

112TH CONGRESS
1ST SESSION

S. 1000

To promote energy savings in residential and commercial buildings and industry, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 16, 2011

Mrs. SHAHEEN (for herself and Mr. PORTMAN) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To promote energy savings in residential and commercial buildings and industry, 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; TABLE OF CONTENTS.**

4 (a) **SHORT TITLE.**—This Act may be cited as the
5 “Energy Savings and Industrial Competitiveness Act of
6 2011”.

7 (b) **TABLE OF CONTENTS.**—The table of contents of
8 this Act is as follows:

Sec. 1. Short title; table of contents.

TITLE I—BUILDINGS

Subtitle A—Building Energy Codes

Sec. 101. Greater energy efficiency in building codes.

Subtitle B—Appliance Standards

- Sec. 111. Energy conservation standards.
- Sec. 112. Energy conservation standards for heat pump pool heaters.
- Sec. 113. GU-24 base lamps.
- Sec. 114. Efficiency standards for bottle-type water dispensers, commercial hot food holding cabinets, and portable electric spas.
- Sec. 115. Test procedure petition process.
- Sec. 116. Amendments to home appliance test methods.
- Sec. 117. Credit for Energy Star smart appliances.
- Sec. 118. Video game console energy efficiency study.
- Sec. 119. Refrigerator and freezer standards.
- Sec. 120. Room air conditioner standards.
- Sec. 121. Uniform efficiency descriptor for covered water heaters.
- Sec. 122. Clothes dryers.
- Sec. 123. Standards for clothes washers.
- Sec. 124. Dishwashers.
- Sec. 125. Standards for certain reflector lamps.
- Sec. 126. Petition for amended standards.
- Sec. 127. Prohibited acts.
- Sec. 128. Outdoor lighting.
- Sec. 129. Standards for commercial furnaces.
- Sec. 130. Service over the counter, self-contained, medium temperature commercial refrigerators.
- Sec. 131. Motor market assessment and commercial awareness program.
- Sec. 132. Study of compliance with energy standards for appliances.
- Sec. 133. Study of direct current electricity supply in certain buildings.
- Sec. 134. Technical corrections.

Subtitle C—Worker Training and Capacity Building

Sec. 141. Building training and assessment centers.

TITLE II—BUILDING EFFICIENCY FINANCE

- Sec. 201. Rural energy savings program.
- Sec. 202. Loan program for energy efficiency upgrades to existing buildings.

TITLE III—INDUSTRIAL EFFICIENCY AND COMPETITIVENESS

Subtitle A—Manufacturing Energy Efficiency

- Sec. 301. State partnership industrial energy efficiency revolving loan program.
- Sec. 302. Coordination of research and development of energy efficient technologies for industry.
- Sec. 303. Energy efficient technologies assessment.
- Sec. 304. Future of Industry program.
- Sec. 305. Sustainable manufacturing initiative.
- Sec. 306. Study of advanced energy technology manufacturing capabilities in the United States.
- Sec. 307. Industrial Technologies steering committee.
- Sec. 308. Authorization of appropriations.

Subtitle B—Supply Star

Sec. 311. Supply Star.

Subtitle C—Electric Motor Rebate Program

Sec. 321. Energy saving motor control rebate program.

TITLE IV—FEDERAL AGENCY ENERGY EFFICIENCY

Sec. 401. Adoption of personal computer power savings techniques by Federal agencies.

Sec. 402. Availability of funds for design updates.

Sec. 403. Best practices for advanced metering.

Sec. 404. Federal energy management and data collection standard.

Sec. 405. Electric vehicle charging infrastructure.

Sec. 406. Broadening definition of renewable energy to include thermal.

Sec. 407. Study on Federal data center consolidation.

TITLE V—MISCELLANEOUS

Sec. 501. Budgetary effects.

Sec. 502. Advance appropriations required.

1 **TITLE I—BUILDINGS**
 2 **Subtitle A—Building Energy Codes**
 3 **SEC. 101. GREATER ENERGY EFFICIENCY IN BUILDING**
 4 **CODES.**

5 (a) IN GENERAL.—Section 304 of the Energy Con-
 6 servation and Production Act (42 U.S.C. 6833) is amend-
 7 ed to read as follows:

8 **“SEC. 304. UPDATING STATE BUILDING ENERGY EFFI-**
 9 **CIENCY CODES.**

10 “(a) UPDATING NATIONAL MODEL BUILDING EN-
 11 ERGY CODES.—

12 “(1) IN GENERAL.—The Secretary shall—

13 “(A) support the development of national
 14 model building energy codes, including the up-
 15 dating of ASHRAE and IECC model building
 16 energy codes and standards;

1 “(B) encourage and support the adoption
2 of building energy codes by States and, as ap-
3 propriate, by local governments that meet or ex-
4 ceed the national model building energy codes,
5 or achieve equivalent or greater energy savings;
6 and

7 “(C) support full compliance with the
8 State and local codes.

9 “(2) TARGETS AND GOALS.—

10 “(A) IN GENERAL.—The Secretary shall
11 support the updating of the national model
12 building energy codes for residential buildings
13 and commercial buildings to enable the achieve-
14 ment of energy savings goals established under
15 subparagraph (B) and the targets established
16 under subparagraph (C).

17 “(B) GOALS.—The Secretary shall—

18 “(i) establish goals of zero-net-energy
19 for new commercial and residential build-
20 ings by 2030; and

21 “(ii) work with State and local gov-
22 ernments, the International Code Council,
23 ASHRAE, and other interested parties to
24 achieve these goals through a combination
25 of national model building energy codes,

1 appliance and lighting standards, and re-
2 search, development, and demonstration of
3 new efficiency and clean energy tech-
4 nologies.

5 “(C) TARGETS.—

6 “(i) IN GENERAL.—The Secretary
7 shall support the updating of national
8 model building energy codes by estab-
9 lishing 1 or more aggregate energy savings
10 targets to achieve the goals set under sub-
11 paragraph (B).

12 “(ii) SEPARATE TARGETS.—The Sec-
13 retary may establish separate targets for
14 commercial and residential buildings.

15 “(iii) BASELINES.—The baseline for
16 updating national model codes shall be the
17 2009 IECC for residential buildings and
18 ASHRAE Standard 90.1–2010 for com-
19 mercial buildings.

20 “(iv) SPECIFIC YEARS.—

21 “(I) IN GENERAL.—Targets for
22 specific years shall be established and
23 revised by the Secretary through rule-
24 making and coordinated with the

1 IECC and ASHRAE Standard 90.1
2 cycles at a level that is—

3 “(aa) at the maximum level
4 of energy efficiency that is tech-
5 nologically feasible and life-cycle
6 cost effective, while accounting
7 for the economic considerations
8 under subparagraph (E);

9 “(bb) higher than the pre-
10 ceeding target; and

11 “(cc) on a path to achieving
12 zero-net-energy buildings.

13 “(II) INITIAL TARGETS.—Not
14 later than 1 year after the date of en-
15 actment of this clause, the Secretary
16 shall establish initial targets under
17 this subparagraph.

18 “(III) DIFFERENT TARGET
19 YEARS.—Subject to subclause (I),
20 prior to the applicable year, the Sec-
21 retary may set a different target year
22 for any of model codes described in
23 clause (i) if the Secretary determines
24 that a higher target cannot be met.

1 “(IV) SMALL BUSINESS.—When
2 establishing targets under this sub-
3 paragraph through rulemaking, the
4 Secretary shall ensure compliance
5 with the Small Business Regulatory
6 Enforcement Fairness Act of 1996 (5
7 U.S.C. 601 note; Public Law 104–
8 121).

9 “(D) APPLIANCE STANDARDS AND OTHER
10 FACTORS AFFECTING BUILDING ENERGY USE.—
11 In establishing building code targets under sub-
12 paragraph (C), the Secretary shall develop and
13 adjust the targets in recognition of potential
14 savings and costs relating to—

15 “(i) efficiency gains made in appli-
16 ances, lighting, windows, and insulation;

17 “(ii) advancement of distributed gen-
18 eration and on-site renewable power gen-
19 eration technologies;

20 “(iii) equipment improvements for
21 heating, cooling, and ventilation systems;

22 “(iv) building management systems
23 and SmartGrid technologies to reduce en-
24 ergy use; and

1 “(v) other technologies, practices, and
2 building systems that the Secretary con-
3 siders appropriate regarding building plug
4 load and other energy uses.

5 “(E) ECONOMIC CONSIDERATIONS.—In es-
6 tablishing and revising building code targets
7 under subparagraph (C), the Secretary shall
8 consider the economic feasibility of achieving
9 the proposed targets established under this sec-
10 tion and the potential costs and savings for con-
11 sumers and building owners, including a return
12 on investment analysis.

13 “(3) TECHNICAL ASSISTANCE TO MODEL CODE-
14 SETTING AND STANDARD DEVELOPMENT ORGANIZA-
15 TIONS.—

16 “(A) IN GENERAL.—The Secretary shall,
17 on a timely basis, provide technical assistance
18 to model code-setting and standard development
19 organizations.

20 “(B) ASSISTANCE.—The assistance shall
21 include, as requested by the organizations, tech-
22 nical assistance in—

23 “(i) evaluating code or standards pro-
24 posals or revisions;

1 “(ii) building energy analysis and de-
2 sign tools;

3 “(iii) building demonstrations;

4 “(iv) developing definitions of energy
5 use intensity and building types for use in
6 model codes or in evaluating the efficiency
7 impacts of the codes;

8 “(v) performance-based standards;
9 and

10 “(vi) evaluating economic consider-
11 ations under paragraph (2)(E).

12 “(C) AMENDMENT PROPOSALS.—The Sec-
13 retary may submit timely code and standard
14 amendment proposals to the model code-setting
15 and standard development organizations, with
16 supporting evidence, sufficient to enable the
17 model building energy codes and standards to
18 meet the targets established under paragraph
19 (2)(C).

20 “(D) ANALYSIS METHODOLOGY.—The Sec-
21 retary shall make publicly available the entire
22 calculation methodology (including input as-
23 sumptions and data) used by the Secretary to
24 estimate the energy savings of code or standard
25 proposals and revisions.

1 “(4) DETERMINATION AND ESTABLISHMENT.—

2 “(A) REVISION OF MODEL BUILDING
3 CODES AND STANDARDS.—If the provisions of
4 the IECC or ASHRAE Standard 90.1 regard-
5 ing building energy use are revised, the Sec-
6 retary shall make a preliminary determination
7 not later than 90 days after the date of the re-
8 vision, and a final determination not later than
9 1 year after the date of the revision, on whether
10 the revision will—

11 “(i) improve energy efficiency in
12 buildings compared to the existing national
13 model building energy code; and

14 “(ii) meet the applicable targets under
15 paragraph (2)(C).

16 “(B) CODES OR STANDARDS NOT MEETING
17 TARGETS.—

18 “(i) IN GENERAL.—If the Secretary
19 makes a preliminary determination under
20 subparagraph (A)(ii) that a code or stand-
21 ard does not meet the targets established
22 under paragraph (2)(C), the Secretary may
23 at the same time provide the model code or
24 standard developer with proposed changes
25 that would result in a model code that

1 meets the targets and with supporting evi-
2 dence, taking into consideration—

3 “(I) whether the modified code is
4 technically feasible and life-cycle cost
5 effective;

6 “(II) available appliances, tech-
7 nologies, materials, and construction
8 practices; and

9 “(III) potential costs, savings
10 and other benefits for consumers and
11 building owners, including the impact
12 on overall building ownership and op-
13 erating costs.

14 “(ii) INCORPORATION OF CHANGES.—

15 “(I) IN GENERAL.—On receipt of
16 the proposed changes, the model code
17 or standard developer shall have an
18 additional 180 days to incorporate
19 changes into the model code or stand-
20 ard.

21 “(II) FINAL DETERMINATION.—

22 A final determination under subpara-
23 graph (A) shall be on the modified
24 model code or standard.

1 “(C) POSITIVE DETERMINATIONS.—If the
2 Secretary makes positive final determinations
3 under clauses (i) and (ii) of subparagraph (A)
4 or under clause (i) of subparagraph (A) if the
5 applicable target has not been established, the
6 revised IECC or ASHRAE Standard 90.1 shall
7 be established as the relevant national model
8 building energy code.

9 “(D) ESTABLISHMENT BY SECRETARY.—

10 “(i) IN GENERAL.—If the Secretary
11 makes a negative final determination under
12 subparagraph (A)(ii), the Secretary shall
13 at the same time establish a modified na-
14 tional model building energy code.

15 “(ii) CODES OR STANDARDS NOT UP-
16 DATED.—If the IECC or ASHRAE Stand-
17 ard 90.1 is not revised by a target date
18 under paragraph (2), the Secretary shall,
19 not later than 90 days after the target
20 date, issue a draft of, and not later than
21 1 year after the target date, establish, a
22 modified national model building energy
23 code.

1 “(iii) REQUIREMENTS.—Any national
2 model building energy code established
3 under this subparagraph shall—

4 “(I) meet the targets established
5 under paragraph (2);

6 “(II) achieve the maximum level
7 of energy savings that is techno-
8 logically feasible and life-cycle cost-ef-
9 fective, while accounting for the eco-
10 nomic considerations under paragraph
11 (2)(E); and

12 “(III) be based on the latest edi-
13 tion of the IECC or ASHRAE Stand-
14 ard 90.1, including any subsequent
15 amendments, addenda, or additions,
16 but may also consider other model
17 codes or standards.

18 “(5) ADMINISTRATION.—In carrying out this
19 section, the Secretary shall—

20 “(A) publish notice of targets, determina-
21 tions, and national model building energy codes
22 under this section in the Federal Register to
23 provide an explanation of and the basis for such
24 actions, including any supporting modeling,

1 data, assumptions, protocols, and cost-benefit
2 analysis, including return on investment; and

3 “(B) provide an opportunity for public
4 comment on targets, determinations, and na-
5 tional model building energy codes under this
6 section.

7 “(b) STATE CERTIFICATION OF BUILDING ENERGY
8 CODE UPDATES.—

9 “(1) REVIEW AND UPDATING OF CODES BY
10 EACH STATE.—

11 “(A) IN GENERAL.—Not later than 2 years
12 after the date on which a national model build-
13 ing energy code is established or revised under
14 subsection (a), each State shall certify whether
15 or not the State has reviewed and updated the
16 energy provisions of the building code of the
17 State.

18 “(B) DEMONSTRATION.—The certification
19 shall include a demonstration of whether or not
20 the code provisions that are in effect through-
21 out the State—

22 “(i) meet or exceed the revised model
23 code; or

24 “(ii) achieve equivalent or greater en-
25 ergy savings.

1 “(C) NO MODEL CODE UPDATE.—If the
2 Secretary fails to revise a national model build-
3 ing energy code by the date specified in sub-
4 section (a)(4), each State shall, not later than
5 2 years after the specified date, certify whether
6 or not the State has reviewed and updated the
7 energy provisions of the building code of the
8 State to meet or exceed the target in subsection
9 (a)(2).

10 “(2) VALIDATION BY SECRETARY.—Not later
11 than 90 days after a State certification under para-
12 graph (1), the Secretary shall—

13 “(A) determine whether the code provi-
14 sions of the State meet the criteria specified in
15 paragraph (1); and

16 “(B) if the determination is positive, vali-
17 date the certification.

18 “(c) IMPROVEMENTS IN COMPLIANCE WITH BUILD-
19 ING ENERGY CODES.—

20 “(1) REQUIREMENT.—

21 “(A) IN GENERAL.—Not later than 3 years
22 after the date of a certification under sub-
23 section (b), each State shall certify whether or
24 not the State has—

1 “(i) achieved full compliance under
2 paragraph (3) with the certified State
3 building energy code or with the associated
4 national model building energy code; or

5 “(ii) made significant progress under
6 paragraph (4) toward achieving compliance
7 with the certified State building energy
8 code or with the associated national model
9 building energy code.

10 “(B) REPEAT CERTIFICATIONS.—If the
11 State certifies progress toward achieving com-
12 pliance, the State shall repeat the certification
13 until the State certifies that the State has
14 achieved full compliance.

15 “(2) MEASUREMENT OF COMPLIANCE.—A cer-
16 tification under paragraph (1) shall include docu-
17 mentation of the rate of compliance based on—

18 “(A) independent inspections of a random
19 sample of the buildings covered by the code in
20 the preceding year; or

21 “(B) an alternative method that yields an
22 accurate measure of compliance.

23 “(3) ACHIEVEMENT OF COMPLIANCE.—A State
24 shall be considered to achieve full compliance under
25 paragraph (1) if—

1 “(A) at least 90 percent of building space
2 covered by the code in the preceding year sub-
3 stantially meets all the requirements of the ap-
4 plicable code specified in paragraph (1), or
5 achieves equivalent or greater energy savings
6 level; or

7 “(B) the estimated excess energy use of
8 buildings that did not meet the applicable code
9 specified in paragraph (1) in the preceding
10 year, compared to a baseline of comparable
11 buildings that meet this code, is not more than
12 5 percent of the estimated energy use of all
13 buildings covered by this code during the pre-
14 ceding year.

15 “(4) SIGNIFICANT PROGRESS TOWARD
16 ACHIEVEMENT OF COMPLIANCE.—A State shall be
17 considered to have made significant progress toward
18 achieving compliance for purposes of paragraph (1)
19 if the State—

20 “(A) has developed and is implementing a
21 plan for achieving compliance during the 8-
22 year-period beginning on the date of enactment
23 of this paragraph, including annual targets for
24 compliance and active training and enforcement
25 programs; and

1 “(B) has met the most recent target under
2 subparagraph (A).

3 “(5) VALIDATION BY SECRETARY.—Not later
4 than 90 days after a State certification under para-
5 graph (1), the Secretary shall—

6 “(A) determine whether the State has
7 demonstrated meeting the criteria of this sub-
8 section, including accurate measurement of
9 compliance; and

10 “(B) if the determination is positive, vali-
11 date the certification.

12 “(d) STATES THAT DO NOT MEET TARGETS.—

13 “(1) REPORTING.—A State that has not made
14 a certification required under subsection (b) or (c)
15 by the applicable deadline shall submit to the Sec-
16 retary a report on—

17 “(A) the status of the State with respect
18 to meeting the requirements and submitting the
19 certification; and

20 “(B) a plan for meeting the requirements
21 and submitting the certification.

22 “(2) STATES OUT OF CONFORMANCE.—Any
23 State for which the Secretary has not accepted a
24 certification by a deadline under subsection (b) or
25 (c) shall be considered out of conformance with this

1 section until such time as the State submits and the
2 Secretary validates the required certification.

3 “(3) LOCAL GOVERNMENT.—In any State that
4 is out of conformance with this section, a local gov-
5 ernment may be considered in conformance with this
6 section by meeting the certification requirements
7 under subsections (b) and (c).

8 “(4) FEDERAL SUPPORT.—The Secretary shall,
9 as appropriate, make conformance of a jurisdiction
10 with this section a criterion in grants or other sup-
11 port for code adoption and compliance activities for
12 State and local governments.

13 “(5) ANNUAL REPORTS BY SECRETARY.—

14 “(A) IN GENERAL.—The Secretary shall
15 annually submit to Congress, and publish in the
16 Federal Register, a report on—

17 “(i) the status of national model
18 building energy codes;

19 “(ii) the status of code adoption and
20 compliance in the States;

21 “(iii) implementation of this section;
22 and

23 “(iv) improvements in energy savings
24 over time as result of the goals established

1 under subsection (a)(2)(B) and targets es-
2 tablished under subsection (a)(2)(C).

3 “(B) IMPACTS.—The report shall include
4 estimates of impacts of past action under this
5 section, and potential impacts of further action,
6 on—

7 “(i) upfront financial and construction
8 costs, cost benefits and returns (using in-
9 vestment analysis), and lifetime energy use
10 for buildings;

11 “(ii) resulting energy costs to individ-
12 uals and businesses; and

13 “(iii) resulting overall annual building
14 ownership and operating costs.

15 “(e) TECHNICAL ASSISTANCE TO STATES.—The Sec-
16 retary shall provide technical assistance to States to imple-
17 ment the requirements of this section, including proce-
18 dures and technical analysis for States—

19 “(1) to demonstrate that the code provisions of
20 the States achieve equivalent or greater energy sav-
21 ings than the national model building energy codes;

22 “(2) to document the rate of compliance with a
23 building energy code; and

24 “(3) to improve and implement State residential
25 and commercial building energy codes or otherwise

1 promote the design and construction of energy effi-
2 cient buildings.

3 “(f) AVAILABILITY OF INCENTIVE FUNDING.—

4 “(1) IN GENERAL.—The Secretary shall provide
5 incentive funding to States—

6 “(A) to implement the requirements of this
7 section;

8 “(B) to improve and implement residential
9 and commercial building energy codes, including
10 increasing and verifying compliance with the
11 codes and training of State and local building
12 code officials to implement and enforce the
13 codes; and

14 “(C) to promote building energy efficiency
15 through the use of the codes.

16 “(2) ADDITIONAL FUNDING.—Additional fund-
17 ing shall be provided under this subsection for im-
18 plementation of a plan to achieve and document full
19 compliance with residential and commercial building
20 energy codes under subsection (c)—

21 “(A) to a State that is in conformance
22 with this section under subsection (d)(2); and

23 “(B) in a State which is not eligible under
24 subparagraph (A), to a local government that is

1 in conformance with this section under sub-
2 section (d)(3).

3 “(3) TRAINING.—Of the amounts made avail-
4 able under this subsection, the State may use
5 amounts required, but not to exceed \$750,000 for a
6 State, to train State and local building code officials
7 to implement and enforce codes described in para-
8 graph (2).

9 “(4) LOCAL GOVERNMENTS.—States may share
10 grants under this subsection with local governments
11 that implement and enforce the codes.

12 “(g) VOLUNTARY ADVANCED STANDARDS.—

13 “(1) IN GENERAL.—The Secretary shall provide
14 technical and financial support for the development
15 of voluntary advanced standards for residential and
16 commercial buildings for use in—

17 “(A) green building design;

18 “(B) voluntary and market transformation
19 programs;

20 “(C) incentive criteria; and

21 “(D) voluntary adoption by States.

22 “(2) TARGETS.—The voluntary advanced stand-
23 ards shall be designed to achieve energy savings of
24 at least 30 percent compared to the national model
25 building energy codes.

1 “(3) PREFERENCE.—In carrying out this sub-
2 section, the Secretary shall give preference to ad-
3 vanced standards developed by the International
4 Code Council and by ASHRAE.

5 “(h) STUDIES.—The Secretary, in consultation with
6 building science experts from the National Laboratories
7 and institutions of higher education, designers and build-
8 ers of energy-efficient residential and commercial build-
9 ings, code officials, and other stakeholders, shall under-
10 take a study of the feasibility, impact, and merit of—

11 “(1) code improvements that would require that
12 buildings be designed, sited, and constructed in a
13 manner that makes the buildings more adaptable in
14 the future to become zero-net-energy after initial
15 construction, as advances are achieved in energy-sav-
16 ing technologies;

17 “(2) code procedures to incorporate measured
18 lifetimes, not just first-year energy use, in trade-offs
19 and performance calculations; and

20 “(3) legislative options for increasing energy
21 savings from building energy codes, including addi-
22 tional incentives for effective State and local action,
23 and verification of compliance with and enforcement
24 of a code other than by a State or local government.

1 “(i) AUTHORIZATION OF APPROPRIATIONS.—There
2 are authorized to be appropriated to carry out this sub-
3 section—

4 “(1) \$100,000,000 for each of fiscal years 2012
5 through 2015; and

6 “(2) such sums as are necessary for fiscal year
7 2016 and each fiscal year thereafter.”.

8 (b) DEFINITION OF IECC.—Section 303 of the En-
9 ergy Conservation and Production Act (42 U.S.C. 6832)
10 is amended by adding at the end the following:

11 “(17) IECC.—The term ‘IECC’ means the
12 International Energy Conservation Code.”.

13 **Subtitle B—Appliance Standards**

14 **SEC. 111. ENERGY CONSERVATION STANDARDS.**

15 (a) DEFINITION OF ENERGY CONSERVATION STAND-
16 ARD.—Section 321 of the Energy Policy and Conservation
17 Act (42 U.S.C. 6291) is amended—

18 (1) by striking paragraph (6) and inserting the
19 following:

20 “(6) ENERGY CONSERVATION STANDARD.—

21 “(A) IN GENERAL.—The term ‘energy con-
22 servation standard’ means 1 or more perform-
23 ance standards that—

24 “(i) for covered products (excluding
25 clothes washers, dishwashers, showerheads,

1 faucets, water closets, and urinals), pre-
2 scribe a minimum level of energy efficiency
3 or a maximum quantity of energy use, de-
4 termined in accordance with test proce-
5 dures prescribed under section 323;

6 “(ii) for showerheads, faucets, water
7 closets, and urinals, prescribe a minimum
8 level of water efficiency or a maximum
9 quantity of water use, determined in ac-
10 cordance with test procedures prescribed
11 under section 323; and

12 “(iii) for clothes washers and dish-
13 washers—

14 “(I) prescribe a minimum level of
15 energy efficiency or a maximum quan-
16 tity of energy use, determined in ac-
17 cordance with test procedures pre-
18 scribed under section 323; and

19 “(II) include a minimum level of
20 water efficiency or a maximum quan-
21 tity of water use, determined in ac-
22 cordance with those test procedures.

