

111TH CONGRESS  
2D SESSION

# S. 20

To amend the Public Utility Regulatory Policies Act of 1978 to establish  
a Federal clean energy standard.

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IN THE SENATE OF THE UNITED STATES

SEPTEMBER 29, 2010

Mr. GRAHAM introduced the following bill; which was read twice and referred  
to the Committee on Energy and Natural Resources

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## A BILL

To amend the Public Utility Regulatory Policies Act of 1978  
to establish a Federal clean energy standard.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Clean Energy Stand-  
5 ard Act of 2010”.

6 **SEC. 2. SENSE OF CONGRESS ON CLEAN ENERGY AND EN-**  
7 **ERGY EFFICIENCY.**

8 It is the sense of Congress that the Federal Govern-  
9 ment should continue to support the use and expansion  
10 of clean energy and energy efficiency in—

- 1           (1) the production and use of energy;
- 2           (2) the reduction of greenhouse gas emissions;
- 3           and
- 4           (3) the reduction of dependence on foreign oil.

5 **SEC. 3. FEDERAL CLEAN ENERGY STANDARD.**

6           (a) IN GENERAL.—Title VI of the Public Utility Reg-  
 7 ulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.) is  
 8 amended by adding at the end the following:

9 **“SEC. 610. FEDERAL CLEAN ENERGY STANDARD.**

10           “(a) DEFINITIONS.—In this section:

11                   “(1) ADVANCED COAL GENERATION.—The term  
 12 ‘advanced coal generation’ means the generation of  
 13 electricity produced from coal by a new or existing  
 14 coal generating facility that captures and perma-  
 15 nently sequesters or stores at least 65 percent of  
 16 greenhouse gases produced by the facility.

17                   “(2) AFFILIATE.—The term ‘affiliate’ when  
 18 used with respect to a person, means another person  
 19 that directly or indirectly owns or controls, is owned  
 20 or controlled by, or is under common ownership or  
 21 control with, such person, as determined under regu-  
 22 lations issued by the Secretary.

23                   “(3) BASE QUANTITY OF ELECTRICITY.—

24                           “(A) IN GENERAL.—The term ‘base quan-  
 25 tity of electricity’ means the total quantity of

1 electricity sold by an electric utility to electric  
2 consumers in a calendar year.

3 “(B) EXCLUSIONS.—The term ‘base quan-  
4 tity of electricity’ does not include—

5 “(i) electricity generated by a hydro-  
6 electric facility (including a pumped stor-  
7 age facility but excluding qualified hydro-  
8 power) owned by an electric utility or sold  
9 under contract or rate order to an electric  
10 utility to meet the needs of the retail cus-  
11 tomers of the utility; or

12 “(ii) electricity generated through the  
13 incineration of municipal solid waste owned  
14 by an electric utility or sold under contract  
15 or rate order to an electric utility to meet  
16 the needs of the retail customers of the  
17 utility.

18 “(4) BIOMASS.—The term ‘biomass’ means—

19 “(A) materials, precommercial thinnings,  
20 or invasive species from National Forest Sys-  
21 tem land and public lands (as defined in section  
22 103 of the Federal Land Policy and Manage-  
23 ment Act of 1976 (43 U.S.C. 1702)) that—

24 “(i) are byproducts of preventive  
25 treatments that are removed—

1 “(I) to reduce hazardous fuels;

2 “(II) to reduce or contain disease

3 or insect infestation; or

4 “(III) to restore ecosystem

5 health;

6 “(ii) would not otherwise be used for

7 higher-value products; and

8 “(iii) are harvested in accordance

9 with—

10 “(I) applicable law and land

11 management plans; and

12 “(II) the requirements for—

13 “(aa) old-growth mainte-

14 nance, restoration, and manage-

15 ment direction of paragraphs (2),

16 (3), and (4) of subsection (e) of

17 section 102 of the Healthy For-

18 ests Restoration Act of 2003 (16

19 U.S.C. 6512); and

20 “(bb) large-tree retention of

21 subsection (f) of that section; or

22 “(B) any organic matter that is available

23 on a renewable or recurring basis from non-

24 Federal land or land belonging to an Indian or

25 Indian tribe that is held in trust by the United

1 States or subject to a restriction against alien-  
2 ation imposed by the United States, including—

3 “(i) renewable plant material, includ-  
4 ing—

5 “(I) feed grains;

6 “(II) other agricultural commod-  
7 ities;

8 “(III) other plants and trees; and

9 “(IV) algae; and

10 “(ii) waste material, other than paper  
11 commonly recycled, including—

12 “(I) crop residue;

13 “(II) other vegetative waste ma-  
14 terial (including wood waste and wood  
15 residues);

16 “(III) animal waste and byprod-  
17 ucts (including fats, oils, greases, and  
18 manure); and

19 “(IV) food waste and yard waste;  
20 and

21 “(C) residues and byproducts from wood,  
22 pulp, or paper products facilities.

