 nent manner on any ENERGY GUIDE label
13 for any product actually including Smart Grid
14 capability that—

15 “(I) Smart Grid capability is a fea-
16 ture of that product;

17 “(II) the use and value of that feature
18 depended on the Smart Grid capability of
19 the utility system in which the product was
20 installed and the active utilization of that
21 feature by the customer; and

22 “(III) on a utility system with Smart
23 Grid capability, the use of the product’s
24 Smart Grid capability could reduce the
25 customer’s cost of the product’s annual op-

1 eration by an estimated dollar amount
2 range representing the result of incre-
3 mental energy and electricity cost savings
4 that would result from the customer taking
5 full advantage of such Smart Grid capa-
6 bility.

7 “(ii) Not later than 3 years after the date
8 of enactment of this subparagraph, the Com-
9 mission shall complete the rulemaking initiated
10 under clause (i).”.

11 **SEC. 5. SMART GRID PEAK DEMAND REDUCTION GOALS.**

12 (a) GOALS.—Not later than 1 year after the date of
13 enactment of this section, each load-serving entity, or, at
14 the option of the State, each State with respect to load-
15 serving entities that the State regulates, shall determine
16 and publish peak demand reduction goals for any load-
17 serving entities that have an applicable baseline in excess
18 of 250 megawatts.

19 (b) BASELINES.—(1) The Commission, in consulta-
20 tion with the Secretary and the Administrator, shall de-
21 velop and publish, after an opportunity for public com-
22 ment, but not later than 180 days after the date of enact-
23 ment of this section, a methodology to provide for adjust-
24 ments or normalization to a load-serving entity’s applica-
25 ble baseline over time to reflect changes in the number

1 of customers served, weather conditions, general economic
2 conditions, and any other appropriate factors external to
3 peak demand management, as determined by the Commis-
4 sion.

5 (2) The Commission shall support load-serving enti-
6 ties (including any load-serving entities with an applicable
7 baseline of less than 250 megawatts that volunteer to par-
8 ticipate) in determining their applicable baselines and in
9 developing their peak demand reduction goals.

10 (3) The Secretary, in consultation with the Commis-
11 sion, the Administrator, and the North American Electric
12 Reliability Corporation, shall develop a system and rules
13 for measurement and verification of demand reductions.

14 (c) PEAK DEMAND REDUCTION GOALS.—(1) Peak
15 demand reduction goals may be established for an indi-
16 vidual load-serving entity, or, at the determination of a
17 State, tribal, or regional entity, by that State, tribal, or
18 regional entity for a larger region that shares a common
19 system peak demand and for which peak demand reduc-
20 tion measures would offer regional benefit.

21 (2) A State or regional entity establishing peak de-
22 mand reduction goals shall cooperate, as necessary and
23 appropriate, with the Commission, the Secretary, State
24 regulatory commissions, State energy offices, the North

1 American Electric Reliability Corporation, and other rel-
2 evant authorities.

3 (3) In determining the applicable peak demand reduc-
4 tion goals—

5 (A) States and other jurisdictional entities may
6 utilize the results of the 2009 National Assessment
7 of Demand Response Potential, as authorized by
8 section 571 of the National Energy Conservation
9 Policy Act (42 U.S.C. 8279); and

10 (B) the relative economics of peak demand re-
11 duction and generation required to meet peak de-
12 mand shall be evaluated in a neutral and objective
13 manner.

14 (4) The applicable peak demand reduction goals shall
15 provide that—

16 (A) load-serving entities will reduce or mitigate
17 peak demand by a minimum percentage amount
18 from the applicable baseline to a lower peak demand
19 during calendar year 2015;

20 (B) load-serving entities will reduce or mitigate
21 peak demand by a minimum percentage greater
22 amount from the applicable baseline to a lower peak
23 demand during calendar year 2018; and

24 (C) the minimum percentage reductions estab-
25 lished as peak demand reduction goals shall be the

1 maximum reductions that are realistically achievable
2 with an aggressive effort to deploy Smart Grid and
3 peak demand reduction technologies and methods,
4 including those listed in subsection (d).

5 (d) PLAN.—Each load-serving entity shall prepare a
6 peak demand reduction plan that demonstrates its ability
7 to meet each applicable goal by any or a combination of
8 the following options:

9 (1) Direct reduction in megawatts of peak de-
10 mand through—

11 (A) energy efficiency measures (including
12 efficient transmission wire technologies which
13 significantly reduce line loss compared to tradi-
14 tional wire technology) with reliable and contin-
15 ued application during peak demand periods; or

16 (B) use of a Smart Grid.