23 “(B) INCLUSIONS.—The term ‘energy con-
24 servation standard’ includes—

1 “(i) 1 or more design requirements, if
2 the requirements were established—

3 “(I) on or before the date of en-
4 actment of this subclause;

5 “(II) as part of a direct final rule
6 under section 325(p)(4); or

7 “(III) as part of a final rule pub-
8 lished on or after January 1, 2012;
9 and

10 “(ii) any other requirements that the
11 Secretary may prescribe under section
12 325(r).

13 “(C) EXCLUSION.—The term ‘energy con-
14 servation standard’ does not include a perform-
15 ance standard for a component of a finished
16 covered product, unless regulation of the com-
17 ponent is specifically authorized or established
18 pursuant to this title.”; and

19 (2) by adding at the end the following:

20 “(67) EER.—The term ‘EER’ means energy
21 efficiency ratio.

22 “(68) HSPF.—The term ‘HSPF’ means heat-
23 ing seasonal performance factor.”.

24 (b) EER AND HSPF TEST PROCEDURES.—Section
25 323(b) of the Energy Policy and Conservation Act (42

1 U.S.C. 6293(b)) is amended by adding at the end the fol-
2 lowing:

3 “(19) EER AND HSPF TEST PROCEDURES.—

4 “(A) IN GENERAL.—Subject to subpara-
5 graph (B), for purposes of residential central
6 air conditioner and heat pump standards that
7 take effect on or before January 1, 2015—

8 “(i) the EER shall be tested at an
9 outdoor test temperature of 95 degrees
10 Fahrenheit; and

11 “(ii) the HSPF shall be calculated
12 based on Region IV conditions.

13 “(B) REVISIONS.—The Secretary may re-
14 vise the EER outdoor test temperature and the
15 conditions for HSPF calculations as part of any
16 rulemaking to revise the central air conditioner
17 and heat pump test method.”.

18 (c) CENTRAL AIR CONDITIONERS AND HEAT
19 PUMPS.—Section 325(d) of the Energy Policy and Con-
20 servation Act (42 U.S.C. 6295(d)) is amended by adding
21 at the end the following:

22 “(4) CENTRAL AIR CONDITIONERS AND HEAT
23 PUMPS (EXCEPT THROUGH-THE-WALL CENTRAL AIR
24 CONDITIONERS, THROUGH-THE-WALL CENTRAL AIR
25 CONDITIONING HEAT PUMPS, AND SMALL DUCT,

1 HIGH VELOCITY SYSTEMS) MANUFACTURED ON OR
2 AFTER JANUARY 1, 2015.—

3 “(A) BASE NATIONAL STANDARDS.—

4 “(i) SEASONAL ENERGY EFFICIENCY
5 RATIO.—The seasonal energy efficiency
6 ratio of central air conditioners and central
7 air conditioning heat pumps manufactured
8 on or after January 1, 2015, shall not be
9 less than the following:

10 “(I) Split Systems: 13 for central
11 air conditioners and 14 for heat
12 pumps.

13 “(II) Single Package Systems:
14 14.

15 “(ii) HEATING SEASONAL PERFORM-
16 ANCE FACTOR.—The heating seasonal per-
17 formance factor of central air conditioning
18 heat pumps manufactured on or after Jan-
19 uary 1, 2015, shall not be less than the
20 following:

21 “(I) Split Systems: 8.2.

22 “(II) Single Package Systems:
23 8.0.

24 “(B) REGIONAL STANDARDS.—

1 “(i) SEASONAL ENERGY EFFICIENCY
2 RATIO.—The seasonal energy efficiency
3 ratio of central air conditioners and central
4 air conditioning heat pumps manufactured
5 on or after January 1, 2015, and installed
6 in States having historical average annual,
7 population weighted, heating degree days
8 less than 5,000 (specifically the States of
9 Alabama, Arizona, Arkansas, California,
10 Delaware, Florida, Georgia, Hawaii, Ken-
11 tucky, Louisiana, Maryland, Mississippi,
12 Nevada, New Mexico, North Carolina,
13 Oklahoma, South Carolina, Tennessee,
14 Texas, and Virginia) or in the District of
15 Columbia, the Commonwealth of Puerto
16 Rico, or any other territory or possession
17 of the United States shall not be less than
18 the following:

19 “(I) Split Systems: 14 for central
20 air conditioners and 14 for heat
21 pumps.

22 “(II) Single Package Systems:
23 14.

24 “(ii) ENERGY EFFICIENCY RATIO.—
25 The energy efficiency ratio of central air

1 conditioners (not including heat pumps)
2 manufactured on or after January 1, 2015,
3 and installed in the State of Arizona, Cali-
4 fornia, New Mexico, or Nevada shall be not
5 less than the following:

6 “(I) Split Systems: 12.2 for split
7 systems having a rated cooling capaci-
8 ty less than 45,000 BTU per hour
9 and 11.7 for products having a rated
10 cooling capacity equal to or greater
11 than 45,000 BTU per hour.

12 “(II) Single Package Systems:
13 11.0.

14 “(iii) APPLICATION OF SUBSECTION
15 (o)(6).—Subsection (o)(6) shall apply to
16 the regional standards set forth in this
17 subparagraph.

18 “(C) AMENDMENT OF STANDARDS.—

19 “(i) IN GENERAL.—Not later than
20 January 1, 2017, the Secretary shall pub-
21 lish a final rule to determine whether the
22 standards in effect for central air condi-
23 tioners and central air conditioning heat
24 pumps should be amended.

1 “(ii) APPLICATION.—The rule shall
2 provide that any amendments shall apply
3 to products manufactured on or after Jan-
4 uary 1, 2022.

5 “(D) CONSIDERATION OF ADDITIONAL
6 PERFORMANCE STANDARDS OR EFFICIENCY
7 CRITERIA.—

8 “(i) FORUM.—Not later than 4 years
9 in advance of the expected publication date
10 of a final rule for central air conditioners
11 and heat pumps under subparagraph (C),
12 the Secretary shall convene and facilitate a
13 forum for interested persons that are fairly
14 representative of relevant points of view
15 (including representatives of manufactur-
16 ers of the covered product, States, and effi-
17 ciency advocates), as determined by the
18 Secretary, to consider adding additional
19 performance standards or efficiency cri-
20 teria in the forthcoming rule.

21 “(ii) RECOMMENDATION.—If, within 1
22 year of the initial convening of such a
23 forum, the Secretary receives a rec-
24 ommendation submitted jointly by such
25 representative interested persons to add 1

1 or more performance standards or effi-
2 ciency criteria, the Secretary shall incor-
3 porate the performance standards or effi-
4 ciency criteria in the rulemaking process,
5 and, if justified under the criteria estab-
6 lished in this section, incorporate such per-
7 formance standards or efficiency criteria in
8 the revised standard.

9 “(iii) NO RECOMMENDATION.—If no
10 such joint recommendation is made within
11 1 year of the initial convening of such a
12 forum, the Secretary may add additional
13 performance standards or efficiency cri-
14 teria if the Secretary finds that the bene-
15 fits substantially exceed the burdens of the
16 action.

17 “(E) NEW CONSTRUCTION LEVELS.—

18 “(i) IN GENERAL.—As part of any
19 final rule concerning central air condi-
20 tioner and heat pump standards published
21 after June 1, 2013, the Secretary shall de-
22 termine if the building code levels specified
23 in section 327(f)(3)(C) should be amended
24 subject to meeting the criteria of sub-

1 section (o) when applied specifically to new
2 construction.

3 “(ii) EFFECTIVE DATE.—Any amend-
4 ed levels shall not take effect before Janu-
5 ary 1, 2018.

6 “(iii) AMENDED LEVELS.—The final
7 rule shall contain the amended levels, if
8 any.”.

9 (d) THROUGH-THE-WALL CENTRAL AIR CONDI-
10 TIONERS, THROUGH-THE-WALL CENTRAL AIR CONDI-
11 TIONING HEAT PUMPS, AND SMALL DUCT, HIGH VELOC-
12 ITY SYSTEMS.—Section 325(d) of the Energy Policy and
13 Conservation Act (42 U.S.C. 6295(d)) (as amended by
14 subsection (c)) is amended by adding at the end the fol-
15 lowing:

16 “(5) STANDARDS FOR THROUGH-THE-WALL
17 CENTRAL AIR CONDITIONERS, THROUGH-THE-WALL
18 CENTRAL AIR CONDITIONING HEAT PUMPS, AND
19 SMALL DUCT, HIGH VELOCITY SYSTEMS.—

20 “(A) DEFINITIONS.—In this paragraph:

21 “(i) SMALL DUCT, HIGH VELOCITY
22 SYSTEM.—The term ‘small duct, high ve-
23 locity system’ means a heating and cooling
24 product that contains a blower and indoor
25 coil combination that—

1 “(I) is designed for, and pro-
2 duces, at least 1.2 inches of external
3 static pressure when operated at the
4 certified air volume rate of 220–350
5 CFM per rated ton of cooling; and

6 “(II) when applied in the field,
7 uses high velocity room outlets gen-
8 erally greater than 1,000 fpm that
9 have less than 6.0 square inches of
10 free area.

11 “(ii) THROUGH-THE-WALL CENTRAL
12 AIR CONDITIONER; THROUGH-THE-WALL
13 CENTRAL AIR CONDITIONING HEAT
14 PUMP.—The terms ‘through-the-wall cen-
15 tral air conditioner’ and ‘through-the-wall
16 central air conditioning heat pump’ mean a
17 central air conditioner or heat pump, re-
18 spectively, that is designed to be installed
19 totally or partially within a fixed-size open-
20 ing in an exterior wall, and—

21 “(I) is not weatherized;

22 “(II) is clearly and permanently
23 marked for installation only through
24 an exterior wall;

1 “(III) has a rated cooling capac-
2 ity no greater than 30,000 Btu/hr;

3 “(IV) exchanges all of its outdoor
4 air across a single surface of the
5 equipment cabinet; and

6 “(V) has a combined outdoor air
7 exchange area of less than 800 square
8 inches (split systems) or less than
9 1,210 square inches (single packaged
10 systems) as measured on the surface
11 area described in subclause (IV).

12 “(iii) REVISION.—The Secretary may
13 revise the definitions contained in this sub-
14 paragraph through publication of a final
15 rule.

16 “(B) SMALL-DUCT HIGH-VELOCITY SYS-
17 TEMS.—

18 “(i) SEASONAL ENERGY EFFICIENCY
19 RATIO.—The seasonal energy efficiency
20 ratio for small-duct high-velocity systems
21 shall be not less than 11.00 for products
22 manufactured on or after January 23,
23 2006.

24 “(ii) HEATING SEASONAL PERFORM-
25 ANCE FACTOR.—The heating seasonal per-

1 performance factor for small-duct high-veloc-
 2 ity systems shall be not less than 6.8 for
 3 products manufactured on or after Janu-
 4 ary 23, 2006.

5 “(C) RULEMAKING.—

6 “(i) IN GENERAL.—Not later than
 7 June 30, 2011, the Secretary shall publish
 8 a final rule to determine whether stand-
 9 ards for through-the-wall central air condi-
 10 tioners, through-the-wall central air condi-
 11 tioning heat pumps and small duct, high
 12 velocity systems should be amended.

13 “(ii) APPLICATION.—The rule shall
 14 provide that any new or amended standard
 15 shall apply to products manufactured on or
 16 after June 30, 2016.”.

17 (e) FURNACES.—Section 325(f) of the Energy Policy
 18 and Conservation Act (42 U.S.C. 6295(f)) is amended by
 19 adding at the end the following:

20 “(5) NON-WEATHERIZED FURNACES (INCLUD-
 21 ING MOBILE HOME FURNACES, BUT NOT INCLUDING
 22 BOILERS) MANUFACTURED ON OR AFTER MAY 1,
 23 2013, AND WEATHERIZED FURNACES MANUFAC-
 24 TURED ON OR AFTER JANUARY 1, 2015.—

25 “(A) BASE NATIONAL STANDARDS.—

1 “(i) NON-WEATHERIZED FURNACES.—

2 The annual fuel utilization efficiency of
3 non-weatherized furnaces manufactured on
4 or after May 1, 2013, shall be not less
5 than the following:

6 “(I) Gas furnaces, a level deter-
7 mined by the Secretary in a final rule
8 published not later than June 30,
9 2011.

10 “(II) Oil furnaces, 83 percent.

11 “(ii) WEATHERIZED FURNACES.—The
12 annual fuel utilization efficiency of weath-
13 erized gas furnaces manufactured on or
14 after January 1, 2015, shall be not less
15 than 81 percent.

16 “(B) REGIONAL STANDARD.—

17 “(i) ANNUAL FUEL UTILIZATION EF-
18 FICIENCY.—Not later than June 30, 2011,
19 the Secretary shall—

20 “(I) publish a final rule deter-
21 mining whether to establish a stand-
22 ard for the annual fuel utilization effi-
23 ciency of non-weatherized gas fur-
24 naces manufactured on or after May
25 1, 2013, and installed in States hav-

1 ing historical average annual, popu-
2 lation weighted, heating degree days
3 equal to or greater than 5,000 (spe-
4 cifically the States of Alaska, Colo-
5 rado, Connecticut, Idaho, Illinois, In-
6 diana, Iowa, Kansas, Maine, Massa-
7 chusetts, Michigan, Minnesota, Mis-
8 souri, Montana, Nebraska, New
9 Hampshire, New Jersey, New York,
10 North Dakota, Ohio, Oregon, Penn-
11 sylvania, Rhode Island, South Dakota,
12 Utah, Vermont, Washington, West
13 Virginia, Wisconsin, and Wyoming);
14 and

15 “(II) include in the final rule de-
16 scribed in subclause (I) any regional
17 standard established under this sub-
18 paragraph.

19 “(ii) APPLICATION OF SUBSECTION
20 (o)(6).—Subsection (o)(6) shall apply to
21 any regional standard established under
22 this subparagraph.

23 “(C) AMENDMENT OF STANDARDS.—

24 “(i) NON-WEATHERIZED FURNACES.—

1 “(I) IN GENERAL.—Not later
2 than January 1, 2014, the Secretary
3 shall publish a final rule to determine
4 whether the standards in effect for
5 non-weatherized furnaces should be
6 amended.

7 “(II) APPLICATION.—The rule
8 shall provide that any amendments
9 shall apply to products manufactured
10 on or after January 1, 2019.

11 “(ii) WEATHERIZED FURNACES.—

12 “(I) IN GENERAL.—Not later
13 than January 1, 2017, the Secretary
14 shall publish a final rule to determine
15 whether the standard in effect for
16 weatherized furnaces should be
17 amended.

18 “(II) APPLICATION.—The rule
19 shall provide that any amendments
20 shall apply to products manufactured
21 on or after January 1, 2022.

22 “(D) NEW CONSTRUCTION LEVELS.—

23 “(i) IN GENERAL.—

24 “(I) FINAL RULE PUBLISHED
25 AFTER JANUARY 1, 2011.—As part of

1 any final rule concerning furnace
2 standards published after January 1,
3 2011, the Secretary shall establish the
4 building code levels referred to in sub-
5 clauses (I)(aa), (II)(aa), and (III)(aa)
6 of section 327(f)(3)(C)(i) subject to
7 meeting the criteria of subsection (o)
8 when applied specifically to new con-
9 struction.

10 “(II) FINAL RULE PUBLISHED
11 AFTER JUNE 1, 2013.—As part of any
12 final rule concerning furnace stand-
13 ards published after June 1, 2013,
14 the Secretary shall determine if the
15 building code levels specified in or
16 pursuant to section 327(f)(3)(C)
17 should be amended subject to meeting
18 the criteria of subsection (o) when ap-
19 plied specifically to new construction.

20 “(ii) EFFECTIVE DATE.—Any amend-
21 ed levels shall not take effect before Janu-
22 ary 1, 2018.

23 “(iii) AMENDED LEVELS.—The final
24 rule shall contain the amended levels, if
25 any.”.

1 (f) EXCEPTION FOR CERTAIN BUILDING CODE RE-
2 QUIREMENTS.—Section 327(f) of the Energy Policy and
3 Conservation Act (42 U.S.C. 6297(f)) is amended—

4 (1) in paragraph (3), by striking subparagraphs
5 (B) through (F) and inserting the following:

6 “(B) The code does not contain a manda-
7 tory requirement that, under all code compli-
8 ance paths, requires that the covered product
9 have an energy efficiency exceeding 1 of the fol-
10 lowing levels:

11 “(i) The applicable energy conserva-
12 tion standard established in or prescribed
13 under section 325.

14 “(ii) The level required by a regula-
15 tion of the State for which the Secretary
16 has issued a rule granting a waiver under
17 subsection (d).

18 “(C) If the energy consumption or con-
19 servation objective in the code is determined
20 using covered products, including any baseline
21 building designs against which all submitted
22 building designs are to be evaluated, the objec-
23 tive is based on the use of covered products
24 having efficiencies not exceeding—

1 “(i) for residential furnaces, central
2 air conditioners, and heat pumps, effective
3 not earlier than January 1, 2013, and
4 until such time as a level takes effect for
5 the product under clause (ii)—

6 “(I) for the States described in
7 section 325(f)(5)(B)(i)—

8 “(aa) for gas furnaces, an
9 AFUE level determined by the
10 Secretary; and

11 “(bb) 14 SEER for central
12 air conditioners (not including
13 heat pumps);

14 “(II) for the States and other lo-
15 calities described in section
16 325(d)(4)(B)(i) (except for the States
17 of Arizona, California, Nevada, and
18 New Mexico)—

19 “(aa) for gas furnaces, an
20 AFUE level determined by the
21 Secretary; and

22 “(bb) 15 SEER for central
23 air conditioners;

1 “(III) for the States of Arizona,
2 California, Nevada, and New Mex-
3 ico—

4 “(aa) for gas furnaces, an
5 AFUE level determined by the
6 Secretary;

7 “(bb) 15 SEER for central
8 air conditioners;

9 “(cc) an EER of 12.5 for
10 air conditioners (not including
11 heat pumps) with cooling capaci-
12 ty less than 45,000 Btu per
13 hour; and

14 “(dd) an EER of 12.0 for
15 air conditioners (not including
16 heat pumps) with cooling capaci-
17 ty of 45,000 Btu per hour or
18 more; and

19 “(IV) for all States—

20 “(aa) 85 percent AFUE for
21 oil furnaces; and

22 “(bb) 15 SEER and 8.5
23 HSPF for heat pumps;

24 “(ii) the building code levels estab-
25 lished pursuant to section 325; or

1 “(iii) the applicable standards or lev-
2 els specified in subparagraph (B).

3 “(D) The credit to the energy consumption
4 or conservation objective allowed by the code for
5 installing a covered product having an energy
6 efficiency exceeding the applicable standard or
7 level specified in subparagraph (C) is on a 1-
8 for-1 equivalent energy use or equivalent energy
9 cost basis, which may take into account the typ-
10 ical lifetimes of the products and building fea-
11 tures, using lifetimes for covered products
12 based on information published by the Depart-
13 ment of Energy or the American Society of
14 Heating, Refrigerating and Air-Conditioning
15 Engineers.

16 “(E) If the code sets forth 1 or more com-
17 binations of items that meet the energy con-
18 sumption or conservation objective, and if 1 or
19 more combinations specify an efficiency level for
20 a covered product that exceeds the applicable
21 standards and levels specified in subparagraph
22 (B)—

23 “(i) there is at least 1 combination
24 that includes such covered products having
25 efficiencies not exceeding 1 of the stand-

1 ards or levels specified in subparagraph
2 (B); and

3 “(ii) if 1 or more combinations of
4 items specify an efficiency level for a fur-
5 nace, central air conditioner, or heat pump
6 that exceeds the applicable standards and
7 levels specified in subparagraph (B), there
8 is at least 1 combination that the State
9 has found to be reasonably achievable
10 using commercially available technologies
11 that includes such products having effi-
12 ciencies at the applicable levels specified in
13 subparagraph (C), except that no combina-
14 tion need include a product having an effi-
15 ciency less than the level specified in sub-
16 paragraph (B)(ii).

17 “(F) The energy consumption or conserva-
18 tion objective is specified in terms of an esti-
19 mated total consumption of energy (which may
20 be specified in units of energy or its equivalent
21 cost).”;

22 (2) in paragraph (4)(B)—

23 (A) by inserting after “building code” the
24 first place it appears the following: “contains a

1 mandatory requirement that, under all code
2 compliance paths,”; and

3 (B) by striking “unless the” and all that
4 follows through “subsection (d)”;

5 (3) by adding at the end the following:

6 “(5) REPLACEMENT OF COVERED PRODUCT.—
7 Paragraph (3) shall not apply to the replacement of
8 a covered product serving an existing building unless
9 the replacement results in an increase in capacity
10 greater than—

11 “(A) 12,000 Btu per hour for residential
12 air conditioners and heat pumps; or

13 “(B) 20 percent for other covered prod-
14 ucts.”.

15 **SEC. 112. ENERGY CONSERVATION STANDARDS FOR HEAT**
16 **PUMP POOL HEATERS.**

17 (a) DEFINITIONS.—

18 (1) EFFICIENCY DESCRIPTOR.—Section
19 321(22) of the Energy Policy and Conservation Act
20 (42 U.S.C. 6291(22)) is amended—

21 (A) in subparagraph (E), by inserting
22 “gas-fired” before “pool heaters”; and

23 (B) by adding at the end the following:

1 “(F) For heat pump pool heaters, coeffi-
2 cient of performance of heat pump pool heat-
3 ers.”.

4 (2) COEFFICIENT OF PERFORMANCE OF HEAT
5 PUMP POOL HEATERS.—Section 321 of the Energy
6 Policy and Conservation Act (42 U.S.C. 6291) is
7 amended by inserting after paragraph (25) the fol-
8 lowing:

9 “(25A) COEFFICIENT OF PERFORMANCE OF
10 HEAT PUMP POOL HEATERS.—The term ‘coefficient
11 of performance of heat pump pool heaters’ means
12 the ratio of the capacity to power input value ob-
13 tained at the following rating conditions: 50.0 °F db/
14 44.2 °F wb outdoor air and 80.0 °F entering water
15 temperatures, according to AHRI Standard 1160.”.

16 (3) THERMAL EFFICIENCY OF GAS-FIRED POOL
17 HEATERS.—Section 321(26) of the Energy Policy
18 and Conservation Act (42 U.S.C. 6291(26)) is
19 amended by inserting “gas-fired” before “pool heat-
20 ers”.

21 (b) STANDARDS FOR POOL HEATERS.—Section
22 325(e)(2) of the Energy Policy and Conservation Act (42
23 U.S.C. 6295(e)(2)) is amended—

24 (1) by striking “(2) The thermal efficiency of
25 pool heaters” and inserting the following:

1 “(2) POOL HEATERS.—

2 “(A) GAS-FIRED POOL HEATERS.—The
3 thermal efficiency of gas-fired pool heaters”;
4 and

5 (2) by adding at the end the following:

6 “(B) HEAT PUMP POOL HEATERS.—Heat
7 pump pool heaters manufactured on or after
8 the date of enactment of this subparagraph
9 shall have a minimum coefficient of perform-
10 ance of 4.0.”.

11 **SEC. 113. GU-24 BASE LAMPS.**

12 (a) DEFINITIONS.—Section 321 of the Energy Policy
13 and Conservation Act (42 U.S.C. 6291) (as amended by
14 section 111(a)(2)) is amended by adding at the end the
15 following:

16 “(69) GU-24.—The term ‘GU-24’ means the
17 designation of a lamp socket, based on a coding sys-
18 tem by the International Electrotechnical Commis-
19 sion, under which—

20 “(A) ‘G’ indicates a holder and socket type
21 with 2 or more projecting contacts, such as pins
22 or posts;

23 “(B) ‘U’ distinguishes between lamp and
24 holder designs of similar type that are not

1 interchangeably due to electrical or mechanical
2 requirements; and

3 “(C) 24 indicates the distance in millime-
4 ters between the electrical contact posts.

5 “(70) GU-24 ADAPTOR.—

6 “(A) IN GENERAL.—The term ‘GU-24
7 Adaptor’ means a 1-piece device, pig-tail, wiring
8 harness, or other such socket or base attach-
9 ment that—

10 “(i) connects to a GU-24 socket on
11 one end and provides a different type of
12 socket or connection on the other end; and

13 “(ii) does not alter the voltage.

14 “(B) EXCLUSION.—The term ‘GU-24
15 Adaptor’ does not include a fluorescent ballast
16 with a GU-24 base.

17 “(71) GU-24 BASE LAMP.—‘GU-24 base lamp’
18 means a light bulb designed to fit in a GU-24 sock-
19 et.”.

20 (b) STANDARDS.—Section 325 of the Energy Policy
21 and Conservation Act (42 U.S.C. 6295) is amended—

22 (1) by redesignating subsection (ii) as sub-
23 section (jj); and

24 (2) by inserting after subsection (hh) the fol-
25 lowing:

1 “(ii) GU-24 BASE LAMPS.—

2 “(1) IN GENERAL.—A GU-24 base lamp shall
3 not be an incandescent lamp as defined by ANSI.

4 “(2) GU-24 ADAPTORS.—GU-24 adaptors shall
5 not adapt a GU-24 socket to any other line voltage
6 socket.”.