23 “(5) CLEAN ENERGY.—The term ‘clean energy’  
24 means electric energy generated at a facility (includ-  
25 ing a distributed generation facility) from—

1           “(A) solar, wind, geothermal, or ocean en-  
2           ergy;

3           “(B) biomass;

4           “(C) landfill gas;

5           “(D) qualified hydropower;

6           “(E) marine and hydrokinetic renewable  
7           energy (as defined in section 632 of the Energy  
8           Independence and Security Act of 2007 (42  
9           U.S.C. 17211));

10          “(F) incremental geothermal production;

11          “(G) coal-mined methane;

12          “(H) qualified waste-to-energy;

13          “(I) qualified nuclear energy;

14          “(J) advanced coal generation;

15          “(K) eligible retired fossil fuel generation;

16          or

17          “(L) another clean energy source based on  
18          innovative technology, as determined by the  
19          Secretary through rulemaking.

20          “(6) DISTRIBUTED GENERATION FACILITY.—

21          The term ‘distributed generation facility’ means a  
22          facility at or near a customer site that provides elec-  
23          tric energy to 1 or more customers for purposes  
24          other than resale other than to a utility through a  
25          net metering arrangement.

1           “(7) ELIGIBLE RETIRED FOSSIL FUEL GENERA-  
 2           TION.—The term ‘eligible retired fossil fuel genera-  
 3           tion’ means the generation of electricity from any  
 4           fossil fuel that is—

5                   “(A) produced by a fossil fuel generating  
 6           facility (including any petroleum coke or oil-  
 7           fired steam unit or peaking facility) that had  
 8           average carbon dioxide emissions during the 3-  
 9           year period ending on the date of retirement in  
 10          excess of 2,250 pounds per megawatt hour of  
 11          generation; and

12                   “(B) permanently retired during the period  
 13          beginning on the date of enactment of this sec-  
 14          tion and ending on January 1, 2015.

15           “(8) GEOTHERMAL ENERGY.—The term ‘geo-  
 16          thermal energy’ means energy derived from a geo-  
 17          thermal deposit (within the meaning of section  
 18          613(e)(2) of the Internal Revenue Code of 1986).

19           “(9) INCREMENTAL COST OF COMPLIANCE.—

20                   “(A) IN GENERAL.—The term ‘incremental  
 21          cost of compliance’ means—

22                           “(i) the costs attributable to all retail  
 23                   sales of electricity incurred in a year by an  
 24                   electric utility to—

1 “(I) generate clean energy eligi-  
2 ble for Federal clean energy credits;

3 “(II) acquire Federal clean en-  
4 ergy credits; or

5 “(III) make alternative compli-  
6 ance payments in order to comply  
7 with the requirements of subsection  
8 (b); less

9 “(ii)(I) the costs the electric utility  
10 would have incurred to serve all of the re-  
11 tail customers of that electric utility in  
12 that year to generate or acquire additional  
13 electricity not eligible for clean energy  
14 credits if the requirements of subsection  
15 (b) did not apply to the electric utility; and

16 “(II) the costs of compliance with any  
17 comparable State clean energy require-  
18 ment.

19 “(B) COST OF ELECTRICITY.—In calcu-  
20 lating the incremental cost of compliance of an  
21 electric utility under this section, the Secretary  
22 shall take into account the reduction, if any, in  
23 the cost of electricity generated with fossil fuels  
24 associated with increased reliance on clean en-  
25 ergy generation.



1           “(10) INCREMENTAL FOSSIL FUEL PRODUC-  
 2           TION.—The term ‘incremental fossil fuel production’  
 3           means the incremental quantity of electricity gen-  
 4           erated at an existing fossil fuel generation facility  
 5           over the average quantity of electricity generated at  
 6           the facility during the preceding 3-year period that  
 7           is attributable to permanent efficiency improvements  
 8           or capacity additions made on or after the date of  
 9           enactment of this section, if there is no increase in  
 10          greenhouse gas emissions associated with the effi-  
 11          ciency improvements or capacity additions when  
 12          compared to the average greenhouse gas emissions  
 13          during the preceding 3-year period.

14          “(11) INCREMENTAL GEOTHERMAL PRODUC-  
 15          TION.—

16               “(A) IN GENERAL.—The term ‘incremental  
 17               geothermal production’ means, for any year, the  
 18               excess of—

19                   “(i) the total kilowatt hours of elec-  
 20                   tricity produced from a facility (including a  
 21                   distributed generation facility) using geo-  
 22                   thermal energy; over

23                   “(ii) the average number of kilowatt  
 24                   hours produced annually at the facility for  
 25                   5 of the previous 7 calendar years before

1           the date of enactment of this section after  
2           eliminating the highest and the lowest kilo-  
3           watt hour production years in that 7-year  
4           period.