17 (2) Demonstration that an amount of
18 megawatts equal to a stated portion of the applicable
19 goal is contractually committed to be available for
20 peak reduction through one or more of the following:

21 (A) Megawatts enrolled in demand re-
22 sponse programs.

23 (B) Megawatts subject to the ability of a
24 load-serving entity to call on demand response
25 programs, smart appliances, smart electricity or

1 energy storage devices, distributed generation
2 resources on the entity's customers' premises,
3 or other measures directly capable of actively,
4 controllably, reliably, and dynamically reducing
5 peak demand ("dynamic peak management con-
6 trol").

7 (C) Megawatts available from distributed
8 dynamic electricity or energy storage under
9 agreement with the owner of that storage.

10 (D) Megawatts committed from dispatch-
11 able distributed generation demonstrated to be
12 reliable under peak period conditions and in
13 compliance with air quality regulations.

14 (E) Megawatts available from smart appli-
15 ances and equipment with Smart Grid capa-
16 bility available for direct control by the utility
17 through agreement with the customer owning
18 the appliances or equipment or with a third
19 party pursuant to such agreements.

20 (F) Megawatts from a demonstrated and
21 assured minimum of distributed solar electric
22 generation capacity in instances where peak pe-
23 riod and peak demand conditions are directly
24 related to solar radiation and accompanying
25 heat.

1 (3) If any of the methods listed in subpara-
2 graph (C), (D), or (E) of paragraph (2) are relied
3 upon to meet its peak demand reduction goals, the
4 load-serving entity must demonstrate this capability
5 by operating a test during the applicable calendar
6 year.

7 (4) Nothing in this section shall require the
8 publication in peak demand reduction goals or in
9 any peak demand reduction plan of any information
10 that is confidential for competitive or other reasons
11 or that identifies individual customers.

12 (e) EXISTING AUTHORITY AND REQUIREMENTS.—
13 Nothing in this section diminishes or supersedes any au-
14 thority of a State or political subdivision of a State to
15 adopt or enforce any law or regulation respecting peak de-
16 mand management, demand response, distributed energy
17 storage, use of distributed generation, or the regulation
18 of load-serving entities. The Commission, in consultation
19 with States and Indian tribes having such peak demand
20 management, demand response, and distributed energy
21 storage programs, shall to the extent practicable, facilitate
22 coordination between the Federal program and such State
23 and tribal programs.

1 (f) RELIEF.—The Commission may, for good cause,
2 grant relief to load-serving entities from the requirements
3 of this section.

4 (g) OTHER LAWS.—Except as provided in sub-
5 sections (e) and (f), no law or regulation shall relieve any
6 person of any requirement otherwise applicable under this
7 section.

8 (h) COMPLIANCE.—(1) The Commission shall, not
9 later than 1 year after the date of enactment of this Act,
10 establish a public Web site where the Commission shall
11 provide information and data demonstrating compliance
12 by States, Indian tribes, regional entities, and load-serving
13 entities with this section, including the success of load-
14 serving entities in meeting applicable peak demand reduc-
15 tion goals.

16 (2) The Commission shall, by April 1 of each year
17 beginning in 2015, provide a report to Congress on com-
18 pliance with this section and success in meeting applicable
19 peak demand reduction goals and, as appropriate, shall
20 make recommendations as to how to increase peak de-
21 mand reduction efforts.

22 (3) The Commission shall note in each such report
23 any State, political subdivision of a State, or load-serving
24 entity that has failed to comply with this section, or is

1 not a part of any region or group of load-serving entities
2 serving a region that has complied with this section.

3 (4) The Commission shall have and exercise the au-
4 thority to take reasonable steps to modify the process of
5 establishing peak demand reduction goals and to accept
6 adjustments to them as appropriate when sought by load-
7 serving entities.

8 (i) ASSISTANCE AND FUNDING.—

9 (1) ASSISTANCE.—The Secretary may make
10 grants to States and to other entities with respon-
11 sibilities to be carried out under the Act to offset
12 any documented costs of carrying out such respon-
13 sibilities to the extent such costs are deemed burden-
14 some or extraordinary by the Secretary.

15 (2) FUNDING.—There are authorized to be ap-
16 propriated such sums as may be necessary to the
17 Commission, the Secretary, and the Administrator to
18 carry out the provisions of this Act.