7 **SEC. 114. EFFICIENCY STANDARDS FOR BOTTLE-TYPE**
8 **WATER DISPENSERS, COMMERCIAL HOT**
9 **FOOD HOLDING CABINETS, AND PORTABLE**
10 **ELECTRIC SPAS.**

11 (a) DEFINITIONS.—Section 321 of the Energy Policy
12 and Conservation Act (42 U.S.C. 6291) (as amended by
13 section 113(a)) is amended by adding at the end the fol-
14 lowing:

15 “(72) BOTTLE-TYPE WATER DISPENSER.—The
16 term ‘bottle-type water dispenser’ means a drinking
17 water dispenser that is—

18 “(A) designed for dispensing hot and cold
19 water; and

20 “(B) uses a removable bottle or container
21 as the source of potable water.

22 “(73) COMMERCIAL HOT FOOD HOLDING CABI-
23 NET.—

1 “(A) IN GENERAL.—The term ‘commercial
2 hot food holding cabinet’ means a heated, fully-
3 enclosed compartment that—

4 “(i) is designed to maintain the tem-
5 perature of hot food that has been cooked
6 in a separate appliance;

7 “(ii) has 1 or more solid or glass
8 doors; and

9 “(iii) has an interior volume of 8
10 cubic feet or more.

11 “(B) EXCLUSIONS.—The term ‘commercial
12 hot food holding cabinet’ does not include—

13 “(i) a heated glass merchandising cab-
14 inet;

15 “(ii) a drawer warmer;

16 “(iii) a cook-and-hold appliance; or

17 “(iv) a mobile serving cart with both
18 hot and cold compartments.

19 “(74) COMPARTMENT BOTTLE-TYPE WATER
20 DISPENSER.—The term ‘compartment bottle-type
21 water dispenser’ means a drinking water dispenser
22 that—

23 “(A) is designed for dispensing hot and
24 cold water;

1 “(B) uses a removable bottle or container
2 as the source of potable water; and

3 “(C) includes a refrigerated compartment
4 with or without provisions for making ice.

5 “(75) PORTABLE ELECTRIC SPA.—

6 “(A) IN GENERAL.—The term ‘portable
7 electric spa’ means a factory-built electric spa
8 or hot tub that—

9 “(i) is intended for the immersion of
10 persons in heated water circulated in a
11 closed system; and

12 “(ii) is not intended to be drained and
13 filled with each use.

14 “(B) INCLUSIONS.—The term ‘portable
15 electric spa’ includes—

16 “(i) a filter;

17 “(ii) a heater (including an electric,
18 solar, or gas heater);

19 “(iii) a pump;

20 “(iv) a control; and

21 “(v) other equipment, such as a light,
22 a blower, and water sanitizing equipment.

23 “(C) EXCLUSIONS.—The term ‘portable
24 electric spa’ does not include—

1 “(i) a permanently installed spa that,
2 once installed, cannot be moved; or

3 “(ii) a spa that is specifically designed
4 and exclusively marketed for medical treat-
5 ment or physical therapy purposes.

6 “(76) WATER DISPENSER.—The term ‘water
7 dispenser’ means a factory-made assembly that—

8 “(A) mechanically cools and heats potable
9 water; and

10 “(B) dispenses the cooled or heated water
11 by integral or remote means.”.

12 (b) COVERAGE.—

13 (1) IN GENERAL.—Section 322(a) of the En-
14 ergy Policy and Conservation Act (42 U.S.C.
15 6292(a)) is amended—

16 (A) by redesignating paragraph (20) as
17 paragraph (23); and

18 (B) by inserting after paragraph (19) the
19 following:

20 “(20) Bottle-type water dispensers and com-
21 partment bottle-type water dispensers.

22 “(21) Commercial hot food holding cabinets.

23 “(22) Portable electric spas.”.

24 (2) CONFORMING AMENDMENTS.—

1 (A) Section 324 of the Energy Policy and
2 Conservation Act (42 U.S.C. 6294) is amended
3 by striking “(19)” each place it appears in sub-
4 sections (a)(3), (b)(1)(B), (b)(3), and (b)(5)
5 and inserting “(23)”.

6 (B) Section 325(l) of the Energy Policy
7 and Conservation Act (42 U.S.C. 6295(l)) is
8 amended by striking “paragraph (19)” each
9 place it appears in paragraphs (1) and (2) and
10 inserting “paragraph (23)”.

11 (c) TEST PROCEDURES.—Section 323(b) of the En-
12 ergy Policy and Conservation Act (42 U.S.C. 6293(b)) (as
13 amended by section 111(b)) is amended by adding at the
14 end the following:

15 “(20) BOTTLE-TYPE WATER DISPENSERS.—

16 “(A) IN GENERAL.—Test procedures for
17 bottle-type water dispensers and compartment
18 bottle-type water dispensers shall be based on
19 the document ‘Energy Star Program Require-
20 ments for Bottled Water Coolers version 1.1’
21 published by the Environmental Protection
22 Agency.

23 “(B) INTEGRAL, AUTOMATIC TIMERS.—A
24 unit with an integral, automatic timer shall not
25 be tested under this paragraph using section

1 4D of the test criteria (relating to Timer
2 Usage).

3 “(21) COMMERCIAL HOT FOOD HOLDING CABI-
4 NETS.—

5 “(A) IN GENERAL.—Test procedures for
6 commercial hot food holding cabinets shall be
7 based on the test procedures described in
8 ANSI/ASTM F2140–01 (Test for idle energy
9 rate-dry test).

10 “(B) INTERIOR VOLUME.—Interior volume
11 shall be based under this paragraph on the
12 method demonstrated in the document ‘Energy
13 Star Program Requirements for Commercial
14 Hot Food Holding Cabinets’ of the Environ-
15 mental Protection Agency, as in effect on Au-
16 gust 15, 2003.

17 “(22) PORTABLE ELECTRIC SPAS.—

18 “(A) IN GENERAL.—Test procedures for
19 portable electric spas shall be based on the test
20 method for portable electric spas described in
21 section 1604 of title 20, California Code of
22 Regulations, as amended on December 3, 2008.

23 “(B) NORMALIZED CONSUMPTION.—Con-
24 sumption shall be normalized under this para-

1 graph for a water temperature difference of 37
2 degrees Fahrenheit.

3 “(C) ANSI TEST PROCEDURE.—If the
4 American National Standards Institute pub-
5 lishes a test procedure for portable electric
6 spas, the Secretary shall revise the procedure
7 established under this paragraph, as determined
8 appropriate by the Secretary.”.

9 (d) STANDARDS.—Section 325 of the Energy Policy
10 and Conservation Act (42 U.S.C. 6295) (as amended by
11 section 113(b)) is amended—

12 (1) by redesignating subsection (ii) as sub-
13 section (mm); and

14 (2) by inserting after subsection (hh) the fol-
15 lowing:

16 “(ii) BOTTLE-TYPE WATER DISPENSERS.—Effective
17 beginning on the date that is 1 year after the date of en-
18 actment of the Energy Savings and Industrial Competi-
19 tiveness Act of 2011—

20 “(1) a bottle-type water dispenser shall not
21 have standby energy consumption that is greater
22 than 1.2 kilowatt-hours per day; and

23 “(2) a compartment bottle-type water dispenser
24 shall not have standby energy consumption that is
25 greater than 1.3 kilowatt-hours per day.

1 “(jj) COMMERCIAL HOT FOOD HOLDING CABI-
2 NETS.—Effective beginning on the date that is 1 year
3 after the date of enactment of the Energy Savings and
4 Industrial Competitiveness Act of 2011, a commercial hot
5 food holding cabinet shall have a maximum idle energy
6 rate of 40 watts per cubic foot of interior volume.

7 “(kk) PORTABLE ELECTRIC SPAS.—Effective begin-
8 ning on the date that is 1 year after the date of enactment
9 of the Energy Savings and Industrial Competitiveness Act
10 of 2011, a portable electric spa shall not have a normalized
11 standby power rate of greater than $5 (V^{2/3})$ Watts (in
12 which ‘V’ equals the fill volume (in gallons)).

13 “(ll) REVISIONS.—

14 “(1) IN GENERAL.—Not later than the date
15 that is 3 years after the date of enactment of the
16 Energy Savings and Industrial Competitiveness Act
17 of 2011, the Secretary shall—

18 “(A) consider in accordance with sub-
19 section (o) revisions to the standards estab-
20 lished under subsections (ii), (jj), and (kk); and

21 “(B)(i) publish a final rule establishing the
22 revised standards; or

23 “(ii) make a finding that no revisions are
24 technically feasible and economically justified.

1 “(2) EFFECTIVE DATE.—Any revised standards
2 under this subsection shall take effect not earlier
3 than the date that is 3 years after the date of the
4 publication of the final rule.”.

5 (e) PREEMPTION.—Section 327 of the Energy Policy
6 and Conservation Act (42 U.S.C. 6297) is amended—

7 (1) in subsection (b)—

8 (A) in paragraph (6), by striking “or”
9 after the semicolon at the end;

10 (B) in paragraph (7), by striking the pe-
11 riod at the end and inserting “; or”; and

12 (C) by adding at the end the following:

13 “(8) is a regulation that—

14 “(A) establishes efficiency standards for
15 bottle-type water dispensers, compartment bot-
16 tle-type water dispensers, commercial hot food
17 holding cabinets, or portable electric spas; and

18 “(B) is in effect on or before the date of
19 enactment of this paragraph.”; and

20 (2) in subsection (c)—

21 (A) in paragraph (8)(B), by striking “and”
22 after the semicolon at the end;

23 (B) in paragraph (9)—

1 (i) by striking “except that—” and all
2 that follows through “if the Secretary” and
3 inserting “except that if the Secretary”;

4 (ii) by redesignating clauses (i) and
5 (ii) as subparagraphs (A) and (B), respec-
6 tively, and indenting appropriately; and

7 (iii) in subparagraph (B) (as so redesi-
8 gnated), by striking the period at the end
9 and inserting “; or”; and

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

11 “(10) is a regulation that—

12 “(A) establishes efficiency standards for
13 bottle-type water dispensers, compartment bot-
14 tle-type water dispensers, commercial hot food
15 holding cabinets, or portable electric spas; and

16 “(B) is adopted by the California Energy
17 Commission on or before January 1, 2013.”.

18 **SEC. 115. TEST PROCEDURE PETITION PROCESS.**

19 (a) CONSUMER PRODUCTS OTHER THAN AUTO-
20 MOBILES.—Section 323(b)(1) of the Energy Policy and
21 Conservation Act (42 U.S.C. 6293(b)(1)) is amended—

22 (1) in subparagraph (A)(i), by striking
23 “amend” and inserting “publish in the Federal Reg-
24 ister amended”; and

25 (2) by adding at the end the following:

1 “(B) PETITIONS.—

2 “(i) IN GENERAL.—In the case of any
3 covered product, any person may petition
4 the Secretary to conduct a rulemaking—

5 “(I) to prescribe a test procedure
6 for the covered product; or

7 “(II) to amend the test proce-
8 dures applicable to the covered prod-
9 uct to more accurately or fully comply
10 with paragraph (3).

11 “(ii) DETERMINATION.—The Sec-
12 retary shall—

13 “(I) not later than 90 days after
14 the date of receipt of the petition,
15 publish the petition in the Federal
16 Register; and

17 “(II) not later than 180 days
18 after the date of receipt of the peti-
19 tion, grant or deny the petition.

20 “(iii) BASIS.—The Secretary shall
21 grant a petition if the Secretary finds that
22 the petition contains evidence that, assum-
23 ing no other evidence was considered, pro-
24 vides an adequate basis for determining
25 that an amended test procedure would

1 more accurately or fully comply with para-
2 graph (3).

3 “(iv) EFFECT ON OTHER REQUIRE-
4 MENTS.—The granting of a petition by the
5 Secretary under this subparagraph shall
6 create no presumption with respect to the
7 determination of the Secretary that the
8 proposed test procedure meets the require-
9 ments of paragraph (3).

10 “(v) RULEMAKING.—

11 “(I) IN GENERAL.—Except as
12 provided in subclause (II), not later
13 than the end of the 18-month period
14 beginning on the date of granting a
15 petition, the Secretary shall publish
16 an amended test procedure or a deter-
17 mination not to amend the test proce-
18 dure.

19 “(II) EXTENSION.—The Sec-
20 retary may extend the period de-
21 scribed in subclause (I) for 1 addi-
22 tional year.

23 “(III) DIRECT FINAL RULE.—
24 The Secretary may adopt a consensus
25 test procedure in accordance with the

1 direct final rule procedure established
2 under section 325(p)(4).

3 “(C) TEST PROCEDURES.—The Secretary
4 may, in accordance with the requirements of
5 this subsection, prescribe test procedures for
6 any consumer product classified as a covered
7 product under section 322(b).

8 “(D) NEW OR AMENDED TEST PROCE-
9 DURES.—The Secretary shall direct the Na-
10 tional Institute of Standards and Technology to
11 assist in developing new or amended test proce-
12 dures.”.

13 (b) CERTAIN INDUSTRIAL EQUIPMENT.—Section 343
14 of the Energy Policy and Conservation Act (42 U.S.C.
15 6314) is amended—

16 (1) in subsection (a), by striking paragraph (1)
17 and inserting the following:

18 “(1) AMENDMENT AND PETITION PROCESS.—

19 “(A) IN GENERAL.—At least once every 7
20 years, the Secretary shall review test procedures
21 for all covered equipment and—

22 “(i) publish in the Federal Register
23 amended test procedures with respect to
24 any covered equipment, if the Secretary
25 determines that amended test procedures

1 would more accurately or fully comply with
2 paragraphs (2) and (3); or

3 “(ii) publish notice in the Federal
4 Register of any determination not to
5 amend a test procedure.

6 “(B) PETITIONS.—

7 “(i) IN GENERAL.—In the case of any
8 class or category of covered equipment,
9 any person may petition the Secretary to
10 conduct a rulemaking—

11 “(I) to prescribe a test procedure
12 for the covered equipment; or

13 “(II) to amend the test proce-
14 dures applicable to the covered equip-
15 ment to more accurately or fully com-
16 ply with paragraphs (2) and (3).

17 “(ii) DETERMINATION.—The Sec-
18 retary shall—

19 “(I) not later than 90 days after
20 the date of receipt of the petition,
21 publish the petition in the Federal
22 Register; and

23 “(II) not later than 180 days
24 after the date of receipt of the peti-
25 tion, grant or deny the petition.

1 “(iii) BASIS.—The Secretary shall
2 grant a petition if the Secretary finds that
3 the petition contains evidence that, assum-
4 ing no other evidence was considered, pro-
5 vides an adequate basis for determining
6 that an amended test method would more
7 accurately promote energy or water use ef-
8 ficiency.

9 “(iv) EFFECT ON OTHER REQUIRE-
10 MENTS.—The granting of a petition by the
11 Secretary under this paragraph shall cre-
12 ate no presumption with respect to the de-
13 termination of the Secretary that the pro-
14 posed test procedure meets the require-
15 ments of paragraphs (2) and (3).

16 “(v) RULEMAKING.—

17 “(I) IN GENERAL.—Except as
18 provided in subclause (II), not later
19 than the end of the 18-month period
20 beginning on the date of granting a
21 petition, the Secretary shall publish
22 an amended test method or a deter-
23 mination not to amend the test meth-
24 od.

1 “(II) EXTENSION.—The Sec-
2 retary may extend the period de-
3 scribed in subclause (I) for 1 addi-
4 tional year.

5 “(III) DIRECT FINAL RULE.—
6 The Secretary may adopt a consensus
7 test procedure in accordance with the
8 direct final rule procedure established
9 under section 325(p).”;

10 (2) by striking subsection (c); and

11 (3) by redesignating subsections (d) and (e) as
12 subsections (c) and (d), respectively.

13 **SEC. 116. AMENDMENTS TO HOME APPLIANCE TEST METH-**
14 **ODS.**

15 Section 323(b) of the Energy Policy and Conserva-
16 tion Act (42 U.S.C. 6293(b)) (as amended by section
17 114(e)) is amended by adding at the end the following:

18 “(23) REFRIGERATOR AND FREEZER TEST PRO-
19 CEDURE.—

20 “(A) IN GENERAL.—Not later than 90
21 days after the date on which the Secretary pub-
22 lishes the final standard rule that was proposed
23 on September 27, 2010, the Secretary shall fi-
24 nalize the interim final test procedure rule pro-
25 posed on December 16, 2010, with such subse-

1 quent modifications to the test procedure or
2 standards as the Secretary determines to be ap-
3 propriate and consistent with this part.

4 “(B) RULEMAKING.—

5 “(i) INITIATION.—Not later than Jan-
6 uary 1, 2012, the Secretary shall initiate a
7 rulemaking to amend the test procedure
8 described in subparagraph (A) only to in-
9 corporate measured automatic icemaker
10 energy use.

11 “(ii) FINAL RULE.—Not later than
12 December 31, 2012, the Secretary shall
13 publish a final rule regarding the matter
14 described in clause (i).

15 “(24) ADDITIONAL HOME APPLIANCE TEST
16 PROCEDURES.—

17 “(A) AMENDED TEST PROCEDURE FOR
18 CLOTHES WASHERS.—Not later than October 1,
19 2011, the Secretary shall publish a final rule
20 amending the residential clothes washer test
21 procedure.

22 “(B) AMENDED TEST PROCEDURE FOR
23 CLOTHES DRYERS.—

24 “(i) IN GENERAL.—Not later than
25 180 days after the date of enactment of

1 this paragraph, the Secretary shall publish
2 an amended test procedure for clothes dry-
3 ers.

4 “(ii) REQUIREMENT.—The amend-
5 ments to the test procedure shall be lim-
6 ited to modifications requiring that tested
7 dryers are run until the cycle (including
8 cool down) is ended by automatic termi-
9 nation controls, if equipped with those con-
10 trols.”.

11 **SEC. 117. CREDIT FOR ENERGY STAR SMART APPLIANCES.**

12 Section 324A of the Energy Policy and Conservation
13 Act (42 U.S.C. 6294a) is amended by adding at the end
14 the following:

15 “(e) CREDIT FOR SMART APPLIANCES.—Not later
16 than 180 days after the date of enactment of this sub-
17 section, after soliciting comments pursuant to subsection
18 (c)(5), the Administrator of the Environmental Protection
19 Agency, in cooperation with the Secretary, shall determine
20 whether to update the Energy Star criteria for residential
21 refrigerators, refrigerator-freezers, freezers, dishwashers,
22 clothes washers, clothes dryers, and room air conditioners
23 to incorporate smart grid and demand response features.”.

1 **SEC. 118. VIDEO GAME CONSOLE ENERGY EFFICIENCY**
2 **STUDY.**

3 (a) IN GENERAL.—Part B of title III of the Energy
4 Policy and Conservation Act is amended by inserting after
5 section 324A (42 U.S.C. 6294a) the following:

6 **“SEC. 324B. VIDEO GAME CONSOLE ENERGY EFFICIENCY**
7 **STUDY.**

8 “(a) INITIAL STUDY.—

9 “(1) IN GENERAL.—Not later than 1 year after
10 the date of enactment of this section, the Secretary
11 shall conduct a study of—

12 “(A) video game console energy use; and

13 “(B) opportunities for energy savings re-
14 garding that energy use.

15 “(2) INCLUSIONS.—The study under paragraph
16 (1) shall include an assessment of all power-con-
17 suming modes and media playback modes of video
18 game consoles.

19 “(b) ACTION ON COMPLETION.—On completion of
20 the initial study under subsection (a), the Secretary shall
21 determine, by regulation, using the criteria and procedures
22 described in section 325(n)(2), whether to initiate a proc-
23 ess for establishing minimum energy efficiency standards
24 for video game console energy use.

25 “(c) FOLLOW-UP STUDY.—If the Secretary deter-
26 mines under subsection (b) that standards should not be

1 established, the Secretary shall conduct a follow-up study
 2 in accordance with subsection (a) by not later than 3 years
 3 after the date of the determination.”.

4 (b) APPLICATION DATE.—Subsection (nn)(1) of sec-
 5 tion 325 of the Energy Policy and Conservation Act (42
 6 U.S.C. 6295) (as redesignated by section 114(d)(1)) is
 7 amended by inserting “or section 324B” after “subsection
 8 (l), (u), or (v)” each place it appears.

9 **SEC. 119. REFRIGERATOR AND FREEZER STANDARDS.**

10 Section 325(b) of the Energy Policy and Conserva-
 11 tion Act (42 U.S.C. 6295(b)) is amended by striking para-
 12 graph (4) and inserting the following:

13 “(4) REFRIGERATORS, REFRIGERATOR-FREEZ-
 14 ERS, AND FREEZERS MANUFACTURED AS OF JANU-
 15 ARY 1, 2014.—

16 “(A) DEFINITION OF BUILT-IN PRODUCT
 17 CLASS.—In this paragraph, the term ‘built-in
 18 product class’ means a refrigerator, freezer, or
 19 refrigerator with a freezer unit that—

20 “(i) is 7.75 cubic feet or greater in
 21 total volume and 24 inches or less in cabi-
 22 net depth (not including doors, handles,
 23 and custom front panels);

1 “(ii) is designed to be totally encased
2 by cabinetry or panels attached during in-
3 stallation;

4 “(iii) is designed to accept a custom
5 front panel or to be equipped with an inte-
6 gral factory-finished face;

7 “(iv) is designed to be securely fas-
8 tened to adjacent cabinetry, walls, or
9 floors; and

10 “(v) has 2 or more sides that are
11 not—

12 “(I) fully finished; and

13 “(II) intended to be visible after
14 installation.

15 “(B) MAXIMUM ENERGY USE.—

16 “(i) IN GENERAL.—Based on the test
17 procedure in effect on July 9, 2010, the
18 maximum energy use allowed in kilowatt
19 hours per year for each product described
20 in the table contained in clause (ii) (other
21 than refrigerators and refrigerator-freezers
22 with total refrigerated volume exceeding 39
23 cubic feet and freezers with total refrig-
24 erated volume exceeding 30 cubic feet) that
25 is manufactured on or after January 1,

1 2014, is specified in the table contained in
2 that clause.

3 “(ii) STANDARDS EQUATIONS.—The
4 allowed maximum energy use referred to in
5 clause (i) is as follows:

“Standards Equations	
Product Description	
Automatic Defrost Refrigerator-Freezers	
Top Freezer w/o TTD ice	7.35 AV+ 207.0
Top Freezer w/ TTD ice	7.65 AV+ 267.0
Side Freezer w/o TTD ice	3.68 AV+ 380.6
Side Freezer w/ TTD ice	7.58 AV+ 304.5
Bottom Freezer w/o TTD ice	3.68 AV+ 367.2
Bottom Freezer w/ TTD ice	4.0 AV+ 431.2
Manual & Partial Automatic Refrigerator-Freezers	
Manual Defrost	7.06 AV+ 198.7
Partial Automatic	7.06 AV+ 198.7
All Refrigerators	
Manual Defrost	7.06 AV+ 198.7
Automatic Defrost	7.35 AV+ 207.0
All Freezers	
Upright with manual defrost	5.66 AV+ 193.7
Upright with automatic defrost	8.70 AV+ 228.3
Chest with manual defrost	7.41 AV+ 107.8
Chest with automatic defrost	10.33 AV+ 148.1
Automatic Defrost Refrigerator-Freezers-Compact Size	
Top Freezer and Bottom Freezer	10.80 AV+ 301.8

Side Freezer	6.08 AV+ 400.8
Manual & Partial Automatic Refrigerator-Freezers-Compact Size	
Manual Defrost	8.03 AV+ 224.3
Partial Automatic	5.25 AV+ 298.5
All Refrigerators-Compact Size	
Manual defrost	8.03 AV+ 224.3
Automatic defrost	9.53 AV+ 266.3
All Freezers-Compact Size	
Upright with manual defrost	8.80 AV+ 225.7
Upright with automatic defrost	10.26 AV+ 351.9
Chest	9.41 AV+ 136.8
Automatic Defrost Refrigerator-Freezers-Built-ins	
Top Freezer w/o TTD ice	7.84 AV+ 220.8
Side Freezer w/o TTD ice	3.93 AV+ 406.0
Side Freezer w/ TTD ice	8.08 AV+ 324.8
Bottom Freezer w/o TTD ice	3.91 AV+ 390.2
Bottom Freezer w/ TTD ice	4.25 AV+ 458.2
All Refrigerators-Built-ins	
Automatic Defrost	7.84 AV+ 220.8
All Freezers-Built-ins	
Upright with automatic defrost	9.32 AV+ 244.6.

- 1 “(iii) FINAL RULES.—
- 2 “(I) IN GENERAL.—Except as
- 3 provided in subclause (II), after the
- 4 date of publication of each test proce-
- 5 dure change made pursuant to section
- 6 323(b)(23), in accordance with the

1 procedures described in section
2 323(e)(2), the Secretary shall publish
3 final rules to amend the standards
4 specified in the table contained in
5 clause (ii).

6 “(II) EXCEPTION.—The stand-
7 ards amendment made pursuant to
8 the test procedure change required
9 under section 323(b)(23)(B) shall be
10 based on the difference between—

11 “(aa) the average measured
12 automatic ice maker energy use
13 of a representative sample for
14 each product class; and

15 “(bb) the value assumed by
16 the Department of Energy for ice
17 maker energy use in the test pro-
18 cedure published pursuant to sec-
19 tion 323(b)(23)(A).

20 “(III) APPLICABILITY.—Section
21 323(e)(3) shall not apply to the rules
22 described in this clause.