5           “(B) SPECIAL RULE.—A facility described  
6           in subparagraph (A) that was placed in service  
7           at least 7 years before the date of enactment of  
8           this section shall, commencing with the year in  
9           which that date of enactment occurs, reduce the  
10          amount calculated under subparagraph (A)(ii)  
11          each year, on a cumulative basis, by the average  
12          percentage decrease in the annual kilowatt hour  
13          production for the 7-year period described in  
14          subparagraph (A)(ii) with such cumulative sum,  
15          but not to exceed 30 percent.

16          “(12) INCREMENTAL HYDROPOWER.—

17                 “(A) IN GENERAL.—The term ‘incremental  
18                 hydropower’ means additional energy generated  
19                 as a result of efficiency improvements or capac-  
20                 ity additions made on or after January 1, 1992.

21                 “(B) EXCLUSION.—The term ‘incremental  
22                 hydropower’ does not include additional energy  
23                 generated as a result of operational changes not  
24                 directly associated with efficiency improvements  
25                 or capacity additions.

1                   “(C) MEASUREMENT AND CERTIFI-  
 2                   CATION.—Efficiency improvements and capacity  
 3                   additions referred to in subparagraph (A) shall  
 4                   be—

5                   “(i) measured on the basis of the  
 6                   same water flow information used to deter-  
 7                   mine a historic average annual generation  
 8                   baseline for the hydroelectric facility; and

9                   “(ii) certified by the Secretary or the  
 10                  Federal Energy Regulatory Commission.

11               “(13) INCREMENTAL NUCLEAR PRODUCTION.—  
 12               The term ‘incremental nuclear production’ means  
 13               the incremental quantity of energy generated by an  
 14               existing nuclear facility over the average quantity of  
 15               energy generated at the facility during the preceding  
 16               3-year period that is attributable to permanent effi-  
 17               ciency improvements or capacity additions made on  
 18               or after the date of enactment of this section.

19               “(14) INDIAN LAND.—The term ‘Indian land’  
 20               has the meaning given the term in section 2601 of  
 21               the Energy Policy Act of 1992 (25 U.S.C. 3501).

22               “(15) QUALIFIED HYDROPOWER.—

23               “(A) IN GENERAL.—The term ‘qualified  
 24               hydropower’ means—

25               “(i) incremental hydropower;

1 “(ii) additions of capacity made on or  
2 after January 1, 2001, or the effective  
3 commencement date of an existing applica-  
4 ble State clean or renewable electricity  
5 standard program at an existing nonhydro-  
6 electric dam, if—

7 “(I) the hydroelectric project in-  
8 stalled on the nonhydroelectric dam—

9 “(aa) is licensed by the Fed-  
10 eral Energy Regulatory Commis-  
11 sion, or is exempt from licensing,  
12 and is in compliance with the  
13 terms and conditions of the li-  
14 cense or exemption; and

15 “(bb) meets all other appli-  
16 cable environmental, licensing,  
17 and regulatory requirements, in-  
18 cluding applicable fish passage  
19 requirements;

20 “(II) the nonhydroelectric dam—

21 “(aa) was placed in service  
22 before the date of enactment of  
23 this section;

1 “(bb) was operated for flood  
2 control, navigation, or water sup-  
3 ply purposes; and

4 “(cc) did not produce hydro-  
5 electric power as of the date of  
6 enactment of this section; and

7 “(III) the hydroelectric project is  
8 operated so that the water surface ele-  
9 vation at any given location and time  
10 that would have occurred in the ab-  
11 sence of the hydroelectric project is  
12 maintained, subject to any license re-  
13 quirements imposed under applicable  
14 law that change the water surface ele-  
15 vation for the purpose of improving  
16 the environmental quality of the af-  
17 fected waterway, as certified by the  
18 Federal Energy Regulatory Commis-  
19 sion; and

20 “(iii) in the case of the State of Alas-  
21 ka—

22 “(I) energy generated by a small  
23 hydroelectric facility that produces  
24 less than 50 megawatts;

1 “(II) energy from pumped stor-  
2 age; and

3 “(III) energy from a lake tap.

4 “(B) STANDARDS.—Nothing in this para-  
5 graph or the application of this paragraph shall  
6 affect the standards under which the Federal  
7 Energy Regulatory Commission issues licenses  
8 for and regulates hydropower projects under  
9 part I of the Federal Power Act (16 U.S.C.  
10 791a et seq.).