19 **SEC. 6. REAUTHORIZATION OF ENERGY EFFICIENCY PUB-**
20 **LIC INFORMATION PROGRAM TO INCLUDE**
21 **SMART GRID INFORMATION.**

22 (a) IN GENERAL.—Section 134 of the Energy Policy
23 Act of 2005 (42 U.S.C. 15832) is amended as follows:

1 (1) By amending the section heading to read as
2 follows: “**ENERGY EFFICIENCY AND SMART GRID**
3 **PUBLIC INFORMATION INITIATIVE**”.

4 (2) In paragraph (1) of subsection (a), by strik-
5 ing “reduce energy consumption during the 4-year
6 period beginning on the date of enactment of this
7 Act” and inserting “increase energy efficiency and
8 to adopt Smart Grid technology and practices”.

9 (3) In paragraph (2) of subsection (a), by strik-
10 ing “benefits to consumers of reducing” and insert-
11 ing “economic and environmental benefits to con-
12 sumers and the United States of optimizing”.

13 (4) In subsection (a), by inserting at the begin-
14 ning of paragraph (3) “the effect of energy effi-
15 ciency and Smart Grid capability in reducing energy
16 and electricity prices throughout the economy, to-
17 gether with”.

18 (5) In subsection (a)(4), by redesignating sub-
19 paragraph (D) as subparagraph (E), by striking
20 “and” at the end of subparagraph (C), and by in-
21 serting after subparagraph (C) the following:

22 “(D) purchasing and utilizing equipment
23 that includes Smart Grid features and capa-
24 bility; and”.

1 (6) In subsection (c), by striking “Not later
2 than July 1, 2009,” and inserting, “For each year
3 when appropriations pursuant to the authorization
4 in this section exceed \$10,000,000,”.

5 (7) In subsection (d) by striking “2010” and
6 inserting “2022”.

7 (8) In subsection (e) by striking “2010” and in-
8 serting “2022”.

9 (b) TABLE OF CONTENTS.—The item relating to sec-
10 tion 134 in the table of contents for the Energy Policy
11 Act of 2005 (42 U.S.C. 15801 and following) is amended
12 to read as follows:

“Sec. 134. Energy efficiency and Smart Grid public information initiative.”.

13 **SEC. 7. INCLUSION OF SMART GRID FEATURES IN APPLI-**
14 **ANCE REBATE PROGRAM.**

15 (a) AMENDMENTS.—Section 124 of the Energy Pol-
16 icy Act of 2005 (42 U.S.C. 15821) is amended as follows:

17 (1) By amending the section heading to read as
18 follows: “**ENERGY EFFICIENT AND SMART AP-**
19 **PLIANCE REBATE PROGRAM.**”.

20 (2) By redesignating paragraphs (4) and (5) of
21 subsection (a) as paragraphs (5) and (6), respec-
22 tively, and inserting after paragraph (3) the fol-
23 lowing:

24 “(4) SMART APPLIANCE.—The term ‘smart ap-
25 pliance’ means a product that the Administrator of

1 the Environmental Protection Agency or the Sec-
2 retary of Energy has determined qualifies for such
3 a designation in the Energy Star program pursuant
4 to section 3 of the Smart Grid Advancement Act of
5 2013, or that the Secretary or the Administrator has
6 separately determined includes the relevant Smart
7 Grid capabilities listed in section 1301 of the Energy
8 Independence and Security Act of 2007 (42 U.S.C.
9 17381).”.

10 (3) In subsection (b)(1) by inserting “and
11 smart” after “efficient” and by inserting after
12 “products” the first place it appears “, including
13 products designated as being smart appliances”.

14 (4) In subsection (b)(3), by inserting “the ad-
15 ministration of” after “carry out”.

16 (5) In subsection (d), by inserting “the admin-
17 istration of” after “carrying out” and by inserting
18 “, and up to 100 percent of the value of the rebates
19 provided pursuant to this section” before the period
20 at the end.

21 (6) In subsection (e)(3), by inserting “, with
22 separate consideration as applicable if the product is
23 also a smart appliance,” after “Energy Star prod-
24 uct” the first place it appears and by inserting “or
25 smart appliance” before the period at the end.

1 (7) In subsection (f), by striking
2 “\$50,000,000” through the period at the end and
3 inserting “\$100,000,000 for each fiscal year from
4 2014 through 2019.”.

5 (b) TABLE OF CONTENTS.—The item relating to sec-
6 tion 124 in the table of contents for the Energy Policy
7 Act of 2005 (42 U.S.C. 15801 and following) is amended
8 to read as follows:

“Sec. 124. Energy efficient and smart appliance rebate program.”.

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