23 “(iv) FINAL RULE.—The Secretary
24 shall publish any final rule required by

1 clause (iii) by not later than the later of
2 the date that is 180 days after—

3 “(I) the date of enactment of this
4 clause; or

5 “(II) the date of publication of a
6 final rule to amend the test procedure
7 described in section 323(b)(23).

8 “(v) NEW PRODUCT CLASSES.—The
9 Secretary may establish 1 or more new
10 product classes as part of the final amend-
11 ed standard adopted pursuant to the test
12 procedure change required under section
13 323(b)(23)(B) if the 1 or more new prod-
14 uct classes are needed to distinguish
15 among products with automatic icemakers.

16 “(vi) EFFECTIVE DATES OF STAND-
17 ARDS.—

18 “(I) STANDARDS AMENDMENT
19 FOR FIRST REVISED TEST PROCE-
20 DURE.—A standards amendment
21 adopted pursuant to a test procedure
22 change required under section
23 323(b)(23)(A) shall apply to any
24 product manufactured as of January
25 1, 2014.

1 “(II) STANDARDS AMENDMENT
2 AFTER REVISED TEST PROCEDURE
3 FOR ICEMAKER ENERGY.—An amend-
4 ment adopted pursuant to a test pro-
5 cedure change required under section
6 323(b)(23)(B) shall apply to any
7 product manufactured as of the date
8 that is 3 years after the date of publi-
9 cation of the final rule amending the
10 standards.

11 “(vii) SLOPE AND INTERCEPT AD-
12 JUSTMENTS.—

13 “(I) IN GENERAL.—With respect
14 to refrigerators, freezers, and refrig-
15 erator-freezers, the Secretary may, by
16 rule, adjust the slope and intercept of
17 the equations specified in the table
18 contained in clause (ii)—

19 “(aa) based on the energy
20 use of typical products of various
21 sizes in a product class; and

22 “(bb) if the average energy
23 use for each of the classes is the
24 same under the new equations as

1 under the equations specified in
2 the table contained in clause (ii).

3 “(II) DEADLINE.—If the Sec-
4 retary adjusts the slope and intercept
5 of an equation described in subclause
6 (I), the Secretary shall publish the
7 final rule containing the adjustment
8 by not later than July 1, 2011.

9 “(viii) EFFECT.—A final rule pub-
10 lished under clause (iii) pursuant to the
11 test procedure change required under sec-
12 tion 323(b)(23)(B) or pursuant to clause
13 (iv) shall not be considered to be an
14 amendment to the standard for purposes
15 of section 325(m).”.

16 **SEC. 120. ROOM AIR CONDITIONER STANDARDS.**

17 Section 325(c) of the Energy Policy and Conservation
18 Act (42 U.S.C. 6295(c)) is amended by adding at the end
19 the following:

20 “(3) MINIMUM ENERGY EFFICIENCY RATIO OF
21 ROOM AIR CONDITIONERS MANUFACTURED ON OR
22 AFTER JUNE 1, 2014.—

23 “(A) IN GENERAL.—Based on the test pro-
24 cedure in effect on July 9, 2010, the minimum
25 energy efficiency ratios of room air conditioners

1 manufactured on or after June 1, 2014, shall
 2 not be less than that specified in the table con-
 3 tained in subparagraph (B).

4 “(B) MINIMUM ENERGY EFFICIENCY RA-
 5 TIOS.—The minimum energy efficiency ratios
 6 referred to in subparagraph (A) are as follows:

“Product Description	Minimum EER
Without Reverse Cycle w/Louvers	
<6,000 Btu/h	11.2
6,000 to 7,999 Btu/h	11.2
8,000-13,999 Btu/h	11.0
14,000 to 19,999 Btu/h	10.8
20,000-27,999 Btu/h	9.4
≥28,000 Btu/h	9.0
Without Reverse Cycle w/o Louvers	
<6,000 Btu/h	10.2
6,000 to 7,999 Btu/h	10.2
8,000-10,999 Btu/h	9.7
11,000-13,999 Btu/h	9.6
14,000 to 19,999 Btu/h	9.4
≥20,000 Btu/h	9.4
With Reverse Cycle	
<20,000 w/Louvers Btu/h	9.9
≥ 20,000 w/Louvers Btu/h	9.4
<14,000 w/o Louvers Btu/h	9.4
≥14,000 w/o Louvers Btu/h	8.8
Casement	

“Product Description	Minimum EER
Casement Only	9.6
Casement-Slider	10.5.

1 “(C) FINAL RULE.—

2 “(i) IN GENERAL.—Not later than
3 July 1, 2011, pursuant to the test proce-
4 dure adopted by the Secretary on January
5 6, 2011, the Secretary shall amend the
6 standards specified in the table contained
7 in subparagraph (B) in accordance with
8 the procedures described in section
9 323(e)(2).

10 “(ii) STANDBY AND OFF MODE EN-
11 ERGY CONSUMPTION.—

12 “(I) IN GENERAL.—The Sec-
13 retary shall integrate standby and off
14 mode energy consumption into the
15 amended energy efficiency ratios
16 standards required under clause (i).

17 “(II) REQUIREMENTS.—The
18 amended standards described in sub-
19 clause (I) shall reflect the levels of
20 standby and off mode energy con-
21 sumption that meet the criteria de-
22 scribed in section 325(o).

1 “(iii) APPLICABILITY.—

2 “(I) AMENDMENT OF STAND-
3 ARD.—Section 323(e)(3) shall not
4 apply to the amended standards de-
5 scribed in clause (i).

6 “(II) AMENDED STANDARDS.—
7 The amended standards required by
8 this subparagraph shall apply to prod-
9 ucts manufactured on or after June 1,
10 2014.”.

11 **SEC. 121. UNIFORM EFFICIENCY DESCRIPTOR FOR COV-
12 ERED WATER HEATERS.**

13 Section 325(e) of the Energy Policy and Conservation
14 Act (42 U.S.C. 6295(e)) is amended by adding at the end
15 the following:

16 “(5) UNIFORM EFFICIENCY DESCRIPTOR FOR
17 COVERED WATER HEATERS.—

18 “(A) DEFINITIONS.—In this paragraph:

19 “(i) COVERED WATER HEATER.—The
20 term ‘covered water heater’ means—

21 “(I) a water heater; and

22 “(II) a storage water heater, in-
23 stantaneous water heater, and unfired
24 water storage tank (as defined in sec-
25 tion 340).

1 “(ii) FINAL RULE.—The term ‘final
2 rule’ means the final rule published under
3 this paragraph.

4 “(B) PUBLICATION OF FINAL RULE.—Not
5 later than 180 days after the date of enactment
6 of this paragraph, the Secretary shall publish a
7 final rule that establishes a uniform efficiency
8 descriptor and accompanying test methods for
9 covered water heaters.

10 “(C) PURPOSE.—The purpose of the final
11 rule shall be to replace with a uniform effi-
12 ciency descriptor—

13 “(i) the energy factor descriptor for
14 water heaters established under this sub-
15 section; and

16 “(ii) the thermal efficiency and stand-
17 by loss descriptors for storage water heat-
18 ers, instantaneous water heaters, and
19 unfired water storage tanks established
20 under section 342(a)(5).

21 “(D) EFFECT OF FINAL RULE.—

22 “(i) IN GENERAL.—Notwithstanding
23 any other provision of this title, effective
24 beginning on the effective date of the final
25 rule, the efficiency standard for covered

1 water heaters shall be denominated accord-
2 ing to the efficiency descriptor established
3 by the final rule.

4 “(ii) EFFECTIVE DATE.—The final
5 rule shall take effect 1 year after the date
6 of publication of the final rule under sub-
7 paragraph (B).

8 “(E) CONVERSION FACTOR.—

9 “(i) IN GENERAL.—The Secretary
10 shall develop a mathematical conversion
11 factor for converting the measurement of
12 efficiency for covered water heaters from
13 the test procedures in effect on the date of
14 enactment of this paragraph to the new
15 energy descriptor established under the
16 final rule.

17 “(ii) APPLICATION.—The conversion
18 factor shall apply to models of covered
19 water heaters affected by the final rule and
20 tested prior to the effective date of the
21 final rule.

22 “(iii) EFFECT ON EFFICIENCY RE-
23 QUIREMENTS.—The conversion factor shall
24 not affect the minimum efficiency require-

1 ments for covered water heaters otherwise
2 established under this title.

3 “(iv) USE.—During the period de-
4 scribed in clause (v), a manufacturer may
5 apply the conversion factor established by
6 the Secretary to rerate existing models of
7 covered water heaters that are in existence
8 prior to the effective date of the rule de-
9 scribed in clause (v)(II) to comply with the
10 new efficiency descriptor.

11 “(v) PERIOD.—Subclause (E) shall
12 apply during the period—

13 “(I) beginning on the date of
14 publication of the conversion factor in
15 the Federal Register; and

16 “(II) ending on April 16, 2015.

17 “(F) EXCLUSIONS.—The final rule may
18 exclude a specific category of covered water
19 heaters from the uniform efficiency descriptor
20 established under this paragraph if the Sec-
21 retary determines that the category of water
22 heaters—

23 “(i) does not have a residential use
24 and can be clearly described in the final
25 rule; and

1 “(ii) are effectively rated using the
2 thermal efficiency and standby loss
3 descriptors applied (on the date of enact-
4 ment of this paragraph) to the category
5 under section 342(a)(5).

6 “(G) OPTIONS.—The descriptor set by the
7 final rule may be—

8 “(i) a revised version of the energy
9 factor descriptor in use on the date of en-
10 actment of this paragraph;

11 “(ii) the thermal efficiency and stand-
12 by loss descriptors in use on that date;

13 “(iii) a revised version of the thermal
14 efficiency and standby loss descriptors;

15 “(iv) a hybrid of descriptors; or

16 “(v) a new approach.

17 “(H) APPLICATION.—The efficiency
18 descriptor and accompanying test method estab-
19 lished under the final rule shall apply, to the
20 maximum extent practicable, to all water heat-
21 ing technologies in use on the date of enact-
22 ment of this paragraph and to future water
23 heating technologies.

24 “(I) PARTICIPATION.—The Secretary shall
25 invite interested stakeholders to participate in

1 the rulemaking process used to establish the
2 final rule.

3 “(J) TESTING OF ALTERNATIVE
4 DESCRIPTORS.—In establishing the final rule,
5 the Secretary shall contract with the National
6 Institute of Standards and Technology, as nec-
7 essary, to conduct testing and simulation of al-
8 ternative descriptors identified for consider-
9 ation.

10 “(K) EXISTING COVERED WATER HEAT-
11 ERS.—A covered water heater shall be consid-
12 ered to comply with the final rule on and after
13 the effective date of the final rule and with any
14 revised labeling requirements established by the
15 Federal Trade Commission to carry out the
16 final rule if the covered water heater—

17 “(i) was manufactured prior to the ef-
18 fective date of the final rule; and

19 “(ii) complied with the efficiency
20 standards and labeling requirements in ef-
21 fect prior to the final rule.”.

22 **SEC. 122. CLOTHES DRYERS.**

23 Section 325(g)(4) of the Energy Policy and Con-
24 servation Act (42 U.S.C. 6295(g)(4)) is amended by add-
25 ing at the end the following:

1 “(D) MINIMUM ENERGY FACTORS FOR
2 CLOTHES DRYERS.—

3 “(i) IN GENERAL.—Based on the test
4 procedure in effect as of July 9, 2010,
5 clothes dryers manufactured on or after
6 January 1, 2015, shall comply with the
7 minimum energy factors specified in the
8 table contained in clause (ii).

9 “(ii) NEW STANDARDS.—The min-
10 imum energy factors referred to in clause
11 (i) are as follows:

“Product Description	EF
Vented Electric Standard	3.17.
Vented Electric Compact 120V	3.29.
Vented Electric Compact 240V	3.05.
Vented Gas	2.81.
Vent-Less Electric Compact 240V	2.37.
Vent-Less Electric Combination Washer/Dryer	1.95.

12 “(iii) FINAL RULE.—

13 “(I) REQUIREMENTS.—

14 “(aa) IN GENERAL.—The
15 final rule to amend the clothes
16 dryer test procedure adopted pur-
17 suant to section 323(b)(24)(B)
18 shall amend the energy factors

1 standards specified in the table
2 contained in clause (ii) in accord-
3 ance with the procedures de-
4 scribed in section 323(e)(2).

5 “(bb) REPRESENTATIVE
6 SAMPLE.—To establish a rep-
7 resentative sample of compliant
8 products, the Secretary shall se-
9 lect a sample of minimally com-
10 pliant dryers that automatically
11 terminate the drying cycle at not
12 less than 4 percent remaining
13 moisture content.

14 “(II) STANDBY AND OFF MODE
15 ENERGY CONSUMPTION.—

16 “(aa) INTEGRATION.—The
17 Secretary shall integrate standby
18 and off mode energy consumption
19 into the amended standards re-
20 quired under subclause (I).

21 “(bb) REQUIREMENTS.—
22 The amended standards de-
23 scribed in item (aa) shall reflect
24 levels of standby and off mode
25 energy consumption that meet

1 the criteria described in section
2 325(o).

3 “(III) APPLICABILITY.—

4 “(aa) AMENDMENT OF
5 STANDARD.—Section 323(e)(3)
6 shall not apply to the amended
7 standards described in subclause
8 (I).

9 “(bb) AMENDED STAND-
10 ARDS.—The amended standards
11 required by this clause shall
12 apply to products manufactured
13 on or after January 1, 2015.

14 “(iv) OTHER STANDARDS.—Any dryer
15 energy conservation standard that takes ef-
16 fect after the date of enactment of this
17 subparagraph but before the amended
18 standard required by this subparagraph
19 shall not apply.”.

20 **SEC. 123. STANDARDS FOR CLOTHES WASHERS.**

21 Section 325(g)(9) of the Energy Policy and Con-
22 servation Act (42 U.S.C. 6295(g)(9)) is amended by strik-
23 ing subparagraph (B) and inserting the following:

24 “(B) AMENDMENT OF STANDARDS.—

1 “(i) PRODUCTS MANUFACTURED ON
2 OR AFTER JANUARY 1, 2015.—

3 “(I) IN GENERAL.—Based on the
4 test procedure in effect on July 9,
5 2010, clothes washers manufactured
6 on or after January 1, 2015, shall
7 comply with the minimum modified
8 energy factors and maximum water
9 factors specified in the table contained
10 in subclause (II).

11 “(II) STANDARDS.—The min-
12 imum modified energy factors and
13 maximum water factors referred to in
14 subclause (I) are as follows:

	“MEF	WF
Top Loading—Standard	1.72	8.0
Top Loading—Compact	1.26	14.0
Front Loading—Standard	2.2	4.5
Front Loading—Compact (less than 1.6 cu. ft. capacity)	1.72	8.0.

15 “(ii) PRODUCTS MANUFACTURED ON
16 OR AFTER JANUARY 1, 2018.—

17 “(I) IN GENERAL.—Based on the
18 test procedure in effect on July 9,
19 2010, top-loading clothes washers
20 manufactured on or after January 1,

1 2018, shall comply with the minimum
 2 modified energy factors and maximum
 3 water factors specified in the table
 4 contained in subclause (II).

5 “(II) STANDARDS.—The min-
 6 imum modified energy factors and
 7 maximum water factors referred to in
 8 subclause (I) are as follows:

	“MEF	WF
Top Loading—Standard	2.0	6.0
Top Loading—Compact	1.81	11.6.

9 “(iii) FINAL RULE.—

10 “(I) IN GENERAL.—The final
 11 rule to amend the clothes washer test
 12 procedure adopted pursuant to section
 13 323(b)(24)(A) shall amend the stand-
 14 ards described in clauses (i) and (ii)
 15 in accordance with the procedures de-
 16 scribed in section 323(e)(2).

17 “(II) STANDBY AND OFF MODE
 18 ENERGY CONSUMPTION.—

19 “(aa) INTEGRATION.—The
 20 Secretary shall integrate standby
 21 and off mode energy consumption
 22 into the amended modified en-

1 energy factor standards required
2 under subclause (I).

3 “(bb) REQUIREMENTS.—

4 The amended modified energy
5 factor standards described in
6 item (aa) shall reflect levels of
7 standby and off mode energy
8 consumption that meet the cri-
9 teria described in section 325(o).

10 “(III) APPLICABILITY.—

11 “(aa) AMENDMENT OF
12 STANDARD.—Section 323(e)(3)
13 shall not apply to the amended
14 standards described in subclause
15 (I).

16 “(bb) AMENDED STANDARDS
17 FOR PRODUCTS MANUFACTURED
18 ON OR AFTER JANUARY 1, 2015.—
19 Amended standards required by
20 this clause that are based on
21 clause (i) shall apply to products
22 manufactured on or after Janu-
23 ary 1, 2015.

24 “(cc) AMENDED STANDARDS
25 FOR PRODUCTS MANUFACTURED

1 ON OR AFTER JANUARY 1, 2018.—
 2 Amended standards required by
 3 this clause that are based on
 4 clause (ii) shall apply to products
 5 manufactured on or after Janu-
 6 ary 1, 2018.”.

7 **SEC. 124. DISHWASHERS.**

8 Section 325(g)(10) of the Energy Policy and Con-
 9 servation Act (42 U.S.C. 6295(g)(10)) is amended—

10 (1) by striking subparagraph (A);

11 (2) by redesignating subparagraph (B) as sub-
 12 paragraph (D); and

13 (3) by inserting before subparagraph (D) (as
 14 redesignated by paragraph (2)) the following:

15 “(A) DISHWASHERS MANUFACTURED ON
 16 OR AFTER JANUARY 1, 2010.—A dishwasher
 17 manufactured on or after January 1, 2010,
 18 shall—

19 “(i) for a standard size dishwasher,
 20 not exceed 355 kilowatt hours per year and
 21 6.5 gallons per cycle; and

22 “(ii) for a compact size dishwasher,
 23 not exceed 260 kilowatt hours per year and
 24 4.5 gallons per cycle.

1 “(B) DISHWASHERS MANUFACTURED ON
2 OR AFTER JANUARY 1, 2013.—A dishwasher
3 manufactured on or after January 1, 2013,
4 shall—

5 “(i) for a standard size dishwasher,
6 not exceed 307 kilowatt hours per year and
7 5.0 gallons per cycle; and

8 “(ii) for a compact size dishwasher,
9 not exceed 222 kilowatt hours per year and
10 3.5 gallons per cycle.

11 “(C) REQUIREMENTS OF FINAL RULES.—

12 “(i) IN GENERAL.—Any final rule to
13 amend the dishwasher test procedure after
14 July 9, 2010, and before January 1, 2013,
15 shall amend the standards described in
16 subparagraph (B) in accordance with the
17 procedures described in section 323(e)(2).

18 “(ii) APPLICABILITY.—

19 “(I) AMENDMENT OF STAND-
20 ARD.—Section 323(e)(3) shall not
21 apply to the amended standards de-
22 scribed in clause (i).

23 “(II) AMENDED STANDARDS.—

24 The amended standards required by
25 this subparagraph shall apply to prod-

1 ucts manufactured on or after Janu-
2 ary 1, 2013.”.

3 **SEC. 125. STANDARDS FOR CERTAIN REFLECTOR LAMPS.**

4 Section 325(i) of the Energy Policy and Conservation
5 Act (42 U.S.C. 6295(i)) is amended by adding at the end
6 the following:

7 “(9) REFLECTOR LAMPS.—In conducting
8 rulemakings for reflector lamps after January 1,
9 2014, the Secretary shall consider—

10 “(A) incandescent and nonincandescent
11 technologies; and

12 “(B) a new energy-related measure, other
13 than lumens per watt, that is based on the pho-
14 tometric distribution of those lamps.”.

15 **SEC. 126. PETITION FOR AMENDED STANDARDS.**

16 Section 325(n) of the Energy Policy and Conserva-
17 tion Act (42 U.S.C. 6295(n)) is amended—

18 (1) by redesignating paragraph (3) as para-
19 graph (5); and

20 (2) by inserting after paragraph (2) the fol-
21 lowing:

22 “(3) NOTICE OF DECISION.—Not later than
23 180 days after the date of receiving a petition, the
24 Secretary shall publish in the Federal Register a no-

1 tice of, and explanation for, the decision of the Sec-
2 retary to grant or deny the petition.

3 “(4) NEW OR AMENDED STANDARDS.—Not
4 later than 3 years after the date of granting a peti-
5 tion for new or amended standards, the Secretary
6 shall publish in the Federal Register—

7 “(A) a final rule that contains the new or
8 amended standards; or

9 “(B) a determination that no new or
10 amended standards are necessary.”.

11 **SEC. 127. PROHIBITED ACTS.**

12 Section 332(a) of the Energy Policy and Conserva-
13 tion Act (42 U.S.C. 6302(a)) is amended—

14 (1) in paragraph (1), by striking “for any man-
15 ufacturer or private labeler to distribute” and insert-
16 ing “for any manufacturer (or representative of a
17 manufacturer), distributor, retailer, or private label-
18 er to offer for sale or distribute”;

19 (2) by striking paragraph (5) and inserting the
20 following:

21 “(5) for any manufacturer (or representative of
22 a manufacturer), distributor, retailer, or private la-
23 beler—

24 “(A) to offer for sale or distribute in com-
25 merce any new covered product that is not in

1 conformity with an applicable energy conserva-
2 tion standard established in or prescribed under
3 this part; or

4 “(B) if the standard is a regional standard
5 that is more stringent than the base national
6 standard, to offer for sale or distribute in com-
7 merce any new covered product having knowl-
8 edge (consistent with the definition of ‘know-
9 ingly’ in section 333(b)) that the product will
10 be installed at a location covered by a regional
11 standard established in or prescribed under this
12 part and will not be in conformity with the
13 standard;”;

14 (3) in paragraph (6) (as added by section
15 306(b)(2) of Public Law 110–140 (121 Stat.
16 1559)), by striking the period at the end and insert-
17 ing a semicolon;

18 (4) by redesignating paragraph (6) (as added
19 by section 321(e)(3) of Public Law 110–140 (121
20 Stat. 1586)) as paragraph (7);

21 (5) in paragraph (7) (as so redesignated)—

22 (A) by striking “for any manufacturer, dis-
23 tributor, retailer, or private labeler to dis-
24 tribute” and inserting “for any manufacturer
25 (or representative of a manufacturer), dis-

1 tributor, retailer, or private labeler to offer for
2 sale or distribute”; and

3 (B) by striking the period at the end and
4 inserting a semicolon; and

5 (6) by inserting after paragraph (7) (as so re-
6 designated) the following:

7 “(8) for any manufacturer or private labeler to
8 distribute in commerce any new covered product that
9 has not been properly certified in accordance with
10 the requirements established in or prescribed under
11 this part;

12 “(9) for any manufacturer or private labeler to
13 distribute in commerce any new covered product that
14 has not been properly tested in accordance with the
15 requirements established in or prescribed under this
16 part; and

17 “(10) for any manufacturer or private labeler to
18 violate any regulation lawfully promulgated to imple-
19 ment any provision of this part.”.

20 **SEC. 128. OUTDOOR LIGHTING.**

21 (a) DEFINITIONS.—

22 (1) COVERED EQUIPMENT.—Section 340(1) of
23 the Energy Policy and Conservation Act (42 U.S.C.
24 6311(1)) is amended—

1 (A) by redesignating subparagraph (L) as
2 subparagraph (O); and

3 (B) by inserting after subparagraph (K)
4 the following:

5 “(L) High light output double-ended
6 quartz halogen lamps.

7 “(M) General purpose mercury vapor
8 lamps.”.

9 (2) INDUSTRIAL EQUIPMENT.—Section
10 340(2)(B) of the Energy Policy and Conservation
11 Act (42 U.S.C. 6311(2)(B)) is amended—

12 (A) by striking “and” before “unfired hot
13 water”; and

14 (B) by inserting after “tanks” the fol-
15 lowing: “, high light output double-ended quartz
16 halogen lamps, and general purpose mercury
17 vapor lamps”.

18 (3) NEW DEFINITIONS.—Section 340 of the
19 Energy Policy and Conservation Act (42 U.S.C.
20 6311) is amended—

21 (A) by redesignating paragraphs (22) and
22 (23) (as amended by sections 312(a)(2) and
23 314(a) of the Energy Independence and Secu-
24 rity Act of 2007 (121 Stat. 1564, 1569)) as
25 paragraphs (23) and (24), respectively; and

1 (B) by adding at the end the following:

2 “(25) GENERAL PURPOSE MERCURY VAPOR
3 LAMP.—The term ‘general purpose mercury vapor
4 lamp’ means a mercury vapor lamp (as defined in
5 section 321) that—

6 “(A) has a screw base;

7 “(B) is designed for use in general lighting
8 applications (as defined in section 321);

9 “(C) is not a specialty application mercury
10 vapor lamp; and

11 “(D) is designed to operate on a mercury
12 vapor lamp ballast (as defined in section 321)
13 or is a self-ballasted lamp.