11 “(16) QUALIFIED NUCLEAR ENERGY.—The  
12 term ‘qualified nuclear energy’ means energy from a  
13 nuclear generating unit placed in service on or after  
14 the date of enactment of this section.

15 “(17) QUALIFIED WASTE-TO-ENERGY.—The  
16 term ‘qualified waste-to-energy’ means energy from  
17 the combustion of post-recycled municipal solid  
18 waste, or from the gasification or pyrolysis of  
19 such waste and the combustion of the resulting gas  
20 at the same facility, if the owner or operator of the  
21 facility generating electricity from the energy pro-  
22 vides to the Secretary, on an annual basis—

23 “(A) a certification that the facility is in  
24 compliance with all applicable Federal and  
25 State environmental permits;

1           “(B) in the case of a facility that com-  
 2 mences operation before the date of enactment  
 3 of this section, a certification that the facility  
 4 meets emissions standards promulgated under  
 5 section 112 or 129 of the Clean Air Act (42  
 6 U.S.C. 7412, 7429) that apply as of the date  
 7 of enactment of this section to new facilities  
 8 within the relevant source category; and

9           “(C) in the case of the combustion,  
 10 pyrolization, or gasification of municipal solid  
 11 waste, a certification that each local govern-  
 12 ment unit from which such waste originates op-  
 13 erates, participates in the operation of, con-  
 14 tracts for, or otherwise provides for, recycling  
 15 services for residents of the local government  
 16 unit.

17       “(b) CLEAN ENERGY AND ENERGY EFFICIENCY RE-  
 18 QUIREMENT.—

19           “(1) REQUIREMENT.—

20           “(A) IN GENERAL.—Subject to subpara-  
 21 graph (B), each electric utility that sells elec-  
 22 tricity to electric consumers for a purpose other  
 23 than resale shall obtain a percentage of the  
 24 base quantity of electricity the electric utility

1 sells to electric consumers in any calendar year  
 2 from clean energy or energy efficiency.

3 “(B) PERCENTAGE.—Except as provided  
 4 in section 611, the percentage obtained in a cal-  
 5 endar year under subparagraph (A) shall not be  
 6 less than the amount specified in the following  
 7 table:

<b>“Calendar year:</b>	<b>Minimum annual percentage:</b>
2013 and 2014 .....	13
2015 through 2019 .....	15
2020 through 2024 .....	20
2025 through 2029 .....	25
2030 through 2034 .....	30
2035 through 2039 .....	35
2040 through 2044 .....	40
2045 through 2049 .....	45
2050 .....	50.

8 “(2) MEANS OF COMPLIANCE.—An electric util-  
 9 ity shall meet the requirements of paragraph (1)  
 10 by—

11 “(A) submitting to the Secretary clean en-  
 12 ergy credits issued under subsection (c);

13 “(B) submitting Federal energy efficiency  
 14 credits issued under subsection (i), except that  
 15 those credits may not be used to meet more  
 16 than 25 percent of the requirements under  
 17 paragraph (1) in any calendar year;

18 “(C) making alternative compliance pay-  
 19 ments to the Secretary at the rate of 3.5 cents  
 20 per kilowatt hour (as adjusted for inflation



1 under subsection (g)) if the electric utility does  
 2 not elect to petition the Secretary to waive the  
 3 requirements under subsection (d)(3)(C); or

4 “(D) a combination of activities described  
 5 in subparagraphs (A), (B), and (C).

6 “(3) PHASE-IN.—The Secretary shall prescribe,  
 7 by regulation, a reasonable phase-in of the require-  
 8 ments of paragraph (1) as the requirements apply to  
 9 an electric utility that becomes subject to this sec-  
 10 tion on or after January 1, 2013.

11 “(c) FEDERAL CLEAN ENERGY AND ENERGY EFFI-  
 12 CIENCY CREDIT TRADING PROGRAMS.—

13 “(1) IN GENERAL.—Not later than January 1,  
 14 2011, the Secretary shall establish a Federal clean  
 15 energy credit trading program, and a Federal energy  
 16 efficiency credit trading program, under which elec-  
 17 tric utilities shall submit to the Secretary Federal  
 18 clean energy credits and Federal energy efficiency  
 19 credits to certify the compliance of the electric utili-  
 20 ties with subsection (b)(1).

21 “(2) ADMINISTRATION.—As part of the pro-  
 22 gram, the Secretary shall—

23 “(A) issue clean energy credits to genera-  
 24 tors of electric energy from clean energy, re-  
 25 gardless of whether the energy is transmitted

1 over the national interstate transmission sys-  
2 tem;

3 “(B) to the extent that clean sources of  
4 electricity are used in combination with other  
5 sources of energy, issue credits only to the ex-  
6 tent that the electricity generated is from clean  
7 energy resources;

8 “(C) issue clean energy credits to electric  
9 utilities associated with State clean energy  
10 standard compliance mechanisms pursuant to  
11 subsection (h);

12 “(D) issue energy efficiency credits pursu-  
13 ant to subsection (i);

14 “(E) subject to subparagraph (F), ensure  
15 that a kilowatt hour, including the associated  
16 clean energy credit or energy efficiency credit,  
17 shall be used only once for purposes of compli-  
18 ance with this Act;

19 “(F) allow double credits for generation  
20 from facilities on Indian land, and triple credits  
21 for generation from small clean energy distrib-  
22 uted generators no larger than 1 megawatt, ex-  
23 cept that no distributed clean energy generation  
24 facilities on Indian land shall receive a greater  
25 number of credits than triple credits;

1           “(G) ensure that, with respect to a pur-  
2           chaser that, as of the date of enactment of this  
3           section, has a purchase agreement from a clean  
4           energy facility placed in service before that  
5           date, the credit associated with the generation  
6           of clean energy under the contract is issued to  
7           the purchaser of the electric energy to the ex-  
8           tent that the contract does not already provide  
9           for the allocation of the Federal credit;

10           “(H) in the case of eligible retired fossil  
11           fuel generation, issue 0.25 credits per kilowatt  
12           hour during the 3 year-period beginning on the  
13           date of retirement based on the average annual  
14           quantity of electricity generated by eligible re-  
15           tired fossil fuel generation during the final 3  
16           years of operation of the facility;

17           “(I) calculate the quantity of clean energy  
18           credits issued for advanced coal generation,  
19           which shall be equal to the product obtained by  
20           multiplying—

21                   “(i) the kilowatt hours of electricity  
22                   generated by a facility and supplied to the  
23                   grid during the prior year; by

24                   “(ii) during the same year, the ratio  
25                   of—

1                   “(I) the quantity of carbon diox-  
2                   ide captured from the facility and se-  
3                   questered; bears to

4                   “(II) the sum of—

5                   “(aa) the quantity of carbon  
6                   dioxide captured from the facility  
7                   and sequestered; and

8                   “(bb) the quantity of carbon  
9                   dioxide emitted from the facility;

10                  “(J) issue double clean energy credits in  
11                  the case of the first 5 new advanced coal gen-  
12                  eration facilities that permanently sequester a  
13                  minimum of 1,000,000 tons per year of carbon  
14                  dioxide into deep geologic formations;

15                  “(K) issue double credits in the case of the  
16                  first 5 retrofitted coal plants that are advanced  
17                  coal generators, if the retrofitted facilities cap-  
18                  ture at least 200 MWe equivalent of flue gas  
19                  and sequester carbon dioxide into deep geologic  
20                  formations;

21                  “(L) in the case of credits issued under  
22                  subparagraphs (J) and (K), if the qualifying  
23                  project uses captured carbon dioxide for pur-  
24                  poses of enhanced hydrocarbon recovery, reduce  
25                  the credits by .25; and

1           “(M) issue clean energy credits for the  
2           useful electric and thermal output from a facil-  
3           ity that produces the output from biomass,  
4           using a system under which—

5                   “(i) in the case of efficiency that is  
6                   less than 50 percent, 1 clean energy credit  
7                   is awarded;

8                   “(ii) in the case of efficiency that is  
9                   50 percent or more but less than 70 per-  
10                  cent, 1.1 clean energy credits are awarded  
11                  for the same unit output;

12                  “(iii) in the case of efficiency that is  
13                  70 percent or more but less than 90 per-  
14                  cent, 1.25 clean energy credits are awarded  
15                  for the same unit output; and

16                  “(iv) in the case of efficiency that is  
17                  90 percent or more, 1.5 clean energy cred-  
18                  its are awarded for the same unit output.

19           “(3) CLEAN ENERGY CREDIT BORROWING.—At  
20           any time before the end of calendar year 2015 and  
21           any subsequent calendar year, an electric utility that  
22           has reason to believe the electric utility will not have  
23           sufficient clean energy credits to comply with sub-  
24           section (b) may—

1           “(A) submit to the Secretary a plan that  
2 demonstrates that the electric utility, as a con-  
3 sequence of having facilities under construction  
4 at the time the plan is submitted, will earn suf-  
5 ficient clean energy credits during the subse-  
6 quent 3 calendar years to meet the require-  
7 ments of subsection (b) for calendar year 2015  
8 and the subsequent calendar years affected; and

9           “(B) on approval of the plan by the Sec-  
10 retary, apply clean energy credits that the plan  
11 demonstrates will be earned during the subse-  
12 quent 3 calendar years to meet the require-  
13 ments of subsection (b) for each calendar year  
14 affected.