14 “(26) HIGH LIGHT OUTPUT DOUBLE-ENDED
15 QUARTZ HALOGEN LAMP.—The term ‘high light out-
16 put double-ended quartz halogen lamp’ means a
17 lamp that—

18 “(A) is designed for general outdoor light-
19 ing purposes;

20 “(B) contains a tungsten filament;

21 “(C) has a rated initial lumen value of
22 greater than 6,000 and less than 40,000
23 lumens;

24 “(D) has at each end a recessed single
25 contact, R7s base;

1 “(E) has a maximum overall length (MOL)
2 between 4 and 11 inches;

3 “(F) has a nominal diameter less than $\frac{3}{4}$
4 inch (T6);

5 “(G) is designed to be operated at a volt-
6 age not less than 110 volts and not greater
7 than 200 volts or is designed to be operated at
8 a voltage between 235 volts and 300 volts;

9 “(H) is not a tubular quartz infrared heat
10 lamp; and

11 “(I) is not a lamp marked and marketed
12 as a Stage and Studio lamp with a rated life of
13 500 hours or less.

14 “(27) SPECIALTY APPLICATION MERCURY
15 VAPOR LAMP.—The term ‘specialty application mer-
16 cury vapor lamp’ means a mercury vapor lamp (as
17 defined in section 321) that is—

18 “(A) designed only to operate on a spe-
19 cialty application mercury vapor lamp ballast
20 (as defined in section 321); and

21 “(B) is marked and marketed for specialty
22 applications only.

23 “(28) TUBULAR QUARTZ INFRARED HEAT
24 LAMP.—The term ‘tubular quartz infrared heat

1 lamp’ means a double-ended quartz halogen lamp
2 that—

3 “(A) is marked and marketed as an infra-
4 red heat lamp; and

5 “(B) radiates predominately in the infra-
6 red radiation range and in which the visible ra-
7 diation is not of principle interest.”.

8 (b) STANDARDS.—Section 342 of the Energy Policy
9 and Conservation Act (42 U.S.C. 6313) is amended by
10 adding at the end the following:

11 “(g) HIGH LIGHT OUTPUT DOUBLE-ENDED QUARTZ
12 HALOGEN LAMPS.—A high light output double-ended
13 quartz halogen lamp manufactured on or after January
14 1, 2016, shall have a minimum efficiency of—

15 “(1) 27 LPW for lamps with a minimum rated
16 initial lumen value greater than 6,000 and a max-
17 imum initial lumen value of 15,000; and

18 “(2) 34 LPW for lamps with a rated initial
19 lumen value greater than 15,000 and less than
20 40,000.

21 “(h) GENERAL PURPOSE MERCURY VAPOR
22 LAMPS.—A general purpose mercury vapor lamp shall not
23 be manufactured on or after January 1, 2016.”.

24 (c) PREEMPTION.—Section 345 of the Energy Policy
25 and Conservation Act (42 U.S.C. 6316) is amended—

1 (1) in the first sentence of subsection (a), by
2 striking “The” and inserting “Except as otherwise
3 provided in this section, the”; and

4 (2) by adding at the end the following:

5 “(i) HIGH LIGHT OUTPUT DOUBLE-ENDED QUARTZ
6 HALOGEN LAMPS.—

7 “(1) IN GENERAL.—Except as provided in para-
8 graph (2), section 327 shall apply to high light out-
9 put double-ended quartz halogen lamps to the same
10 extent and in the same manner as described in sec-
11 tion 325(n)(1).

12 “(2) STATE ENERGY CONSERVATION STAND-
13 ARDS.—Any State energy conservation standard that
14 is adopted on or before January 1, 2015, pursuant
15 to a statutory requirement to adopt efficiency stand-
16 ard for reducing outdoor lighting energy use enacted
17 prior to January 31, 2008, shall not be preempted.”.

18 **SEC. 129. STANDARDS FOR COMMERCIAL FURNACES.**

19 Section 342(a) of the Energy Policy and Conserva-
20 tion Act (42 U.S.C. 6313(a)) is amended by adding at
21 the end the following:

22 “(11) Warm air furnaces with an input rating
23 of 225,000 Btu per hour or more and manufactured
24 on or after the date that is 1 year after the date of

1 enactment of this paragraph shall meet the following
2 standard levels:

3 “(A) Gas-fired units shall—

4 “(i) have a minimum thermal effi-
5 ciency of 80 percent;

6 “(ii) include an interrupted or inter-
7 mittent ignition device;

8 “(iii) have jacket losses not exceeding
9 0.75 percent of the input rating; and

10 “(iv) have power venting or a flue
11 damper.

12 “(B) Oil-fired units shall have—

13 “(i) a minimum thermal efficiency of
14 81 percent;

15 “(ii) jacket losses not exceeding 0.75
16 percent of the input rating; and

17 “(iii) power venting or a flue damp-
18 er.”.

19 **SEC. 130. SERVICE OVER THE COUNTER, SELF-CONTAINED,**
20 **MEDIUM TEMPERATURE COMMERCIAL RE-**
21 **FRIGERATORS.**

22 Section 342(c) of the Energy Policy and Conservation
23 Act (42 U.S.C. 6313(c)) is amended—

24 (1) in paragraph (1)—

1 (A) by redesignating subparagraph (C) as
2 subparagraph (E); and

3 (B) by inserting after subparagraph (B)
4 the following:

5 “(C) The term ‘service over the counter,
6 self-contained, medium temperature commercial
7 refrigerator’ or ‘(SOC–SC–M)’ means a me-
8 dium temperature commercial refrigerator—

9 “(i) with a self-contained condensing
10 unit and equipped with sliding or hinged
11 doors in the back intended for use by sales
12 personnel, and with glass or other trans-
13 parent material in the front for displaying
14 merchandise; and

15 “(ii) that has a height not greater
16 than 66 inches and is intended to serve as
17 a counter for transactions between sales
18 personnel and customers.

19 “(D) The term ‘TDA’ means the total dis-
20 play area (ft²) of the refrigerated case, as de-
21 fined in AHRI Standard 1200.”;

22 (2) by redesignating paragraphs (4) and (5) as
23 paragraphs (5) and (6), respectively; and

24 (3) by inserting after paragraph (3) the fol-
25 lowing:

1 “(4) Each SOC–SC–M manufactured on or
2 after January 1, 2012, shall have a total daily en-
3 ergy consumption (in kilowatt hours per day) of not
4 more than $0.6 \times \text{TDA} + 1.0$.”.

5 **SEC. 131. MOTOR MARKET ASSESSMENT AND COMMERCIAL**
6 **AWARENESS PROGRAM.**

7 (a) FINDINGS.—Congress finds that—

8 (1) electric motor systems account for about
9 half of the electricity used in the United States;

10 (2) electric motor energy use is determined by
11 both the efficiency of the motor and the system in
12 which the motor operates;

13 (3) Federal Government research on motor end
14 use and efficiency opportunities is more than a dec-
15 ade old; and

16 (4) the Census Bureau has discontinued collec-
17 tion of data on motor and generator importation,
18 manufacture, shipment, and sales.

19 (b) DEFINITIONS.—In this section:

20 (1) DEPARTMENT.—The term “Department”
21 means the Department of Energy.

22 (2) INTERESTED PARTIES.—The term “inter-
23 ested parties” includes—

24 (A) trade associations;

25 (B) motor manufacturers;

1 (C) motor end users;

2 (D) electric utilities; and

3 (E) individuals and entities that conduct
4 energy efficiency programs.

5 (3) SECRETARY.—The term “Secretary” means
6 the Secretary of Energy, in consultation with inter-
7 ested parties.

8 (c) ASSESSMENT.—The Secretary shall conduct an
9 assessment of electric motors and the electric motor mar-
10 ket in the United States that shall—

11 (1) include important subsectors of the indus-
12 trial and commercial electric motor market (as de-
13 termined by the Secretary), including—

14 (A) the stock of motors and motor-driven
15 equipment;

16 (B) efficiency categories of the motor pop-
17 ulation; and

18 (C) motor systems that use drives, servos,
19 and other control technologies;

20 (2) characterize and estimate the opportunities
21 for improvement in the energy efficiency of motor
22 systems by market segment, including opportunities
23 for—

24 (A) expanded use of drives, servos, and
25 other control technologies;

1 (B) expanded use of process control,
2 pumps, compressors, fans or blowers, and mate-
3 rial handling components; and

4 (C) substitution of existing motor designs
5 with existing and future advanced motor de-
6 signs, including electronically commutated per-
7 manent magnet, interior permanent magnet,
8 and switched reluctance motors; and

9 (3) develop an updated profile of motor system
10 purchase and maintenance practices, including sur-
11 veying the number of companies that have motor
12 purchase and repair specifications, by company size,
13 number of employees, and sales.

14 (d) RECOMMENDATIONS; UPDATE.—Based on the as-
15 sessment conducted under subsection (c), the Secretary
16 shall—

17 (1) develop—

18 (A) recommendations to update the de-
19 tailed motor profile on a periodic basis;

20 (B) methods to estimate the energy sav-
21 ings and market penetration that is attributable
22 to the Save Energy Now Program of the De-
23 partment; and

24 (C) recommendations for the Director of
25 the Census Bureau on market surveys that

1 should be undertaken in support of the motor
2 system activities of the Department; and

3 (2) prepare an update to the Motor Master+
4 program of the Department.

5 (e) PROGRAM.—Based on the assessment, rec-
6 ommendations, and update required under subsections (c)
7 and (d), the Secretary shall establish a proactive, national
8 program targeted at motor end-users and delivered in co-
9 operation with interested parties to increase awareness
10 of—

11 (1) the energy and cost-saving opportunities in
12 commercial and industrial facilities using higher effi-
13 ciency electric motors;

14 (2) improvements in motor system procurement
15 and management procedures in the selection of high-
16 er efficiency electric motors and motor-system com-
17 ponents, including drives, controls, and driven equip-
18 ment; and

19 (3) criteria for making decisions for new, re-
20 placement, or repair motor and motor system com-
21 ponents.

22 **SEC. 132. STUDY OF COMPLIANCE WITH ENERGY STAND-**
23 **ARDS FOR APPLIANCES.**

24 (a) IN GENERAL.—The Secretary of Energy shall
25 conduct a study of the degree of compliance with energy

1 standards for appliances, including an investigation of
2 compliance rates and options for improving compliance,
3 including enforcement.

4 (b) REPORT.—Not later than 18 months after the
5 date of enactment of this Act, the Secretary of Energy
6 shall submit to the appropriate committees of Congress
7 a report describing the results of the study, including any
8 recommendations.

9 **SEC. 133. STUDY OF DIRECT CURRENT ELECTRICITY SUP-**
10 **PLY IN CERTAIN BUILDINGS.**

11 (a) IN GENERAL.—The Secretary of Energy shall
12 conduct a study—

13 (1) of the costs and benefits (including signifi-
14 cant energy efficiency, power quality, and other
15 power grid, safety, and environmental benefits) of
16 requiring high-quality, direct current electricity sup-
17 ply in buildings; and

18 (2) to determine, if the requirement described
19 in paragraph (1) is imposed, what the policy and
20 role of the Federal Government should be in real-
21 izing those benefits.

22 (b) REPORT.—Not later than 1 year after the date
23 of enactment of this Act, the Secretary shall submit to
24 the appropriate committees of Congress a report describ-

1 ing the results of the study, including any recommenda-
2 tions.

3 **SEC. 134. TECHNICAL CORRECTIONS.**

4 (a) TITLE III OF ENERGY INDEPENDENCE AND SE-
5 CURITY ACT OF 2007—ENERGY SAVINGS THROUGH IM-
6 PROVED STANDARDS FOR APPLIANCES AND LIGHTING.—

7 (1) Section 325(u) of the Energy Policy and
8 Conservation Act (42 U.S.C. 6295(u)) (as amended
9 by section 301(c) of the Energy Independence and
10 Security Act of 2007 (121 Stat. 1550)) is amend-
11 ed—

12 (A) by redesignating paragraph (7) as
13 paragraph (4); and

14 (B) in paragraph (4) (as so redesignated),
15 by striking “supplies is” and inserting “supply
16 is”.

17 (2) Section 302(b) of the Energy Independence
18 and Security Act of 2007 (121 Stat. 1551) is
19 amended by striking “6313(a)” and inserting
20 “6314(a)”.

21 (3) Section 342(a)(6) of the Energy Policy and
22 Conservation Act (42 U.S.C. 6313(a)(6)) (as amend-
23 ed by section 305(b)(2) of the Energy Independence
24 and Security Act of 2007 (121 Stat. 1554)) is
25 amended—

1 (A) in subparagraph (B)—

2 (i) by striking “If the Secretary” and
3 inserting the following:

4 “(i) IN GENERAL.—If the Secretary”;

5 (ii) by striking “clause (ii)(II)” and
6 inserting “subparagraph (A)(ii)(II)”;

7 (iii) by striking “clause (i)” and in-
8 serting “subparagraph (A)(i)”;

9 (iv) by adding at the end the fol-
10 lowing:

11 “(ii) FACTORS.—In determining
12 whether a standard is economically justi-
13 fied for the purposes of subparagraph
14 (A)(ii)(II), the Secretary shall, after receiv-
15 ing views and comments furnished with re-
16 spect to the proposed standard, determine
17 whether the benefits of the standard ex-
18 ceed the burden of the proposed standard
19 by, to the maximum extent practicable,
20 considering—

21 “(I) the economic impact of the
22 standard on the manufacturers and
23 on the consumers of the products sub-
24 ject to the standard;

1 “(II) the savings in operating
2 costs throughout the estimated aver-
3 age life of the product in the type (or
4 class) compared to any increase in the
5 price of, or in the initial charges for,
6 or maintenance expenses of, the prod-
7 ucts that are likely to result from the
8 imposition of the standard;

9 “(III) the total projected quan-
10 tity of energy savings likely to result
11 directly from the imposition of the
12 standard;

13 “(IV) any lessening of the utility
14 or the performance of the products
15 likely to result from the imposition of
16 the standard;

17 “(V) the impact of any lessening
18 of competition, as determined in writ-
19 ing by the Attorney General, that is
20 likely to result from the imposition of
21 the standard;

22 “(VI) the need for national en-
23 ergy conservation; and

24 “(VII) other factors the Sec-
25 retary considers relevant.

1 “(iii) ADMINISTRATION.—

2 “(I) ENERGY USE AND EFFI-
3 CIENCY.—The Secretary may not pre-
4 scribe any amended standard under
5 this paragraph that increases the
6 maximum allowable energy use, or de-
7 creases the minimum required energy
8 efficiency, of a covered product.

9 “(II) UNAVAILABILITY.—

10 “(aa) IN GENERAL.—The
11 Secretary may not prescribe an
12 amended standard under this
13 subparagraph if the Secretary
14 finds (and publishes the finding)
15 that interested persons have es-
16 tablished by a preponderance of
17 the evidence that a standard is
18 likely to result in the unavail-
19 ability in the United States in
20 any product type (or class) of
21 performance characteristics (in-
22 cluding reliability, features, sizes,
23 capacities, and volumes) that are
24 substantially the same as those
25 generally available in the United

1 States at the time of the finding
2 of the Secretary.

3 “(bb) OTHER TYPES OR
4 CLASSES.—The failure of some
5 types (or classes) to meet the cri-
6 terion established under this sub-
7 clause shall not affect the deter-
8 mination of the Secretary on
9 whether to prescribe a standard
10 for the other types or classes.”;
11 and

12 (B) in subparagraph (C)(iv), by striking
13 “An amendment prescribed under this sub-
14 section” and inserting “Notwithstanding sub-
15 paragraph (D), an amendment prescribed under
16 this subparagraph”.

17 (4) Section 342(a)(6)(B)(iii) of the Energy Pol-
18 icy and Conservation Act (as added by section
19 306(c) of the Energy Independence and Security Act
20 of 2007 (121 Stat. 1559)) is transferred and reded-
21 icated as clause (vi) of section 342(a)(6)(C) of the
22 Energy Policy and Conservation Act (as amended by
23 section 305(b)(2) of the Energy Independence and
24 Security Act of 2007 (121 Stat. 1554)).

1 (5) Section 345 of the Energy Policy and Con-
2 servation Act (42 U.S.C. 6316) (as amended by sec-
3 tion 312(e) of the Energy Independence and Secu-
4 rity Act of 2007 (121 Stat. 1567)) is amended—

5 (A) by striking “subparagraphs (B)
6 through (G)” each place it appears and insert-
7 ing “subparagraphs (B), (C), (D), (I), (J), and
8 (K)”;

9 (B) by striking “part A” each place it ap-
10 pears and inserting “part B”; and

11 (C) in subsection (a)—

12 (i) in paragraph (8), by striking
13 “and” at the end;

14 (ii) in paragraph (9), by striking the
15 period at the end and inserting “; and”;

16 and

17 (iii) by adding at the end the fol-
18 lowing:

19 “(10) section 327 shall apply with respect to
20 the equipment described in section 340(1)(L) begin-
21 ning on the date on which a final rule establishing
22 an energy conservation standard is issued by the
23 Secretary, except that any State or local standard
24 prescribed or enacted for the equipment before the
25 date on which the final rule is issued shall not be

1 preempted until the energy conservation standard
2 established by the Secretary for the equipment takes
3 effect.”; and

4 (D) in subsection (h)(3), by striking “sec-
5 tion 342(f)(3)” and inserting “section
6 342(f)(4)”.

7 (6) Section 340(13) of the Energy Policy and
8 Conservation Act (42 U.S.C. 6311(13)) (as amended
9 by section 313(a) of the Energy Independence and
10 Security Act of 2007 (121 Stat. 1568)) is amend-
11 ed—

12 (A) by striking subparagraphs (A) and (B)
13 and inserting the following:

14 “(A) IN GENERAL.—The term ‘electric
15 motor’ means any of the following:

16 “(i) A motor that is a general purpose
17 T-frame, single-speed, foot-mounting, poly-
18 phase squirrel-cage induction motor of the
19 National Electrical Manufacturers Associa-
20 tion, Design A and B, continuous rated,
21 operating on 230/460 volts and constant
22 60 Hertz line power as defined in NEMA
23 Standards Publication MG1–1987.

24 “(ii) A motor incorporating the design
25 elements described in clause (i), but is con-

1 figured to incorporate 1 or more of the fol-
2 lowing variations:

3 “(I) U-frame motor.

4 “(II) NEMA Design C motor.

5 “(III) Close-coupled pump motor.

6 “(IV) Footless motor.

7 “(V) Vertical solid shaft normal
8 thrust motor (as tested in a horizontal
9 configuration).

10 “(VI) 8-pole motor.

11 “(VII) Poly-phase motor with a
12 voltage rating of not more than 600
13 volts (other than 230 volts or 460
14 volts, or both, or can be operated on
15 230 volts or 460 volts, or both).”;

16 (B) by redesignating subparagraphs (C)
17 through (I) as subparagraphs (B) through (H),
18 respectively.

19 (7)(A) Section 342(b) of the Energy Policy and
20 Conservation Act (42 U.S.C. 6313(b)) is amended—

21 (i) in paragraph (1), by striking “para-
22 graph (2)” and inserting “paragraph (3)”;

23 (ii) by redesignating paragraphs (2) and
24 (3) as paragraphs (3) and (4);

1 (iii) by inserting after paragraph (1) the
2 following:

3 “(2) STANDARDS EFFECTIVE BEGINNING DE-
4 CEMBER 19, 2010.—

5 “(A) IN GENERAL.—Except for definite
6 purpose motors, special purpose motors, and
7 those motors exempted by the Secretary under
8 paragraph (3) and except as provided for in
9 subparagraphs (B), (C), and (D), each electric
10 motor manufactured with power ratings from 1
11 to 200 horsepower (alone or as a component of
12 another piece of equipment) on or after Decem-
13 ber 19, 2010, shall have a nominal full load ef-
14 ficiency of not less than the nominal full load
15 efficiency described in NEMA MG-1 (2006)
16 Table 12-12.

17 “(B) FIRE PUMP ELECTRIC MOTORS.—Ex-
18 cept for those motors exempted by the Sec-
19 retary under paragraph (3), each fire pump
20 electric motor manufactured with power ratings
21 from 1 to 200 horsepower (alone or as a compo-
22 nent of another piece of equipment) on or after
23 December 19, 2010, shall have a nominal full
24 load efficiency that is not less than the nominal

1 full load efficiency described in NEMA MG-1
2 (2006) Table 12-11.

3 “(C) NEMA DESIGN B ELECTRIC MO-
4 TORS.—Except for those motors exempted by
5 the Secretary under paragraph (3), each
6 NEMA Design B electric motor with power rat-
7 ings of more than 200 horsepower, but not
8 greater than 500 horsepower, manufactured
9 (alone or as a component of another piece of
10 equipment) on or after December 19, 2010,
11 shall have a nominal full load efficiency of not
12 less than the nominal full load efficiency de-
13 scribed in NEMA MG-1 (2006) Table 12-11.

14 “(D) MOTORS INCORPORATING CERTAIN
15 DESIGN ELEMENTS.—Except for those motors
16 exempted by the Secretary under paragraph
17 (3), each electric motor described in section
18 340(13)(A)(ii) manufactured with power rat-
19 ings from 1 to 200 horsepower (alone or as a
20 component of another piece of equipment) on or
21 after December 19, 2010, shall have a nominal
22 full load efficiency of not less than the nominal
23 full load efficiency described in NEMA MG-1
24 (2006) Table 12-11.”; and

1 (iv) in paragraph (3) (as redesignated by
2 clause (ii)), by striking “paragraph (1)” each
3 place it appears in subparagraphs (A) and (D)
4 and inserting “paragraphs (1) and (2)”.

5 (B) Section 313 of the Energy Independence
6 and Security Act of 2007 (121 Stat. 1568) is re-
7 pealed.

8 (C) The amendments made by—

9 (i) subparagraph (A) take effect on De-
10 cember 19, 2010; and

11 (ii) subparagraph (B) take effect on De-
12 cember 19, 2007.

13 (8) Section 321(30)(D)(i)(III) of the Energy
14 Policy and Conservation Act (42 U.S.C.
15 6291(30)(D)(i)(III)) (as amended by section
16 321(a)(1)(A) of the Energy Independence and Secu-
17 rity Act of 2007 (121 Stat. 1574)) is amended by
18 inserting before the semicolon the following: “or, in
19 the case of a modified spectrum lamp, not less than
20 232 lumens and not more than 1,950 lumens”.

21 (9) Section 321(30)(T) of the Energy Policy
22 and Conservation Act (42 U.S.C. 6291(30)(T)) (as
23 amended by section 321(a)(1)(B) of the Energy
24 Independence and Security Act of 2007 (121 Stat.
25 1574)) is amended—

1 (A) in clause (i)—

2 (i) by striking the comma after
3 “household appliance” and inserting
4 “and”; and

5 (ii) by striking “and is sold at retail,”;
6 and

7 (B) in clause (ii), by inserting “when sold
8 at retail,” before “is designated”.

9 (10) Section 325(i) of the Energy Policy and
10 Conservation Act (42 U.S.C. 6295(i)) (as amended
11 by sections 321(a)(3)(A) and 322(b) of the Energy
12 Independence and Security Act of 2007 (121 Stat.
13 1577, 1588)) is amended by striking the subsection
14 designation and all that follows through the end of
15 paragraph (8) and inserting the following:

16 “(i) GENERAL SERVICE FLUORESCENT LAMPS, GEN-
17 ERAL SERVICE INCANDESCENT LAMPS, INTERMEDIATE
18 BASE INCANDESCENT LAMPS, CANDELABRA BASE INCAN-
19 DESCENT LAMPS, AND INCANDESCENT REFLECTOR
20 LAMPS.—

21 “(1) ENERGY EFFICIENCY STANDARDS.—

22 “(A) IN GENERAL.—Each of the following
23 general service fluorescent lamps, general serv-
24 ice incandescent lamps, intermediate base in-
25 candescent lamps, candelabra base incandescent

1 lamps, and incandescent reflector lamps manu-
 2 factured after the effective date specified in the
 3 tables listed in this subparagraph shall meet or
 4 exceed the standards established in the fol-
 5 lowing tables:

“FLUORESCENT LAMPS

Lamp Type	Nominal Lamp Wattage	Minimum CRI	Minimum Average Lamp Efficacy (LPW)	Effective Date (Period of Months)
4-foot medium bi-pin	>35 W	69	75.0	36
.....	≤35 W	45	75.0	36
2-foot U-shaped	>35 W	69	68.0	36
.....	≤35 W	45	64.0	36
8-foot slimline	>65 W	69	80.0	18
.....	≤65 W	45	80.0	18
8-foot high output	>100 W	69	80.0	18
.....	≤100 W	45	80.0	18.

“INCANDESCENT REFLECTOR LAMPS

Nominal Lamp Wattage	Minimum Average Lamp Efficacy (LPW)	Effective Date (Period of Months)
40–50	10.5	36
51–66	11.0	36
67–85	12.5	36
86–115	14.0	36
116–155	14.5	36
156–205	15.0	36.

“GENERAL SERVICE INCANDESCENT LAMPS

Rated Lumen Ranges	Maximum Rated Wattage	Minimum Rated Life-time	Effective Date
1490–2600	72	1,000 hrs	1/1/2012
1050–1489	53	1,000 hrs	1/1/2013
750–1049	43	1,000 hrs	1/1/2014
310–749	29	1,000 hrs	1/1/2014.

“MODIFIED SPECTRUM GENERAL SERVICE INCANDESCENT LAMPS

Rated Lumen Ranges	Maximum Rated Wattage	Minimum Rated Life-time	Effective Date
1118–1950	72	1,000 hrs	1/1/2012
788–1117	53	1,000 hrs	1/1/2013
563–787	43	1,000 hrs	1/1/2014

“MODIFIED SPECTRUM GENERAL SERVICE INCANDESCENT
LAMPS—Continued

Rated Lumen Ranges	Maximum Rated Wattage	Minimum Rated Life-time	Effective Date
232–562	29	1,000 hrs	1/1/2014.