15       “(4) CREDIT TRADING AND BANKING.—

16           “(A) IN GENERAL.—An electric utility that  
17 holds clean energy credits in excess of the quan-  
18 tity of credits needed to comply with subsection  
19 (b) may transfer the credits to another electric  
20 utility in the same utility holding company sys-  
21 tem or sell the credits to another electric utility.

22           “(B) CARRYING FORWARD.—A clean en-  
23 ergy credit for any year that is not used to sat-  
24 isfy the minimum clean energy requirements of

subsection (b) for that year may be carried forward for use in any subsequent year.

“(5) DELEGATION OF MARKET FUNCTION.—

“(A) IN GENERAL.—The Secretary may delegate to—

“(i) an appropriate market-making entity the administration of a national clean energy credit market and a national energy efficiency credit market for purposes of creating a transparent national market for the sale or trade of clean energy credits and energy efficiency credits; and

“(ii) regional entities the tracking of dispatch of clean energy generation.

“(B) ADMINISTRATION.—Any delegation under subparagraph (A) shall ensure that the tracking and reporting of information concerning the dispatch of clean energy generation is transparent, verifiable, and independent of any generation or load interests with obligations under this section.

“(d) ENFORCEMENT.—

1           “(1) CIVIL PENALTIES.—Any electric utility  
2           that fails to meet the requirements of subsection (b)  
3           shall be subject to a civil penalty.

4           “(2) AMOUNT OF PENALTY.—The amount of  
5           the civil penalty shall be equal to the product ob-  
6           tained by multiplying—

7                 “(A) the number of kilowatt hours of elec-  
8                 tric energy sold to electric consumers in viola-  
9                 tion of subsection (b); by

10                “(B) 200 percent of the value of the alter-  
11                native compliance payment, as adjusted for in-  
12                flation under subsection (g).

13           “(3) MITIGATION OR WAIVER.—

14                 “(A) PENALTY.—

15                         “(i) IN GENERAL.—The Secretary  
16                         shall mitigate or waive a civil penalty  
17                         under this subsection if the electric utility  
18                         is unable to comply with subsection (b) due  
19                         to a reason outside of the reasonable con-  
20                         trol of the electric utility.

21                         “(ii) AMOUNT.—The Secretary shall  
22                         reduce the amount of any penalty deter-  
23                         mined under paragraph (2) by the amount  
24                         paid by the electric utility to a State for  
25                         failure to comply with the requirement of



1 a State clean or renewable energy program  
2 if the State requirement is greater than  
3 the applicable requirement of subsection  
4 (b).

5 “(B) REQUIREMENT.—The Secretary may  
6 waive the requirements of subsection (b) for a  
7 period of up to 5 years with respect to an elec-  
8 tric utility if the Secretary determines that the  
9 electric utility cannot meet the requirements  
10 due to a hurricane, tornado, fire, flood, earth-  
11 quake, ice storm, or other natural disaster or  
12 act of God beyond the reasonable control of the  
13 utility.

14 “(C) RATEPAYER PROTECTION.—

15 “(i) IN GENERAL.—Subject to clause  
16 (ii), effective beginning June 1, 2013, and  
17 not later than June 1 of each year there-  
18 after, an electric utility may petition the  
19 Secretary to waive, for the following com-  
20 pliance year, all or part of the require-  
21 ments of subsection (b) in order to limit  
22 the rate impact of the incremental cost of  
23 compliance of the electric utility to not  
24 more than 4 percent per retail customer in  
25 any year.

1 “(ii) REQUIREMENTS.—

2 “(I) EXHAUSTION OF OPPORTU-  
3 NITIES.—The Secretary may waive all  
4 or part of the requirements of sub-  
5 section (b) only on a demonstration by  
6 the petitioner that the petitioner has  
7 exhausted all opportunities under this  
8 section to comply with the require-  
9 ments of subsection (b).

10 “(II) LIMITATIONS.—Any waiver  
11 granted by the Secretary under this  
12 subparagraph shall be limited to the  
13 maximum extent practicable while en-  
14 suring that the increased cost of com-  
15 pliance does not exceed 4 percent per  
16 retail customer for any year.

17 “(D) VARIANCE.—A State public utility  
18 commission or electric utility may submit an  
19 application to the Secretary that requests a  
20 variance from the requirements of subsection  
21 (b) for 1 or more calendar years (including sus-  
22 pension or reduction of the requirements) on  
23 the basis of transmission constraints preventing  
24 delivery of clean energy.

1           “(4) PROCEDURE FOR ASSESSING PENALTY.—

2           The Secretary shall assess a civil penalty under this  
3           subsection in accordance with the procedures pre-  
4           scribed by section 333(d) of the Energy Policy and  
5           Conservation Act (42 U.S.C. 6303(d)).

6           “(e) ALTERNATIVE COMPLIANCE PAYMENTS.—

7           “(1) IN GENERAL.—An electric utility may sat-  
8           isfy the requirements of subsection (b), in whole or  
9           in part, by submitting in accordance with this sub-  
10          section, in lieu of each Federal clean energy credit  
11          or megawatt hour of demonstrated total annual elec-  
12          tricity savings that would otherwise be due, a pay-  
13          ment equal to the amount required under subsection  
14          (b) in accordance with such regulations as the Sec-  
15          retary may promulgate.

16          “(2) PAYMENT TO STATE FUNDS.—Payments  
17          made under this subsection shall be made directly to  
18          the 1 or more States in which the electric utility is  
19          located, in proportion to the base quantity of a retail  
20          electric supplier that is within each applicable State,  
21          if the payments are deposited directly into a fund  
22          within the treasury of the State for use in accord-  
23          ance with paragraph (3).

1           “(3) USE OF GRANTS.—The Governor of any  
2       State may expend amounts in a State clean energy  
3       escrow account solely for purposes of—

4           “(A) increasing the quantity of electric en-  
5       ergy produced from a clean energy source in the  
6       State, including nuclear and advanced coal  
7       technologies for carbon capture and sequestra-  
8       tion;

9           “(B) promoting the deployment and use of  
10      electric drive vehicles in the State, including the  
11      development of electric drive vehicles and bat-  
12      teries; and

13          “(C) offsetting the costs of carrying out  
14      this section paid by electric consumers in the  
15      State through—

16           “(i) direct grants to electric con-  
17           sumers; or

18           “(ii) energy efficiency investments.

19          “(4) INFORMATION AND REPORTS.—As a condi-  
20      tion of providing payments to a State under this  
21      subsection, the Secretary may require the Governor  
22      to keep such accounts or records, and furnish such  
23      information and reports, as the Secretary determines  
24      are necessary and appropriate for determining com-  
25      pliance with this subsection.

1 “(f) EXEMPTIONS.—

2 “(1) IN GENERAL.—During any calendar year,  
3 this section shall not apply to an electric utility—

4 “(A) that sold less than 4,000,000 mega-  
5 watt hours of electric energy to electric con-  
6 sumers during the preceding calendar year, ex-  
7 cept that sales to an affiliate, lessee, or tenant  
8 of the electric utility shall not be treated as  
9 sales to electric consumers under this para-  
10 graph; or

11 “(B) in Hawaii.

12 “(2) ADMINISTRATION.—

13 “(A) VOLUNTARY COVERAGE.—Paragraph  
14 (1) shall not apply to an electric utility de-  
15 scribed in paragraph (1) that voluntarily elects  
16 to be covered by this section.

17 “(B) SALE OF CLEAN ENERGY CREDITS.—  
18 An electric utility that is not covered by this  
19 section and has not elected to be covered by  
20 this section shall not be eligible to sell any cred-  
21 its generated pursuant to this section to any  
22 other person.

23 “(g) INFLATION ADJUSTMENT.—Not later than De-  
24 cember 31 of each year beginning in 2011, the Secretary

1 shall adjust for inflation the rate of the alternative compli-  
2 ance payment under subsection (b)(2)(C).

3 “(h) STATE PROGRAMS.—

4 “(1) IN GENERAL.—Subject to paragraph (2),  
5 nothing in this section diminishes any authority of  
6 a State or political subdivision of a State to adopt  
7 or enforce any law or regulation respecting clean en-  
8 ergy or energy efficiency, or the regulation of electric  
9 utilities.

10 “(2) COMPLIANCE.—Except as provided in sub-  
11 section (d)(3), no such law or regulation shall relieve  
12 any person of any requirement otherwise applicable  
13 under this section.

14 “(3) COORDINATION.—The Secretary, in con-  
15 sultation with States having such clean energy and  
16 energy efficiency programs, shall, to the maximum  
17 extent practicable, facilitate coordination between  
18 the Federal program and State programs.

19 “(4) REGULATIONS.—

20 “(A) IN GENERAL.—The Secretary, in con-  
21 sultation with States, shall promulgate regula-  
22 tions to ensure that an electric utility that is  
23 subject to the requirements of this section and  
24 is subject to a State renewable energy or clean

1 energy standard receives clean energy credits  
2 if—

3 “(i) the electric utility complies with  
4 the State standard by generating or pur-  
5 chasing clean energy or renewable energy  
6 certificates or credits representing clean  
7 energy; or

8 “(ii) the State imposes or allows other  
9 mechanisms for achieving the State stand-  
10 ard, including the payment of taxes, fees,  
11 surcharges, or other financial obligations.