1 “(B) APPLICATION.—

2 “(i) APPLICATION CRITERIA.—This
3 subparagraph applies to each lamp that—

4 “(I) is intended for a general
5 service or general illumination applica-
6 tion (whether incandescent or not);

7 “(II) has a medium screw base
8 or any other screw base not defined in
9 ANSI C81.61–2006;

10 “(III) is capable of being oper-
11 ated at a voltage at least partially
12 within the range of 110 to 130 volts;
13 and

14 “(IV) is manufactured or im-
15 ported after December 31, 2011.

16 “(ii) REQUIREMENT.—For purposes
17 of this paragraph, each lamp described in
18 clause (i) shall have a color rendering
19 index that is greater than or equal to—

20 “(I) 80 for nonmodified spectrum
21 lamps; or

1 “(II) 75 for modified spectrum
2 lamps.

3 “(C) CANDELABRA INCANDESCENT LAMPS
4 AND INTERMEDIATE BASE INCANDESCENT
5 LAMPS.—

6 “(i) CANDELABRA BASE INCANDES-
7 CENT LAMPS.—Effective beginning Janu-
8 ary 1, 2012, a candelabra base incandes-
9 cent lamp shall not exceed 60 rated watts.

10 “(ii) INTERMEDIATE BASE INCANDES-
11 CENT LAMPS.—Effective beginning Janu-
12 ary 1, 2012, an intermediate base incan-
13 descent lamp shall not exceed 40 rated
14 watts.

15 “(D) EXEMPTIONS.—

16 “(i) STATUTORY EXEMPTIONS.—The
17 standards specified in subparagraph (A)
18 shall not apply to the following types of in-
19 candescent reflector lamps:

20 “(I) Lamps rated at 50 watts or
21 less that are ER30, BR30, BR40, or
22 ER40 lamps.

23 “(II) Lamps rated at 65 watts
24 that are BR30, BR40, or ER40
25 lamps.

1 “(III) R20 incandescent reflector
2 lamps rated 45 watts or less.

3 “(ii) ADMINISTRATIVE EXEMP-
4 TIONS.—

5 “(I) PETITION.—Any person may
6 petition the Secretary for an exemp-
7 tion for a type of general service lamp
8 from the requirements of this sub-
9 section.

10 “(II) CRITERIA.—The Secretary
11 may grant an exemption under sub-
12 clause (I) only to the extent that the
13 Secretary finds, after a hearing and
14 opportunity for public comment, that
15 it is not technically feasible to serve a
16 specialized lighting application (such
17 as a military, medical, public safety,
18 or certified historic lighting applica-
19 tion) using a lamp that meets the re-
20 quirements of this subsection.

21 “(III) ADDITIONAL CRITERION.—
22 To grant an exemption for a product
23 under this clause, the Secretary shall
24 include, as an additional criterion,
25 that the exempted product is unlikely

1 to be used in a general service lighting
2 application.

3 “(E) EXTENSION OF COVERAGE.—

4 “(i) PETITION.—Any person may peti-
5 tion the Secretary to establish standards
6 for lamp shapes or bases that are excluded
7 from the definition of general service
8 lamps.

9 “(ii) INCREASED SALES OF EXEMPT-
10 ED LAMPS.—The petition shall include evi-
11 dence that the availability or sales of ex-
12 empted incandescent lamps have increased
13 significantly since the date on which the
14 standards on general service incandescent
15 lamps were established.

16 “(iii) CRITERIA.—The Secretary shall
17 grant a petition under clause (i) if the Sec-
18 retary finds that—

19 “(I) the petition presents evi-
20 dence that demonstrates that commer-
21 cial availability or sales of exempted
22 incandescent lamp types have in-
23 creased significantly since the stand-
24 ards on general service lamps were es-
25 tablished and likely are being widely

1 used in general lighting applications;
2 and

3 “(II) significant energy savings
4 could be achieved by covering exempt-
5 ed products, as determined by the
6 Secretary based in part on sales data
7 provided to the Secretary from manu-
8 facturers and importers.

9 “(iv) NO PRESUMPTION.—The grant
10 of a petition under this subparagraph shall
11 create no presumption with respect to the
12 determination of the Secretary with respect
13 to any criteria under a rulemaking con-
14 ducted under this section.

15 “(v) EXPEDITED PROCEEDING.—If
16 the Secretary grants a petition for a lamp
17 shape or base under this subparagraph,
18 the Secretary shall—

19 “(I) conduct a rulemaking to de-
20 termine standards for the exempted
21 lamp shape or base; and

22 “(II) complete the rulemaking
23 not later than 18 months after the
24 date on which notice is provided
25 granting the petition.

1 “(F) EFFECTIVE DATES.—

2 “(i) IN GENERAL.—In this paragraph,
3 except as otherwise provided in a table
4 contained in subparagraph (A) or in clause
5 (ii), the term ‘effective date’ means the last
6 day of the period of months specified in
7 the table after October 24, 1992.

8 “(ii) SPECIAL EFFECTIVE DATES.—

9 “(I) ER, BR, AND BPAR
10 LAMPS.—The standards specified in
11 subparagraph (A) shall apply with re-
12 spect to ER incandescent reflector
13 lamps, BR incandescent reflector
14 lamps, BPAR incandescent reflector
15 lamps, and similar bulb shapes on and
16 after January 1, 2008, or the date
17 that is 180 days after the date of en-
18 actment of the Energy Independence
19 and Security Act of 2007.

20 “(II) LAMPS BETWEEN 2.25–2.75
21 INCHES IN DIAMETER.—The stand-
22 ards specified in subparagraph (A)
23 shall apply with respect to incandes-
24 cent reflector lamps with a diameter
25 of more than 2.25 inches, but not

1 more than 2.75 inches, on and after
2 the later of January 1, 2008, or the
3 date that is 180 days after the date of
4 enactment of the Energy Independ-
5 ence and Security Act of 2007.

6 “(2) COMPLIANCE WITH EXISTING LAW.—Not-
7 withstanding section 332(a)(5) and section 332(b),
8 it shall not be unlawful for a manufacturer to sell
9 a lamp that is in compliance with the law at the
10 time the lamp was manufactured.

11 “(3) RULEMAKING BEFORE OCTOBER 24,
12 1995.—

13 “(A) IN GENERAL.—Not later than 36
14 months after October 24, 1992, the Secretary
15 shall initiate a rulemaking procedure and shall
16 publish a final rule not later than the end of
17 the 54-month period beginning on October 24,
18 1992, to determine whether the standards es-
19 tablished under paragraph (1) should be
20 amended.

21 “(B) ADMINISTRATION.—The rule shall
22 contain the amendment, if any, and provide
23 that the amendment shall apply to products
24 manufactured on or after the 36-month period

1 beginning on the date on which the final rule is
2 published.

3 “(4) RULEMAKING BEFORE OCTOBER 24,
4 2000.—

5 “(A) IN GENERAL.—Not later than 8 years
6 after October 24, 1992, the Secretary shall ini-
7 tiate a rulemaking procedure and shall publish
8 a final rule not later than 9 years and 6 months
9 after October 24, 1992, to determine whether
10 the standards in effect for fluorescent lamps
11 and incandescent lamps should be amended.

12 “(B) ADMINISTRATION.—The rule shall
13 contain the amendment, if any, and provide
14 that the amendment shall apply to products
15 manufactured on or after the 36-month period
16 beginning on the date on which the final rule is
17 published.

18 “(5) RULEMAKING FOR ADDITIONAL GENERAL
19 SERVICE FLUORESCENT LAMPS.—

20 “(A) IN GENERAL.—Not later than the
21 end of the 24-month period beginning on the
22 date labeling requirements under section
23 324(a)(2)(C) become effective, the Secretary
24 shall—

1 “(i) initiate a rulemaking procedure to
2 determine whether the standards in effect
3 for fluorescent lamps and incandescent
4 lamps should be amended so that the
5 standards would be applicable to additional
6 general service fluorescent lamps; and

7 “(ii) publish, not later than 18
8 months after initiating the rulemaking, a
9 final rule including the amended stand-
10 ards, if any.

11 “(B) ADMINISTRATION.—The rule shall
12 provide that the amendment shall apply to
13 products manufactured after a date which is 36
14 months after the date on which the rule is pub-
15 lished.

16 “(6) STANDARDS FOR GENERAL SERVICE
17 LAMPS.—

18 “(A) RULEMAKING BEFORE JANUARY 1,
19 2014.—

20 “(i) IN GENERAL.—Not later than
21 January 1, 2014, the Secretary shall ini-
22 tiate a rulemaking procedure to determine
23 whether—

1 “(I) standards in effect for gen-
2 eral service lamps should be amended;
3 and

4 “(II) the exclusions for certain
5 incandescent lamps should be main-
6 tained or discontinued based, in part,
7 on excluded lamp sales collected by
8 the Secretary from manufacturers.

9 “(ii) SCOPE.—The rulemaking—

10 “(I) shall not be limited to incan-
11 descent lamp technologies; and

12 “(II) shall include consideration
13 of a minimum standard of 45 lumens
14 per watt for general service lamps.

15 “(iii) AMENDED STANDARDS.—If the
16 Secretary determines that the standards in
17 effect for general service lamps should be
18 amended, the Secretary shall publish a
19 final rule not later than January 1, 2017,
20 with an effective date that is not earlier
21 than 3 years after the date on which the
22 final rule is published.

23 “(iv) PHASED-IN EFFECTIVE
24 DATES.—The Secretary shall consider

1 phased-in effective dates under this sub-
2 paragraph after considering—

3 “(I) the impact of any amend-
4 ment on manufacturers, retiring and
5 repurposing existing equipment,
6 stranded investments, labor contracts,
7 workers, and raw materials; and

8 “(II) the time needed to work
9 with retailers and lighting designers
10 to revise sales and marketing strate-
11 gies.

12 “(v) BACKSTOP REQUIREMENT.—If
13 the Secretary fails to complete a rule-
14 making in accordance with clauses (i)
15 through (iv) or if the final rule does not
16 produce savings that are greater than or
17 equal to the savings from a minimum effi-
18 cacy standard of 45 lumens per watt, effec-
19 tive beginning January 1, 2020, the Sec-
20 retary shall prohibit the manufacture of
21 any general service lamp that does not
22 meet a minimum efficacy standard of 45
23 lumens per watt.

24 “(vi) STATE PREEMPTION.—Neither
25 section 327 nor any other provision of law

1 shall preclude California or Nevada from
2 adopting, effective beginning on or after
3 January 1, 2018—

4 “(I) a final rule adopted by the
5 Secretary in accordance with clauses
6 (i) through (iv);

7 “(II) if a final rule described in
8 subclause (I) has not been adopted,
9 the backstop requirement under
10 clause (v); or

11 “(III) in the case of California, if
12 a final rule described in subclause (I)
13 has not been adopted, any California
14 regulations relating to these covered
15 products adopted pursuant to State
16 statute in effect on the date of enact-
17 ment of the Energy Independence and
18 Security Act of 2007.

19 “(B) RULEMAKING BEFORE JANUARY 1,
20 2020.—

21 “(i) IN GENERAL.—Not later than
22 January 1, 2020, the Secretary shall ini-
23 tiate a rulemaking procedure to determine
24 whether—

1 “(I) standards in effect for gen-
2 eral service lamps should be amended;
3 and

4 “(II) the exclusions for certain
5 incandescent lamps should be main-
6 tained or discontinued based, in part,
7 on excluded lamp sales data collected
8 by the Secretary from manufacturers.

9 “(ii) SCOPE.—The rulemaking shall
10 not be limited to incandescent lamp tech-
11 nologies.

12 “(iii) AMENDED STANDARDS.—If the
13 Secretary determines that the standards in
14 effect for general service lamps should be
15 amended, the Secretary shall publish a
16 final rule not later than January 1, 2022,
17 with an effective date that is not earlier
18 than 3 years after the date on which the
19 final rule is published.

20 “(iv) PHASED-IN EFFECTIVE
21 DATES.—The Secretary shall consider
22 phased-in effective dates under this sub-
23 paragraph after considering—

24 “(I) the impact of any amend-
25 ment on manufacturers, retiring and

1 repurposing existing equipment,
2 stranded investments, labor contracts,
3 workers, and raw materials; and

4 “(II) the time needed to work
5 with retailers and lighting designers
6 to revise sales and marketing strate-
7 gies.

8 “(7) FEDERAL ACTIONS.—

9 “(A) COMMENTS OF SECRETARY.—

10 “(i) IN GENERAL.—With respect to
11 any lamp to which standards are applicable
12 under this subsection or any lamp specified
13 in section 346, the Secretary shall inform
14 any Federal entity proposing actions that
15 would adversely impact the energy con-
16 sumption or energy efficiency of the lamp
17 of the energy conservation consequences of
18 the action.

19 “(ii) CONSIDERATION.—The Federal
20 entity shall carefully consider the com-
21 ments of the Secretary.

22 “(B) AMENDMENT OF STANDARDS.—Not-
23 withstanding section 325(n)(1), the Secretary
24 shall not be prohibited from amending any
25 standard, by rule, to permit increased energy

1 use or to decrease the minimum required en-
2 energy efficiency of any lamp to which standards
3 are applicable under this subsection if the ac-
4 tion is warranted as a result of other Federal
5 action (including restrictions on materials or
6 processes) that would have the effect of either
7 increasing the energy use or decreasing the en-
8 energy efficiency of the product.

9 “(8) COMPLIANCE.—

10 “(A) IN GENERAL.—Not later than the
11 date on which standards established pursuant
12 to this subsection become effective, or, with re-
13 spect to high-intensity discharge lamps covered
14 under section 346, the effective date of stand-
15 ards established pursuant to that section, each
16 manufacturer of a product to which the stand-
17 ards are applicable shall file with the Secretary
18 a laboratory report certifying compliance with
19 the applicable standard for each lamp type.

20 “(B) CONTENTS.—The report shall include
21 the lumen output and wattage consumption for
22 each lamp type as an average of measurements
23 taken over the preceding 12-month period.

24 “(C) OTHER LAMP TYPES.—With respect
25 to lamp types that are not manufactured during

1 the 12-month period preceding the date on
2 which the standards become effective, the re-
3 port shall—

4 “(i) be filed with the Secretary not
5 later than the date that is 12 months after
6 the date on which manufacturing is com-
7 menced; and

8 “(ii) include the lumen output and
9 wattage consumption for each such lamp
10 type as an average of measurements taken
11 during the 12-month period.”.

12 (11) Section 325(l)(4)(A) of the Energy Policy
13 and Conservation Act (42 U.S.C. 6295(l)(4)(A)) (as
14 amended by section 321(a)(3)(B) of the Energy
15 Independence and Security Act of 2007 (121 Stat.
16 1581)) is amended by striking “only”.

17 (12) Section 327(b)(1)(B) of the Energy Policy
18 and Conservation Act (42 U.S.C. 6297(b)(1)(B)) (as
19 amended by section 321(d)(3) of the Energy Inde-
20 pendence and Security Act of 2007 (121 Stat.
21 1585)) is amended—

22 (A) in clause (i), by inserting “and” after
23 the semicolon at the end;

24 (B) in clause (ii), by striking “; and” and
25 inserting a period; and

1 (C) by striking clause (iii).

2 (13) Section 321(30)(C)(ii) of the Energy Pol-
3 icy and Conservation Act (42 U.S.C.
4 6291(30)(C)(ii)) (as amended by section
5 322(a)(1)(B) of the Energy Independence and Secu-
6 rity Act of 2007 (121 Stat. 1587)) is amended by
7 inserting a period after “40 watts or higher”.

8 (14) Section 322(b) of the Energy Independ-
9 ence and Security Act of 2007 (121 Stat. 1588) is
10 amended by striking “6995(i)” and inserting
11 “6295(i)”.

12 (15) Section 327(c) of the Energy Policy and
13 Conservation Act (42 U.S.C. 6297(c)) (as amended
14 by sections 324(f) of the Energy Independence and
15 Security Act of 2007 (121 Stat. 1594) and section
16 6(e)(2)) is amended—

17 (A) in paragraph (6), by striking “or”
18 after the semicolon at the end;

19 (B) in paragraph (9)(B), by striking “or”
20 at the end;

21 (C) in paragraph (10), by striking the pe-
22 riod at the end and inserting a semicolon;

23 (D) by adding at the end the following:

1 “(11) is a regulation for general service lamps
2 that conforms with Federal standards and effective
3 dates; or

4 “(12) is an energy efficiency standard for gen-
5 eral service lamps enacted into law by the State of
6 Nevada prior to December 19, 2007, if the State has
7 not adopted the Federal standards and effective
8 dates pursuant to subsection (b)(1)(B)(ii).”.

9 (16) Section 325(b) of the Energy Independ-
10 ence and Security Act of 2007 (121 Stat. 1596) is
11 amended by striking “6924(c)” and inserting
12 “6294(c)”.

13 (17) This subsection and the amendments made
14 by this subsection take effect as if included in the
15 Energy Independence and Security Act of 2007
16 (Public Law 110–140; 121 Stat. 1492).

17 (b) ENERGY POLICY ACT OF 2005.—

18 (1) Section 325(g)(8)(C)(ii) of the Energy Pol-
19 icy and Conservation Act (42 U.S.C.
20 6295(g)(8)(C)(ii)) (as added by section 135(c)(2)(B)
21 of the Energy Policy Act of 2005) is amended by
22 striking “20°F” and inserting “–20°F”.

23 (2) This subsection and the amendment made
24 by this subsection take effect as if included in the

1 Energy Policy Act of 2005 (Public Law 109–58; 119
2 Stat. 594).

3 (c) ENERGY POLICY AND CONSERVATION ACT.—

4 (1) Section 340(2)(B) of the Energy Policy and
5 Conservation Act (42 U.S.C. 6311(2)(B)) is amend-
6 ed—

7 (A) in clause (xi), by striking “and” at the
8 end;

9 (B) in clause (xii), by striking the period
10 at the end and inserting “; and”; and

11 (C) by adding at the end the following:

12 “(xiii) other motors.”.

13 (2) Section 343(a) of the Energy Policy and
14 Conservation Act (42 U.S.C. 6314(a)) is amended
15 by striking “Air-Conditioning and Refrigeration In-
16 stitute” each place it appears in paragraphs (4)(A)
17 and (7) and inserting “Air-Conditioning, Heating,
18 and Refrigeration Institute”.

19 **Subtitle C—Worker Training and** 20 **Capacity Building**

21 **SEC. 141. BUILDING TRAINING AND ASSESSMENT CENTERS.**

22 (a) IN GENERAL.—The Secretary of Energy shall
23 provide grants to institutions of higher education (as de-
24 fined in section 101 of the Higher Education Act of 1965
25 (20 U.S.C. 1001)) and Tribal Colleges or Universities (as

1 defined in section 316(b) of that Act (20 U.S.C. 1059c(b))

2 to establish building training and assessment centers—

3 (1) to identify opportunities for optimizing en-
4 ergy efficiency and environmental performance in
5 buildings;

6 (2) to promote the application of emerging con-
7 cepts and technologies in commercial and institu-
8 tional buildings;

9 (3) to train engineers, architects, building sci-
10 entists, building energy permitting and enforcement
11 officials, and building technicians in energy-efficient
12 design and operation;

13 (4) to assist institutions of higher education
14 and Tribal Colleges or Universities in training build-
15 ing technicians;

16 (5) to promote research and development for
17 the use of alternative energy sources to supply heat
18 and power for buildings, particularly energy-inten-
19 sive buildings; and

20 (6) to coordinate with and assist State-accred-
21 ited technical training centers, community colleges,
22 Tribal Colleges or Universities, and local offices of
23 the National Institute of Food and Agriculture and
24 ensure appropriate services are provided under this
25 section to each region of the United States.

1 (b) COORDINATION AND NONDUPLICATION.—

2 (1) IN GENERAL.—The Secretary shall coordi-
3 nate the program with the Industrial Assessment
4 Centers program and with other Federal programs
5 to avoid duplication of effort.

6 (2) COLLOCATION.—To the maximum extent
7 practicable, building, training, and assessment cen-
8 ters established under this section shall be collocated
9 with Industrial Assessment Centers.

10 (c) AUTHORIZATION OF APPROPRIATIONS.—There
11 are authorized to be appropriated such sums as are nec-
12 essary to carry out this section.

13 **TITLE II—BUILDING EFFICIENCY**
14 **FINANCE**

15 **SEC. 201. RURAL ENERGY SAVINGS PROGRAM.**

16 Title VI of the Farm Security and Rural Investment
17 Act of 2002 (7 U.S.C. 7901 note et seq.) is amended by
18 adding the following:

19 **“SEC. 6407. RURAL ENERGY SAVINGS PROGRAM.**

20 “(a) PURPOSE.—The purpose of this section is to cre-
21 ate and save jobs by providing loans to qualified con-
22 sumers that will use the loan proceeds to implement en-
23 ergy efficiency measures to achieve significant reductions
24 in energy costs, energy consumption, or carbon emissions.

25 “(b) DEFINITIONS.—In this section:

1 “(1) ELIGIBLE ENTITY.—The term ‘eligible en-
2 tity’ means—

3 “(A) any public power district, public util-
4 ity district, or similar entity, or any electric co-
5 operative described in sections 501(c)(12) or
6 1381(a)(2)(C) of the Internal Revenue Code of
7 1986, that borrowed and repaid, prepaid, or is
8 paying an electric loan made or guaranteed by
9 the Rural Utilities Service (or any predecessor
10 agency); or

11 “(B) any entity primarily owned or con-
12 trolled by an entity or entities described in sub-
13 paragraph (A).

14 “(2) ENERGY EFFICIENCY MEASURES.—The
15 term ‘energy efficiency measures’ means, for or at
16 property served by an eligible entity, structural im-
17 provements and investments in cost-effective, com-
18 mercial technologies to increase energy efficiency.

19 “(3) QUALIFIED CONSUMER.—The term ‘quali-
20 fied consumer’ means a consumer served by an eligi-
21 ble entity that has the ability to repay a loan made
22 under subsection (d), as determined by an eligible
23 entity.

1 “(4) SECRETARY.—The term ‘Secretary’ means
2 the Secretary of Agriculture, acting through the
3 Rural Utilities Service.

4 “(c) LOANS TO ELIGIBLE ENTITIES.—

5 “(1) LOANS AUTHORIZED.—Subject to para-
6 graph (2), the Secretary shall make loans to eligible
7 entities that agree to use the loan funds to make
8 loans to qualified consumers as described in sub-
9 section (d) for the purpose of implementing energy
10 efficiency measures.

11 “(2) LIST, PLAN, AND MEASUREMENT AND
12 VERIFICATION REQUIRED.—

13 “(A) IN GENERAL.—As a condition to re-
14 ceiving a loan or grant under this subsection,
15 an eligible entity shall—

16 “(i) establish a list of energy effi-
17 ciency measures that is expected to de-
18 crease energy use or costs of qualified con-
19 sumers;

20 “(ii) prepare an implementation plan
21 for use of the loan funds; and

22 “(iii) provide for appropriate measure-
23 ment and verification to ensure the effec-
24 tiveness of the energy efficiency loans
25 made by the eligible entity and that there

1 is no conflict of interest in the carrying out
2 of this section.

3 “(B) REVISION OF LIST OF ENERGY EFFI-
4 CIENCY MEASURES.—An eligible entity may up-
5 date the list required under subparagraph
6 (A)(i) to account for newly available efficiency
7 technologies, subject to the approval of the Sec-
8 retary.

9 “(C) EXISTING ENERGY EFFICIENCY PRO-
10 GRAMS.—An eligible entity that, on or before
11 the date of the enactment of this section or
12 within 60 days after such date, has already es-
13 tablished an energy efficiency program for
14 qualified consumers may use an existing list of
15 energy efficiency measures, implementation
16 plan, or measurement and verification system of
17 that program to satisfy the requirements of
18 subparagraph (A) if the Secretary determines
19 the list, plans, or systems are consistent with
20 the purposes of this section.

21 “(3) NO INTEREST.—A loan under this sub-
22 section shall bear no interest.

23 “(4) REPAYMENT.—In the case of a loan made
24 under paragraph (1)—

1 “(A) the term shall not exceed 20 years
2 from the date the loan is closed; and

3 “(B) except as provided in paragraph (6),
4 the repayment of each advance shall be amor-
5 tized for a period of not to exceed 10 years.

6 “(5) AMOUNT OF ADVANCES.—Any advance of
7 loan funds to an eligible entity in any single year
8 shall not exceed 50 percent of the approved loan
9 amount.

10 “(6) SPECIAL ADVANCE FOR START-UP ACTIVI-
11 TIES.—

12 “(A) IN GENERAL.—In order to assist an
13 eligible entity in defraying appropriate start-up
14 costs of establishing new programs or modifying
15 existing programs to carry out subsection (d)
16 (as determined by the Secretary), the Secretary
17 shall allow an eligible entity to request a special
18 advance.

19 “(B) AMOUNT OF SPECIAL ADVANCE.—No
20 eligible entity may receive a special advance
21 under this paragraph for an amount that is
22 greater than 4 percent of the loan amount re-
23 ceived by the eligible entity under paragraph
24 (1).

1 “(C) REPAYMENT.—Repayment of the spe-
2 cial advance—

3 “(i) shall be required not later than
4 the end of the 10-year period beginning on
5 the date the special advance is made; and

6 “(ii) at the option of the eligible enti-
7 ty, may be deferred to the end of the 10-
8 year period.

9 “(7) LIMITATION ON ADVANCES.—An advance
10 on a loan described in paragraph (1) shall be made
11 during the initial 10 years of the term of the loan.

12 “(d) LOANS TO QUALIFIED CONSUMERS.—

13 “(1) TERMS OF LOANS.—Loans made by an eli-
14 gible entity to qualified consumers using loan funds
15 provided by the Secretary under subsection (c)—

16 “(A) may bear interest, not to exceed three
17 percent, to be used for purposes that include es-
18 tablishing a loan loss reserve and to offset per-
19 sonnel and program costs of eligible entities to
20 provide the loans;

21 “(B) shall finance energy efficiency meas-
22 ures for the purpose of decreasing energy usage
23 or costs of the qualified consumer by an
24 amount such that a loan term of not more than
25 ten years will not pose an undue financial bur-

1 den on the qualified consumer, as determined
2 by the eligible entity;

3 “(C) shall not be used to fund energy effi-
4 ciency measures made to personal property un-
5 less the personal property—

6 “(i) is or becomes attached to real
7 property as a fixture; or

8 “(ii) is a manufactured home;

9 “(D) shall be repaid through charges
10 added to the electric bill for the property at
11 which energy efficiency measures are or will be
12 implemented, except that this subparagraph
13 shall not prohibit—

14 “(i) the voluntary prepayment of a
15 loan by the owner of the property; or

16 “(ii) the use of any additional repay-
17 ment mechanisms that are—

18 “(I) demonstrated to have appro-
19 priate risk mitigation features, as de-
20 termined by the eligible entity; or

21 “(II) required if the qualified
22 consumer is no longer a customer of
23 the eligible entity; and

24 “(E) shall require an energy audit by an
25 eligible entity to determine the impact of pro-

1 posed energy efficiency measures on the energy
2 costs and consumption of the qualified con-
3 sumer.

4 “(2) CONTRACTORS.—In addition to any other
5 qualified general contractor, eligible entities may
6 serve as general contractors.

7 “(e) CONTRACT FOR MEASUREMENT AND
8 VERIFICATION, TRAINING, AND TECHNICAL ASSIST-
9 ANCE.—

10 “(1) IN GENERAL.—Not later than 90 days
11 after the date of enactment of this section, the Sec-
12 retary—

13 “(A) shall establish a plan for measure-
14 ment and verification, training, and technical
15 assistance for the program; and

16 “(B) may enter into 1 or more contracts
17 with a qualified entity for the purposes of—

18 “(i) providing measurement and
19 verification activities; and

20 “(ii) developing a program to provide
21 technical assistance and training to the
22 employees of eligible entities to carry out
23 this section.

24 “(2) USE OF SUBCONTRACTORS AUTHOR-
25 IZED.—A qualified entity that enters into a contract

1 under paragraph (1) may use subcontractors to as-
2 sist the qualified entity in performing the contract.

3 “(f) FAST START DEMONSTRATION PROJECTS.—

4 “(1) DEMONSTRATION PROJECTS REQUIRED.—

5 The Secretary shall enter into agreements with eligi-
6 ble entities (or groups of eligible entities) that have
7 energy efficiency programs described in subsection
8 (e)(2)(C) to establish an energy efficiency loan dem-
9 onstration projects consistent with the purposes of
10 this section.

11 “(2) EVALUATION CRITERIA.—In determining
12 which eligible entities to make loans under this sec-
13 tion, the Secretary shall give a preference to entities
14 that—

15 “(A) implement approaches to energy au-
16 dits and investments in energy efficiency meas-
17 ures that yield measurable and predictable sav-
18 ings;

19 “(B) use measurement and verification
20 processes to determine the effectiveness of en-
21 ergy efficiency loans made by eligible entities;

22 “(C) include training for employees of eli-
23 gible entities, including any contractors of such
24 entities, to implement or oversee the activities
25 described in subparagraphs (A) and (B);

1 “(D) provide for the participation of a ma-
2 jority of eligible entities in a State;

3 “(E) reduce the need for generating capac-
4 ity;

5 “(F) provide efficiency loans to—

6 “(i) not fewer than 20,000 consumers,
7 in the case of a single eligible entity; or

8 “(ii) not fewer than 80,000 con-
9 sumers, in the case of a group of eligible
10 entities; and

11 “(G) serve areas where a large percentage
12 of consumers reside—

13 “(i) in manufactured homes; or

14 “(ii) in housing units that are more
15 than 50 years old.

16 “(3) DEADLINE FOR IMPLEMENTATION.—The
17 agreements required by paragraph (1) shall be en-
18 tered into not later than 90 days after the date of
19 enactment of this section.

20 “(4) EFFECT ON AVAILABILITY OF LOANS NA-
21 TIONALLY.—Nothing in this subsection shall delay
22 the availability of loans to eligible entities on a na-
23 tional basis beginning not later than 180 days after
24 the date of enactment of this section.

1 “(5) ADDITIONAL DEMONSTRATION PROJECT
2 AUTHORITY.—

3 “(A) IN GENERAL.—The Secretary may
4 conduct demonstration projects in addition to
5 the project required by paragraph (1).

6 “(B) INAPPLICABILITY OF CERTAIN CRI-
7 TERIA.—The additional demonstration projects
8 may be carried out without regard to subpara-
9 graphs (D), (F), or (G) of paragraph (2).

10 “(g) ADDITIONAL AUTHORITY.—The authority pro-
11 vided in this section is in addition to any authority of the
12 Secretary to offer loans or grants under any other law.

13 “(h) AUTHORIZATION OF APPROPRIATIONS.—

14 “(1) IN GENERAL.—There is authorized to be
15 appropriated to the Secretary to carry out this sec-
16 tion \$405,000,000 for fiscal year 2012, to remain
17 available until expended.

18 “(2) AMOUNTS FOR LOANS, GRANTS, STAFF-
19 ING.—Of the amounts appropriated pursuant to the
20 authorization of appropriations in paragraph (1), the
21 Secretary shall make available—

22 “(A) \$400,000,000 for the purpose of cov-
23 ering the cost of loans to eligible entities under
24 subsection (c) to subsidize gross obligations in

1 the principal amount of not to exceed
2 \$2,000,000,000; and

3 “(B) \$5,000,000 for measurement and
4 verification activities under subsection
5 (e)(1)(A).

6 “(i) EFFECTIVE PERIOD.—Subject to subsection
7 (h)(1) and except as otherwise provided in this section,
8 the loans, grants, and other expenditures required to be
9 made under this section are authorized to be made during
10 each of fiscal years 2012 through 2016.

11 “(j) REGULATIONS.—

12 “(1) IN GENERAL.—Except as otherwise pro-
13 vided in this subsection, not later than 180 days
14 after the date of enactment of this section, the Sec-
15 retary shall promulgate such regulations as are nec-
16 essary to implement this section.

17 “(2) PROCEDURE.—The promulgation of the
18 regulations and administration of this section shall
19 be made without regard to—

20 “(A) chapter 35 of title 44, United States
21 Code (commonly known as the ‘Paperwork Re-
22 duction Act’); and

23 “(B) the Statement of Policy of the Sec-
24 retary of Agriculture effective July 24, 1971
25 (36 Fed. Reg. 13804), relating to notices of

1 proposed rulemaking and public participation in
2 rulemaking.

3 “(3) CONGRESSIONAL REVIEW OF AGENCY
4 RULEMAKING.—In carrying out this section, the Sec-
5 retary shall use the authority provided under section
6 808 of title 5, United States Code.

7 “(4) INTERIM REGULATIONS.—Notwithstanding
8 paragraphs (1) and (2), to the extent regulations are
9 necessary to carry out any provision of this section,
10 the Secretary shall implement such regulations
11 through the promulgation of an interim rule.”.

12 **SEC. 202. LOAN PROGRAM FOR ENERGY EFFICIENCY UP-**
13 **GRADES TO EXISTING BUILDINGS.**

14 Title XVII of the Energy Policy Act of 2005 (42
15 U.S.C. 16511 et seq.) is amended by adding at the end
16 the following:

17 **“SEC. 1706. BUILDING RETROFIT FINANCING PROGRAM.**

18 “(a) DEFINITIONS.—In this section:

19 “(1) CREDIT SUPPORT.—The term ‘credit sup-
20 port’ means a guarantee or commitment to issue a
21 guarantee or other forms of credit enhancement to
22 ameliorate risks for efficiency obligations.

23 “(2) EFFICIENCY OBLIGATION.—The term ‘effi-
24 ciency obligation’ means a debt or repayment obliga-

1 tion incurred in connection with financing a project,
2 or a portfolio of such debt or payment obligations.

3 “(3) PROJECT.—The term ‘project’ means the
4 installation of efficiency or renewable energy meas-
5 ures (including metering) in a building (or in mul-
6 tiple buildings on a given property) that are ex-
7 pected to increase the energy efficiency of the build-
8 ing (including fixtures) in accordance with criteria
9 established by the Secretary.

10 “(b) ELIGIBLE PROJECTS.—

11 “(1) IN GENERAL.—Notwithstanding sections
12 1703 and 1705, the Secretary may provide credit
13 support under this section, in accordance with sec-
14 tion 1702.

15 “(2) INCLUSIONS.—Buildings eligible for credit
16 support under this section include commercial, in-
17 dustrial, municipal, university, school, and hospital
18 facilities that satisfy criteria established by the Sec-
19 retary.

20 “(c) GUIDELINES.—

21 “(1) IN GENERAL.—Not later than 180 days
22 after the date of enactment of this section, the Sec-
23 retary shall establish guidelines for credit support
24 provided under this section.

1 “(2) REQUIREMENTS.—The guidelines estab-
2 lished by the Secretary under this subsection shall
3 include—

4 “(A) standards for assessing the energy
5 savings that could reasonably be expected to re-
6 sult from a project;

7 “(B) examples of financing mechanisms
8 (and portfolios of such financing mechanisms)
9 that qualify as efficiency obligations;

10 “(C) the threshold levels of energy savings
11 that a project, at the time of issuance of credit
12 support, shall be reasonably expected to achieve
13 to be eligible for credit support;

14 “(D) the eligibility criteria the Secretary
15 determines to be necessary for making credit
16 support available under this section; and

17 “(E) any lien priority requirements that
18 the Secretary determines to be necessary.

19 “(3) EFFICIENCY OBLIGATIONS.—The financing
20 mechanisms qualified by the Secretary under para-
21 graph (2)(B) may include—

22 “(A) loans, including loans made by the
23 Federal Financing Bank;

24 “(B) power purchase agreements, including
25 energy efficiency power purchase agreements;

1 “(C) energy services agreements, including
2 energy performance contracts;

3 “(D) property assessed clean energy bonds
4 and other tax assessment-based financing mech-
5 anisms;

6 “(E) aggregate on-meter agreements that
7 finance retrofit projects; and

8 “(F) any other efficiency obligations the
9 Secretary determines to be appropriate.

10 “(4) PRIORITIES.—In carrying out this section,
11 the Secretary shall prioritize—

12 “(A) the maximization of energy savings
13 with the available credit support funding;

14 “(B) the establishment of a clear applica-
15 tion and approval process that allows private
16 building owners, lenders, and investors to rea-
17 sonably expect to receive credit support for
18 projects that conform to guidelines; and

19 “(C) the distribution of projects receiving
20 credit support under this section across States
21 or geographical regions of the United States.

22 “(5) MINIMUM ENERGY SAVINGS REQUIRE-
23 MENT.—

24 “(A) IN GENERAL.—In carrying out this
25 section, the Secretary shall establish an initial

1 minimum energy savings requirement for eligi-
2 ble projects that, to the maximum extent prac-
3 ticable, results in the greatest amount of energy
4 savings on a per project basis.

5 “(B) ADJUSTMENTS.—

6 “(i) IN GENERAL.—Not less than once
7 each year, the Secretary shall adjust the
8 minimum energy savings requirement de-
9 scribed in subparagraph (A) and any other
10 credit support terms the Secretary deter-
11 mines to be necessary, including the max-
12 imum percentage of the efficiency obliga-
13 tion that may be guaranteed, taking into
14 account market conditions and the avail-
15 able funding.

16 “(ii) ADVANCED NOTICE.—If the Sec-
17 retary adjusts the energy savings require-
18 ment, the Secretary shall provide at least
19 90 days advanced public notice.

20 “(d) LIMITATION.—Notwithstanding section 1702(c),
21 the Secretary shall not issue credit support under this sec-
22 tion in an amount that exceeds—

23 “(1) 90 percent of the principal amount of the
24 efficiency obligation that is the subject of the credit
25 support; or

1 “(2) \$10,000,000 for any single project.

2 “(e) AGGREGATION OF PROJECTS.—To the extent
3 provided in the guidelines developed in accordance with
4 subsection (c), the Secretary may issue credit support on
5 a portfolio, or pool of projects, that are not required to
6 be geographically contiguous, if each efficiency obligation
7 in the pool fulfills the requirements described in this sec-
8 tion.

9 “(f) APPLICATION.—

10 “(1) IN GENERAL.—To be eligible to receive
11 credit support under this section, the applicant shall
12 submit to the Secretary an application at such time,
13 in such manner, and containing such information as
14 the Secretary determines to be necessary.

15 “(2) CONTENTS.—An application submitted
16 under this section shall include assurances by the
17 applicant that—

18 “(A) each contractor carrying out the
19 project meets minimum experience level criteria,
20 including local retrofit experience, as deter-
21 mined by the Secretary;

22 “(B) the project is reasonably expected to
23 achieve energy savings, as set forth in the appli-
24 cation using any methodology that meets the
25 standards described in the program guidelines;

1 “(C) the project meets any technical cri-
2 teria described in the program guidelines;

3 “(D) the recipient of the credit support
4 and the parties to the efficiency obligation will
5 provide the Secretary with—

6 “(i) any information the Secretary re-
7 quests to assess the energy savings that re-
8 sult from the project, including historical
9 energy usage data and detailed descrip-
10 tions of the building work, as described in
11 the program guidelines; and

12 “(ii) permission to access information
13 relating to building operations and usage
14 for the period described in the program
15 guidelines; and

16 “(E) any other assurances that the Sec-
17 retary determines to be necessary.

18 “(3) DETERMINATION.—Not later than 90 days
19 after receiving an application, the Secretary shall
20 make a final determination on the application, which
21 may include requests for additional information.

22 “(g) FEES.—

23 “(1) IN GENERAL.—In addition to the fees re-
24 quired by section 1702(h)(1), the Secretary may

1 charge reasonable fees for credit support provided
2 under this section.

3 “(2) AVAILABILITY.—Fees collected under this
4 section shall be subject to section 1702(h)(2).

5 “(h) UNDERWRITING.—The Secretary may delegate
6 the underwriting activities under this section to 1 or more
7 entities that the Secretary determines to be qualified.

8 “(i) REPORT.—Not later than 1 year after com-
9 mencement of the program, the Secretary shall submit to
10 the appropriate committees of Congress a report that de-
11 scribes in reasonable detail—

12 “(1) the manner in which this section is being
13 carried out;

14 “(2) the number and type of projects sup-
15 ported;

16 “(3) the types of funding mechanisms used to
17 provide credit support to projects;

18 “(4) the energy savings expected to result from
19 projects supported by this section;

20 “(5) any tracking efforts the Secretary is using
21 to calculate the actual energy savings produced by
22 the projects; and

23 “(6) any plans to improve the tracking efforts
24 described in paragraph (5).

25 “(j) FUNDING.—

1 “(1) AUTHORIZATION OF APPROPRIATIONS.—

2 There is authorized to be appropriated to the Sec-
3 retary to carry out this section \$400,000,000 for the
4 period of fiscal years 2012 through 2021, to remain
5 available until expended.

6 “(2) ADMINISTRATIVE COSTS.—Not more than
7 1 percent of any amounts made available to the Sec-
8 retary under paragraph (1) may be used by the Sec-
9 retary for administrative costs incurred in carrying
10 out this section.”.

11 **TITLE III—INDUSTRIAL EFFI-**
12 **CIENCY AND COMPETITIVE-**
13 **NESS**

14 **Subtitle A—Manufacturing Energy**
15 **Efficiency**

16 **SEC. 301. STATE PARTNERSHIP INDUSTRIAL ENERGY EFFI-**
17 **CIENCY REVOLVING LOAN PROGRAM.**

18 Section 399A of the Energy Policy and Conservation
19 Act (42 U.S.C. 6371h–1) is amended—

20 (1) in the section heading, by inserting “**AND**
21 **INDUSTRY**” before the period at the end;

22 (2) by redesignating subsections (h) and (i) as
23 subsections (i) and (j), respectively; and

24 (3) by inserting after subsection (g) the fol-
25 lowing:

1 “(h) STATE PARTNERSHIP INDUSTRIAL ENERGY EF-
2 FICIENCY REVOLVING LOAN PROGRAM.—

3 “(1) IN GENERAL.—The Secretary shall carry
4 out a program under which the Secretary shall pro-
5 vide grants to eligible lenders to pay the Federal
6 share of creating a revolving loan program under
7 which loans are provided to commercial and indus-
8 trial manufacturers to implement commercially avail-
9 able technologies or processes that significantly—

10 “(A) reduce systems energy intensity, in-
11 cluding the use of energy-intensive feedstocks;
12 and

13 “(B) improve the industrial competitive-
14 ness of the United States.

15 “(2) ELIGIBLE LENDERS.—To be eligible to re-
16 ceive cost-matched Federal funds under this sub-
17 section, a lender shall—

18 “(A) be a community and economic devel-
19 opment lender that the Secretary certifies meets
20 the requirements of this subsection;

21 “(B) lead a partnership that includes par-
22 ticipation by, at a minimum—

23 “(i) a State government agency; and

24 “(ii) a private financial institution or
25 other provider of loan capital;

1 “(C) submit an application to the Sec-
2 retary, and receive the approval of the Sec-
3 retary, for cost-matched Federal funds to carry
4 out a loan program described in paragraph (1);
5 and

6 “(D) ensure that non-Federal funds are
7 provided to match, on at least a dollar-for-dol-
8 lar basis, the amount of Federal funds that are
9 provided to carry out a revolving loan program
10 described in paragraph (1).

11 “(3) AWARD.—The amount of cost-matched
12 Federal funds provided to an eligible lender shall not
13 exceed \$100,000,000 for any fiscal year.

14 “(4) RECAPTURE OF AWARDS.—

15 “(A) IN GENERAL.—An eligible lender that
16 receives an award under paragraph (1) shall be
17 required to repay to the Secretary an amount
18 of cost-match Federal funds, as determined by
19 the Secretary under subparagraph (B), if the
20 eligible lender is unable or unwilling to operate
21 a program described in this subsection for a pe-
22 riod of not less than 10 years beginning on the
23 date on which the eligible lender first receives
24 funds made available through the award.

1 “(B) DETERMINATION BY SECRETARY.—

2 The Secretary shall determine the amount of
3 cost-match Federal funds that an eligible lender
4 shall be required to repay to the Secretary
5 under subparagraph (A) based on the consider-
6 ation by the Secretary of—

7 “(i) the amount of non-Federal funds
8 matched by the eligible lender;

9 “(ii) the amount of loan losses in-
10 curred by the revolving loan program de-
11 scribed in paragraph (1); and

12 “(iii) any other appropriate factor, as
13 determined by the Secretary.

14 “(C) USE OF RECAPTURED COST-MATCH
15 FEDERAL FUNDS.—The Secretary may dis-
16 tribute to eligible lenders under this subsection
17 each amount received by the Secretary under
18 this paragraph.

19 “(5) ELIGIBLE PROJECTS.—A program for
20 which cost-matched Federal funds are provided
21 under this subsection shall be designed to accelerate
22 the implementation of industrial and commercial ap-
23 plications of technologies or processes (including ap-
24 plications or technologies that use sensors, meters,
25 information networks, controls, and drives or that

1 have been installed pursuant to an energy savings
2 performance contract) that—

3 “(A) improve energy efficiency, power fac-
4 tor, or load management;

5 “(B) enhance the industrial competitive-
6 ness of the United States; and

7 “(C) achieve such other goals as the Sec-
8 retary determines to be appropriate.

9 “(6) EVALUATION.—The Secretary shall evalu-
10 ate applications for cost-matched Federal funds
11 under this subsection on the basis of—

12 “(A) the description of the program to be
13 carried out with the cost-matched Federal
14 funds;

15 “(B) the commitment to provide non-Fed-
16 eral funds in accordance with paragraph
17 (2)(D);

18 “(C) program sustainability over a 10-year
19 period;

20 “(D) the capability of the applicant;

21 “(E) the quantity of energy savings or en-
22 ergy feedstock minimization;

23 “(F) the advancement of the goal under
24 this Act of 25-percent energy avoidance;

1 “(G) the ability to fund energy efficient
2 projects not later than 120 days after the date
3 of the grant award; and

4 “(H) such other factors as the Secretary
5 determines appropriate.

6 “(7) AUTHORIZATION OF APPROPRIATIONS.—
7 There is authorized to be appropriated to carry out
8 this subsection \$700,000,000 for the period of fiscal
9 years 2012 through 2021, to remain available until
10 expended.”.

11 **SEC. 302. COORDINATION OF RESEARCH AND DEVELOP-**
12 **MENT OF ENERGY EFFICIENT TECH-**
13 **NOLOGIES FOR INDUSTRY.**

14 (a) IN GENERAL.—As part of the research and devel-
15 opment activities of the Industrial Technologies Program
16 of the Department of Energy, the Secretary shall estab-
17 lish, as appropriate, collaborative research and develop-
18 ment partnerships with other programs within the Office
19 of Energy Efficiency and Renewable Energy (including the
20 Building Technologies Program), the Office of Electricity
21 Delivery and Energy Reliability, and the Office of Science
22 that—

23 (1) leverage the research and development ex-
24 pertise of those programs to promote early stage en-
25 ergy efficiency technology development;

1 (2) support the use of innovative manufacturing
2 processes and applied research for development,
3 demonstration, and commercialization of new tech-
4 nologies and processes to improve efficiency, reduce
5 emissions, reduce industrial waste, and improve in-
6 dustrial cost-competitiveness; and

7 (3) apply the knowledge and expertise of the In-
8 dustrial Technologies Program to help achieve the
9 program goals of the other programs.

10 (b) REPORTS.—Not later than 2 years after the date
11 of enactment of this Act and biennially thereafter, the Sec-
12 retary shall submit to Congress a report that describes
13 actions taken to carry out subsection (a) and the results
14 of those actions.

15 **SEC. 303. ENERGY EFFICIENT TECHNOLOGIES ASSESS-**
16 **MENT.**

17 (a) IN GENERAL.—Not later than 60 days after the
18 date of enactment of this Act, the Secretary shall com-
19 mence an assessment of commercially available, cost com-
20 petitive energy efficiency technologies that are not widely
21 implemented within the United States for the energy-in-
22 tensive industries of—

23 (1) steel;

24 (2) aluminum;

25 (3) forest and paper products;

1 (4) food processing;

2 (5) metal casting;

3 (6) glass;

4 (7) chemicals;

5 (8) petroleum refining;

6 (9) cement;

7 (10) information and communication tech-
8 nologies; and

9 (11) other industries that (as determined by the
10 Secretary)—

11 (A) use large quantities of energy;

12 (B) emit large quantities of greenhouse
13 gases; or

14 (C) use a rapidly increasing quantity of en-
15 ergy.

16 (b) REPORT.—Not later than 1 year after the date
17 of enactment of this Act, the Secretary shall publish a re-
18 port, in collaboration with affected energy-intensive indus-
19 tries, based on the assessment conducted under subsection
20 (a), that contains—

21 (1) a detailed inventory describing the cost, en-
22 ergy, and greenhouse gas emission savings of each
23 technology described in subsection (a);

24 (2) for each technology, the total cost, energy,
25 and greenhouse gas emissions savings if the tech-

1 nology is implemented throughout the industry of
2 the United States;

3 (3) for each industry, an assessment of total
4 possible cost, energy, and greenhouse gas emissions
5 savings possible if state-of-the art, cost-competitive,
6 commercial energy efficiency technologies were
7 adopted;

8 (4) for each industry, a comparison to the Eu-
9 ropean Union, Japan, and other appropriate coun-
10 tries of energy efficiency technology adoption rates,
11 as determined by the Secretary, including an exam-
12 ination of the policy structures in those countries
13 that promote investments in energy efficiency tech-
14 nologies;

15 (5) recommendations on how to create jobs in
16 the United States through private sector collabora-
17 tion of energy service providers and energy-intensive
18 industries; and

19 (6) an assessment of energy savings available
20 from increased use of recycled material in energy-in-
21 tensive manufacturing processes.

22 **SEC. 304. FUTURE OF INDUSTRY PROGRAM.**

23 (a) IN GENERAL.—Section 452 of the Energy Inde-
24 pendence and Security Act of 2007 (42 U.S.C. 17111) is

1 amended by striking the section heading and inserting the
2 following: “**FUTURE OF INDUSTRY PROGRAM**”.

3 (b) DEFINITION OF ENERGY SERVICE PROVIDER.—
4 Section 452(a) of the Energy Independence and Security
5 Act of 2007 (42 U.S.C. 17111(a)) is amended—

6 (1) by redesignating paragraphs (3) through
7 (5) as paragraphs (4) through (6), respectively; and
8 (2) by inserting after paragraph (3):

9 “(5) ENERGY SERVICE PROVIDER.—The term
10 ‘energy service provider’ means any private company
11 or similar entity providing technology or services to
12 improve energy efficiency in an energy-intensive in-
13 dustry.”.

14 (c) INDUSTRY-SPECIFIC ROAD MAPS.—Section
15 452(c)(2) of the Energy Independence and Security Act
16 of 2007 (42 U.S.C. 17111(c)(2)) is amended—

17 (1) in subparagraph (E), by striking “and” at
18 the end;

19 (2) by redesignating subparagraph (F) as sub-
20 paragraph (G); and

21 (3) by inserting after subparagraph (E) the fol-
22 lowing:

23 “(F) research to establish (through the In-
24 dustrial Technologies Program and in collabora-

1 tion with energy-intensive industries) a road
2 map process under which—

3 “(i) industry-specific studies are con-
4 ducted to determine the intensity of energy
5 use, greenhouse gas emissions, and waste
6 and operating costs, by process and sub-
7 process;

8 “(ii) near-, mid-, and long-term tar-
9 gets of opportunity are established for syn-
10 ergistic improvements in efficiency, sus-
11 tainability, and resilience; and

12 “(iii) public-private actionable plans
13 are created to achieve roadmap goals;
14 and”.

15 (d) INDUSTRIAL RESEARCH AND ASSESSMENT CEN-
16 TERS.—

17 (1) IN GENERAL.—Section 452(e) of the En-
18 ergy Independence and Security Act of 2007 (42
19 U.S.C. 17111(e)) is amended—

20 (A) by redesignating paragraphs (1)
21 through (5) as subparagraphs (A) through (E),
22 respectively, and indenting appropriately;

23 (B) by striking “The Secretary” and in-
24 serting the following:

25 “(1) IN GENERAL.—The Secretary”;

1 (C) in subparagraph (A) (as redesignated
2 by subparagraph (A)), by inserting before the
3 semicolon at the end the following: “, including
4 assessments of sustainable manufacturing goals
5 and the implementation of information tech-
6 nology advancements for supply chain analysis,
7 logistics, system monitoring, industrial and
8 manufacturing processes, and other purposes”;
9 and

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

11 “(2) CENTERS OF EXCELLENCE.—

12 “(A) IN GENERAL.—The Secretary shall
13 establish a Center of Excellence at up to 10 of
14 the highest performing industrial research and
15 assessment centers, as determined by the Sec-
16 retary.

17 “(B) DUTIES.—A Center of Excellence
18 shall coordinate with and advise the industrial
19 research and assessment centers located in the
20 region of the Center of Excellence.

21 “(C) FUNDING.—Subject to the availability
22 of appropriations, of the funds made available
23 under subsection (f), the Secretary shall use to
24 support each Center of Excellence not less than

1 \$500,000 for fiscal year 2012 and each fiscal
2 year thereafter, as determined by the Secretary.

3 “(3) EXPANSION OF CENTERS.—The Secretary
4 shall provide funding to establish additional indus-
5 trial research and assessment centers at institutions
6 of higher education that do not have industrial re-
7 search and assessment centers established under
8 paragraph (1), taking into account the size of, and
9 potential energy efficiency savings for, the manufac-
10 turing base within the region of the proposed center.

11 “(4) COORDINATION.—

12 “(A) IN GENERAL.—To increase the value
13 and capabilities of the industrial research and
14 assessment centers, the centers shall—

15 “(i) coordinate with Manufacturing
16 Extension Partnership Centers of the Na-
17 tional Institute of Standards and Tech-
18 nology;

19 “(ii) coordinate with the Building
20 Technologies Program of the Department
21 of Energy to provide building assessment
22 services to manufacturers;

23 “(iii) increase partnerships with the
24 National Laboratories of the Department
25 of Energy to leverage the expertise and

1 technologies of the National Laboratories
2 for national industrial and manufacturing
3 needs;

4 “(iv) increase partnerships with en-
5 ergy service providers to leverage private
6 sector expertise and accelerate deployment
7 of new and existing technologies and proc-
8 esses for energy efficiency, power factor,
9 and load management;

10 “(v) identify opportunities for reduc-
11 ing greenhouse gas emissions; and

12 “(vi) promote sustainable manufac-
13 turing practices for small- and medium-
14 sized manufacturers.

15 “(5) OUTREACH.—The Secretary shall provide
16 funding for—

17 “(A) outreach activities by the industrial
18 research and assessment centers to inform
19 small- and medium-sized manufacturers of the
20 information, technologies, and services avail-
21 able; and

22 “(B) a full-time equivalent employee at
23 each center of excellence whose primary mission
24 shall be to coordinate and leverage the efforts
25 of the center with—

1 “(i) Federal and State efforts;

2 “(ii) the efforts of utilities and energy
3 service providers;

4 “(iii) the efforts of regional energy ef-
5 ficiency organizations; and

6 “(iv) the efforts of other centers in
7 the region of the center of excellence.

8 “(6) WORKFORCE TRAINING.—

9 “(A) IN GENERAL.—The Secretary shall
10 pay the Federal share of associated internship
11 programs under which students work with or
12 for industries, manufacturers, and energy serv-
13 ice providers to implement the recommendations
14 of industrial research and assessment centers.

15 “(B) FEDERAL SHARE.—The Federal
16 share of the cost of carrying out internship pro-
17 grams described in subparagraph (A) shall be
18 50 percent.

19 “(C) FUNDING.—Subject to the availability
20 of appropriations, of the funds made available
21 under subsection (f), the Secretary shall use to
22 carry out this paragraph not less than
23 \$5,000,000 for fiscal year 2012 and each fiscal
24 year thereafter.

1 “(7) SMALL BUSINESS LOANS.—The Adminis-
2 trator of the Small Business Administration shall, to
3 the maximum practicable, expedite consideration of
4 applications from eligible small business concerns for
5 loans under the Small Business Act (15 U.S.C. 631
6 et seq.) to implement recommendations of industrial
7 research and assessment centers established under
8 paragraph (1).”.

9 (e) AUTHORIZATION OF APPROPRIATIONS.—Section
10 452(f) of the Energy Independence and Security Act of
11 2007 (42 U.S.C. 17111(f)) is amended—

12 (1) in paragraph (1)—

13 (A) in subparagraph (C), by striking
14 “\$196,000,000” and inserting “\$216,000,000”;

15 (B) in subparagraph (D), by striking
16 “\$202,000,000” and inserting “\$232,000,000”;

17 and

18 (C) in subparagraph (E), by striking
19 “\$208,000,000” and inserting “\$248,000,000”;

20 and

21 (2) by adding at the end the following:

22 “(4) INDUSTRIAL RESEARCH AND ASSESSMENT
23 CENTERS.—Of the amounts made available under
24 paragraph (1), the Secretary shall use to provide

1 funding to industrial research and assessment cen-
2 ters under subsection (e) not less than—

3 “(A) \$20,000,000 for fiscal year 2012;

4 “(B) \$30,000,000 for fiscal year 2013; and

5 “(C) \$40,000,000 for fiscal year 2014 and
6 each fiscal year thereafter.”.

7 **SEC. 305. SUSTAINABLE MANUFACTURING INITIATIVE.**

8 (a) IN GENERAL.—Part E of title III of the Energy
9 Policy and Conservation Act (42 U.S.C. 6341) is amended
10 by adding at the end the following:

11 **“SEC. 376. SUSTAINABLE MANUFACTURING INITIATIVE.**

12 “(a) IN GENERAL.—As part of the Industrial Tech-
13 nologies Program of the Department of Energy, the Sec-
14 retary shall carry out a sustainable manufacturing initia-
15 tive under which the Secretary, on the request of a manu-
16 facturer, shall conduct onsite technical assessments to
17 identify opportunities for—

18 “(1) maximizing the energy efficiency of indus-
19 trial processes and cross-cutting systems;

20 “(2) preventing pollution and minimizing waste;

21 “(3) improving efficient use of water in manu-
22 facturing processes;

23 “(4) conserving natural resources; and

24 “(5) achieving such other goals as the Secretary
25 determines to be appropriate.

1 “(b) COORDINATION.—The Secretary shall carry out
2 the initiative in coordination with the private sector and
3 appropriate agencies, including the National Institute of
4 Standards and Technology to accelerate adoption of new
5 and existing technologies or processes that improve energy
6 efficiency.

7 “(c) RESEARCH AND DEVELOPMENT PROGRAM FOR
8 SUSTAINABLE MANUFACTURING AND INDUSTRIAL TECH-
9 NOLOGIES AND PROCESSES.—As part of the Industrial
10 Technologies Program of the Department of Energy, the
11 Secretary shall carry out a joint industry-government
12 partnership program to research, develop, and dem-
13 onstrate new sustainable manufacturing and industrial
14 technologies and processes that maximize the energy effi-
15 ciency of industrial systems, reduce pollution, and con-
16 serve natural resources.

17 “(d) AUTHORIZATION OF APPROPRIATIONS.—There
18 are authorized to be appropriated such sums as are nec-
19 essary to carry out this section.”.

20 (b) TABLE OF CONTENTS.—The table of contents of
21 the Energy Policy and Conservation Act (42 U.S.C. prec.
22 6201) is amended by adding at the end of the items relat-
23 ing to part E of title III the following:

“Sec. 376. Sustainable manufacturing initiative.”.

1 **SEC. 306. STUDY OF ADVANCED ENERGY TECHNOLOGY**
2 **MANUFACTURING CAPABILITIES IN THE**
3 **UNITED STATES.**

4 (a) IN GENERAL.—Not later than 60 days after the
5 date of enactment of this Act, the Secretary shall enter
6 into an arrangement with the National Academy of
7 Sciences under which the Academy shall conduct a study
8 of the development of advanced manufacturing capabilities
9 for various energy technologies, including—

10 (1) an assessment of the manufacturing supply
11 chains of established and emerging industries;

12 (2) an analysis of—

13 (A) the manner in which supply chains
14 have changed over the 25-year period ending on
15 the date of enactment of this Act;

16 (B) current trends in supply chains; and

17 (C) the energy intensity of each part of the
18 supply chain and opportunities for improve-
19 ment;

20 (3) for each technology or manufacturing sec-
21 tor, an analysis of which sections of the supply chain
22 are critical for the United States to retain or develop
23 to be competitive in the manufacturing of the tech-
24 nology;

1 (4) an assessment of which emerging energy
2 technologies the United States should focus on to
3 create or enhance manufacturing capabilities; and

4 (5) recommendations on leveraging the exper-
5 tise of energy efficiency and renewable energy user
6 facilities so that best materials and manufacturing
7 practices are designed and implemented.

8 (b) REPORT.—Not later than 2 years after the date
9 on which the Secretary enters into the agreement with the
10 Academy described in subsection (a), the Academy shall
11 submit to the Committee on Energy and Natural Re-
12 sources of the Senate, the Committee on Energy and Com-
13 merce of the House of Representatives, and the Secretary
14 a report describing the results of the study required under
15 this section, including any findings and recommendations.

16 **SEC. 307. INDUSTRIAL TECHNOLOGIES STEERING COM-**
17 **MITTEE.**

18 The Secretary shall establish an advisory steering
19 committee that includes national trade associations rep-
20 resenting energy-intensive industries or energy service
21 providers to provide recommendations to the Secretary on
22 planning and implementation of the Industrial Tech-
23 nologies Program of the Department of Energy.

1 **SEC. 308. AUTHORIZATION OF APPROPRIATIONS.**

2 There are authorized to be appropriated to the Sec-
3 retary such sums as are necessary to carry out this sub-
4 title.

5 **Subtitle B—Supply Star**

6 **SEC. 311. SUPPLY STAR.**

7 Part B of title III of the Energy Policy and Conserva-
8 tion Act (42 U.S.C. 6291) is amended by inserting after
9 section 324B (as added by section 118(a)) the following:

10 **“SEC. 324C. SUPPLY STAR PROGRAM.**

11 “(a) IN GENERAL.—There is established within the
12 Department of Energy a Supply Star program to identify
13 and promote practices, recognize companies, and, as ap-
14 propriate, recognize products that use highly efficient sup-
15 ply chains in a manner that conserves energy, water, and
16 other resources.

17 “(b) COORDINATION.—In carrying out the program
18 described in subsection (a), the Secretary shall—

19 “(1) consult with other appropriate agencies;
20 and

21 “(2) coordinate efforts with the Energy Star
22 program established under section 324A.

23 “(c) DUTIES.—In carrying out the Supply Star pro-
24 gram described in subsection (a), the Secretary shall—

25 “(1) promote practices, recognize companies,
26 and, as appropriate, recognize products that comply

1 with the Supply Star program as the preferred prac-
2 tices, companies, and products in the marketplace
3 for maximizing supply chain efficiency;

4 “(2) work to enhance industry and public
5 awareness of the Supply Star program;

6 “(3) collect and disseminate data on supply
7 chain energy resource consumption;

8 “(4) develop and disseminate metrics, proc-
9 esses, and analytical tools (including software) for
10 evaluating supply chain energy resource use;

11 “(5) develop guidance at the sector level for im-
12 proving supply chain efficiency;

13 “(6) work with domestic and international orga-
14 nizations to harmonize approaches to analyzing sup-
15 ply chain efficiency, including the development of a
16 consistent set of tools, templates, calculators, and
17 databases; and

18 “(7) work with industry, including small busi-
19 nesses, to improve supply chain efficiency through
20 activities that include—

21 “(A) developing and sharing best practices;

22 and

23 “(B) providing opportunities to benchmark
24 supply chain efficiency.

1 “(d) EVALUATION.—In any evaluation of supply
2 chain efficiency carried out by the Secretary with respect
3 to a specific product, the Secretary shall consider energy
4 consumption and resource use throughout the entire
5 lifecycle of a product, including production, transport,
6 packaging, use, and disposal.

7 “(e) GRANTS AND INCENTIVES.—

8 “(1) IN GENERAL.—The Secretary may award
9 grants or other forms of incentives on a competitive
10 basis to eligible entities, as determined by the Sec-
11 retary, for the purposes of—

12 “(A) studying supply chain energy resource
13 efficiency; and

14 “(B) demonstrating and achieving reduc-
15 tions in the energy resource consumption of
16 commercial products through changes and im-
17 provements to the production supply and dis-
18 tribution chain of the products.

19 “(2) USE OF INFORMATION.—Any information
20 or data generated as a result of the grants or incen-
21 tives described in paragraph (1) shall be used to in-
22 form the development of the Supply Star Program.

23 “(f) TRAINING.—The Secretary shall use funds to
24 support professional training programs to develop and

1 communicate methods, practices, and tools for improving
2 supply chain efficiency.

3 “(g) EFFECT OF IMPACT ON CLIMATE CHANGE.—
4 For purposes of this section, the impact on climate change
5 shall not be a factor in determining supply chain effi-
6 ciency.

7 “(h) EFFECT OF OUTSOURCING OF AMERICAN
8 JOBS.—For purposes of this section, the outsourcing of
9 American jobs in the production of a product shall not
10 count as a positive factor in determining supply chain effi-
11 ciency.

12 “(i) AUTHORIZATION OF APPROPRIATIONS.—There
13 are authorized to be appropriated to carry out this section
14 such sums as are necessary.”.

15 **Subtitle C—Electric Motor Rebate** 16 **Program**

17 **SEC. 321. ENERGY SAVING MOTOR CONTROL REBATE PRO-** 18 **GRAM.**

19 (a) ESTABLISHMENT.—Not later than January 1,
20 2012, the Secretary of Energy (referred to in this section
21 as the “Secretary”) shall establish a program to provide
22 rebates for expenditures made by entities for the purchase
23 and installation of a new constant speed electric motor
24 control that reduces motor energy use by not less than
25 5 percent.

1 (b) REQUIREMENTS.—

2 (1) APPLICATION.—To be eligible to receive a
3 rebate under this section, an entity shall submit to
4 the Secretary an application in such form, at such
5 time, and containing such information as the Sec-
6 retary may require, including—

7 (A) demonstrated evidence that the entity
8 purchased a constant speed electric motor con-
9 trol that reduces motor energy use by not less
10 than 5 percent; and

11 (B) the physical nameplate of the installed
12 motor of the entity to which the energy saving
13 motor control is attached.

14 (2) AUTHORIZED AMOUNT OF REBATE.—The
15 Secretary may provide to an entity that meets the
16 requirements of paragraph (1) a rebate the amount
17 of which shall be equal to the product obtained by
18 multiplying—

19 (A) the nameplate horsepower of the elec-
20 tric motor to which the energy saving motor
21 control is attached; and

22 (B) \$25.

23 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
24 authorized to be appropriated to carry out this section

1 \$5,000,000 for each of fiscal years 2012 through 2016,
2 to remain available until expended.

3 **TITLE IV—FEDERAL AGENCY**
4 **ENERGY EFFICIENCY**

5 **SEC. 401. ADOPTION OF PERSONAL COMPUTER POWER**
6 **SAVINGS TECHNIQUES BY FEDERAL AGEN-**
7 **CIES.**

8 (a) IN GENERAL.—Not later than 180 days after the
9 date of enactment of this Act, the Secretary of Energy,
10 in consultation with the Secretary of Defense, the Sec-
11 retary of Veterans Affairs, and the Administrator of Gen-
12 eral Services, shall issue guidance for Federal agencies to
13 employ advanced tools allowing energy savings through
14 the use of computer hardware, energy efficiency software,
15 and power management tools.

16 (b) REPORTS ON PLANS AND SAVINGS.—Not later
17 than 90 days after the date of the issuance of the guidance
18 under subsection (a), each Federal agency shall submit to
19 the Secretary of Energy a report that describes—

20 (1) the plan of the agency for implementing the
21 guidance within the agency; and

22 (2) estimated energy and financial savings from
23 employing the tools described in subsection (a).

1 **SEC. 402. AVAILABILITY OF FUNDS FOR DESIGN UPDATES.**

2 Section 3307 of title 40, United States Code, is
3 amended—

4 (1) by redesignating subsections (d) through (h)
5 as subsections (e) through (i), respectively; and

6 (2) by inserting after subsection (c) the fol-
7 lowing:

8 “(d) AVAILABILITY OF FUNDS FOR DESIGN UP-
9 DATES.—

10 “(1) IN GENERAL.—Subject to paragraph (2),
11 for any project for which congressional approval is
12 received under subsection (a) and for which the de-
13 sign has been substantially completed but construc-
14 tion has not begun, the Administrator of General
15 Services may use appropriated funds to update the
16 project design to meet applicable Federal building
17 energy efficiency standards established under section
18 305 of the Energy Conservation and Production Act
19 (42 U.S.C. 6834) and other requirements estab-
20 lished under section 3312.

21 “(2) LIMITATION.—The use of funds under
22 paragraph (1) shall not exceed 125 percent of the
23 estimated energy or other cost savings associated
24 with the updates as determined by a life-cycle cost
25 analysis under section 544 of the National Energy
26 Conservation Policy Act (42 U.S.C. 8254).”.

1 **SEC. 403. BEST PRACTICES FOR ADVANCED METERING.**

2 Section 543(e) of the National Energy Conservation
3 Policy Act (42 U.S.C. 8253(e)) is amended by striking
4 paragraph (3) and inserting the following:

5 “(3) PLAN.—

6 “(A) IN GENERAL.—Not later than 180
7 days after the date on which guidelines are es-
8 tablished under paragraph (2), in a report sub-
9 mitted by the agency under section 548(a), each
10 agency shall submit to the Secretary a plan de-
11 scribing the manner in which the agency will
12 implement the requirements of paragraph (1),
13 including—

14 “(i) how the agency will designate
15 personnel primarily responsible for achiev-
16 ing the requirements; and

17 “(ii) a demonstration by the agency,
18 complete with documentation, of any find-
19 ing that advanced meters or advanced me-
20 tering devices (as those terms are used in
21 paragraph (1)), are not practicable.

22 “(B) UPDATES.—Reports submitted under
23 subparagraph (A) shall be updated annually.

24 “(4) BEST PRACTICES REPORT.—

25 “(A) IN GENERAL.—Not later than 180
26 days after the date of enactment of the Energy

1 Savings and Industrial Competitiveness Act of
2 2011, the Secretary of Energy, in consultation
3 with the Secretary of Defense and the Adminis-
4 trator of General Services, shall develop, and
5 issue a report on, best practices for the use of
6 advanced metering of energy use in Federal fa-
7 cilities, buildings, and equipment by Federal
8 agencies.

9 “(B) UPDATING.—The report described
10 under subparagraph (A) shall be updated annu-
11 ally.

12 “(C) COMPONENTS.—The report shall in-
13 clude, at a minimum—

14 “(i) summaries and analysis of the re-
15 ports by agencies under paragraph (3);

16 “(ii) recommendations on standard re-
17 quirements or guidelines for automated en-
18 ergy management systems, including—

19 “(I) potential common commu-
20 nications standards to allow data
21 sharing and reporting;

22 “(II) means of facilitating contin-
23 uous commissioning of buildings and
24 evidence-based maintenance of build-
25 ings and building systems; and

1 “(III) standards for sufficient
 2 levels of security and protection
 3 against cyber threats to ensure sys-
 4 tems cannot be controlled by unau-
 5 thorized persons; and

6 “(iii) an analysis of—

7 “(I) the types of advanced meter-
 8 ing and monitoring systems being pi-
 9 loted, tested, or installed in Federal
 10 buildings; and

11 “(II) existing techniques used
 12 within the private sector or other non-
 13 Federal government buildings.”.

14 **SEC. 404. FEDERAL ENERGY MANAGEMENT AND DATA COL-**
 15 **LECTION STANDARD.**

16 Section 543 of the National Energy Conservation
 17 Policy Act (42 U.S.C. 8253) is amended—

18 (1) by redesignating the second subsection (f)
 19 (as added by section 434(a) of Public Law 110–140
 20 (121 Stat. 1614)) as subsection (g); and

21 (2) in subsection (f)(7), by striking subpara-
 22 graph (A) and inserting the following:

23 “(A) IN GENERAL.—For each facility that
 24 meets the criteria established by the Secretary
 25 under paragraph (2)(B), the energy manager

1 shall use the web-based tracking system under
2 subparagraph (B)—

3 “(i) to certify compliance with the re-
4 quirements for—

5 “(I) energy and water evalua-
6 tions under paragraph (3);

7 “(II) implementation of identified
8 energy and water measures under
9 paragraph (4); and

10 “(III) follow-up on implemented
11 measures under paragraph (5); and

12 “(ii) to publish energy consumption
13 data on an individual facility basis.”.

14 **SEC. 405. ELECTRIC VEHICLE CHARGING INFRASTRUC-**
15 **TURE.**

16 Section 804(4) of the National Energy Conservation
17 Policy Act (42 U.S.C. 8287c(4)) is amended—

18 (1) in subparagraph (A), by striking “or” after
19 the semicolon;

20 (2) in subparagraph (B), by striking the period
21 at the end and inserting “; or”; and

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

23 “(C) a measure to support the use of elec-
24 tric vehicles or the fueling or charging infra-
25 structure necessary for electric vehicles.”.

1 **SEC. 406. BROADENING DEFINITION OF RENEWABLE EN-**
2 **ERGY TO INCLUDE THERMAL.**

3 Section 203 of the Energy Policy Act of 2005 (42
4 U.S.C. 15852) is amended—

5 (1) in subsection (a), in the matter preceding
6 paragraph (1), by striking “electric”;

7 (2) by redesignating subsection (d) as sub-
8 section (e); and

9 (3) by inserting after subsection (c) the fol-
10 lowing:

11 “(d) SEPARATE CALCULATION.—Renewable energy
12 produced at a Federal facility, on Federal land, or on In-
13 dian land (as defined in section 2601 of the Energy Policy
14 Act of 1992 (25 U.S.C. 3501))—

15 “(1) shall be calculated separately from renew-
16 able energy used; and

17 “(2) may be used individually or in combination
18 to comply with subsection (a).”.

19 **SEC. 407. STUDY ON FEDERAL DATA CENTER CONSOLIDA-**
20 **TION.**

21 (a) IN GENERAL.—The Secretary of Energy shall
22 conduct a study on the feasibility of a government-wide
23 data center consolidation, with an overall Federal target
24 of a minimum of 800 Federal data center closures by Oc-
25 tober 1, 2015.

1 (b) COORDINATION.—In conducting the study, the
2 Secretary shall coordinate with Federal data center pro-
3 gram managers, facilities managers, and sustainability of-
4 ficers.

5 (c) REPORT.—Not later than 1 year after the date
6 of enactment of this Act, the Secretary shall submit to
7 Congress a report that describes the results of the study,
8 including a description of agency best practices in data
9 center consolidation.

10 **TITLE V—MISCELLANEOUS**

11 **SEC. 501. BUDGETARY EFFECTS.**

12 The budgetary effects of this Act, for the purpose of
13 complying with the Statutory Pay-As-You-Go Act of 2010,
14 shall be determined by reference to the latest statement
15 titled “Budgetary Effects of PAYGO Legislation” for this
16 Act, submitted for printing in the Congressional Record
17 by the Chairman of the Senate Budget Committee, pro-
18 vided that such statement has been submitted prior to the
19 vote on passage.

20 **SEC. 502. ADVANCE APPROPRIATIONS REQUIRED.**

21 The authorization of amounts under this Act and the
22 amendments made by this Act shall be effective for any
23 fiscal year only to the extent and in the amount provided
24 in advance in appropriations Acts.

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