12 “(B) AMOUNT OF CREDITS.—The amount  
13 of credits received by an electric utility under  
14 this subsection shall equal—

15 “(i) in the case of subparagraph  
16 (A)(i), the quantity of clean energy result-  
17 ing from the generation or purchase by the  
18 electric utility of clean energy; and

19 “(ii) in the case of subparagraph  
20 (A)(ii), the pro rata share of the electric  
21 utility, based on the contributions to the  
22 mechanism made by the electric utility or  
23 customers of the electric utility, in the  
24 State, of the quantity of clean energy re-  
25 sulting from those mechanisms.

1           “(C) PROHIBITION ON DOUBLE COUNT-  
 2           ING.—The regulations promulgated under this  
 3           paragraph shall ensure that a kilowatt hour as-  
 4           sociated with a clean energy credit issued pur-  
 5           suant to this subsection shall not be used for  
 6           compliance with this section more than once.

7           “(i) ENERGY EFFICIENCY CREDITS.—

8           “(1) DEFINITIONS.—In this subsection:

9           “(A) CUSTOMER FACILITY SAVINGS.—The  
 10          term ‘customer facility savings’ means a reduc-  
 11          tion in the consumption of end-use electricity at  
 12          a facility of an end-use consumer of electricity  
 13          served by an electric utility, as compared to—

14               “(i) consumption at the facility during  
 15               a base year, taking into account reductions  
 16               attributable to causes other than energy ef-  
 17               ficiency investments (such as economic  
 18               downturns, reductions in customer base,  
 19               favorable weather conditions, or other such  
 20               causes); or

21               “(ii) in the case of new equipment (re-  
 22               gardless of whether the new equipment re-  
 23               places existing equipment at the end of the  
 24               useful life of the existing equipment), con-  
 25               sumption by similar equipment of average



1 efficiency available for purchase at the  
2 time that new equipment is acquired.

3 “(B) ELECTRICITY SAVINGS.—The term  
4 ‘electricity savings’ means—

5 “(i) customer facility savings of elec-  
6 tricity consumption adjusted to reflect any  
7 associated increase in fuel consumption at  
8 the facility;

9 “(ii) reductions in distribution system  
10 losses of electricity achieved by a retail  
11 electricity distributor, as compared to  
12 losses attributable to new or replacement  
13 distribution system equipment of average  
14 efficiency (as defined by the Secretary by  
15 regulation); and

16 “(iii) the output of new combined heat  
17 and power systems, to the extent provided  
18 under paragraph (5).

19 “(C) QUALIFIED ELECTRICITY SAVINGS.—  
20 The term ‘qualified electricity savings’ means  
21 electricity saving that meet the measurement  
22 and verification requirements of paragraph (4).

23 “(2) PETITION.—On petition by the Governor  
24 of a State or, in the case of the power service area  
25 of the Tennessee Valley Authority, the Board of Di-

rectors of the Tennessee Valley Authority, the Secretary shall allow up to 25 percent of the requirements of an electric utility under subsection (b)(1) associated with the sales of electricity of the utility in the State to be met by submitting Federal energy efficiency credits issued pursuant to this subsection.

“(3) ISSUANCE OF ENERGY EFFICIENCY CREDITS.—

“(A) IN GENERAL.—The Secretary shall issue energy efficiency credits for qualified electricity savings achieved in States described in paragraph (2) in accordance with this subsection.

“(B) QUALIFIED ELECTRICITY SAVINGS.—Subject to subparagraph (C), in accordance with regulations promulgated by the Secretary, the Secretary shall issue credits for—

“(i) qualified electricity savings achieved by an electric utility on or after the date of enactment of this section; and

“(ii) qualified electricity savings achieved by other entities (including State agencies) on or after the date of enactment of this section if—

1                   “(I) the measures used to achieve  
2                   the qualified electricity savings were  
3                   installed or placed in operation by the  
4                   entity seeking the credit; and

5                   “(II) an electric utility eligible to  
6                   receive efficiency credits did not pay a  
7                   substantial portion of the cost of  
8                   achieving the qualified electricity sav-  
9                   ings (unless the utility has waived any  
10                  entitlement to the credit).

11                 “(C) STANDARDS.—No credits shall be  
12                 issued for electricity savings achieved as a re-  
13                 sult of compliance with a national, State, or  
14                 local building, equipment, or appliance effi-  
15                 ciency standard.

16                 “(4) MEASUREMENT AND VERIFICATION OF  
17                 ELECTRICITY SAVINGS.—Not later than January  
18                 2012, the Secretary shall promulgate regulations re-  
19                 garding the measurement and verification of elec-  
20                 tricity savings under this subsection, including regu-  
21                 lations covering—

22                   “(A) procedures and standards for defining  
23                   and measuring electricity savings that will be  
24                   eligible to receive credits under paragraph (3),  
25                   which shall—

1 “(i) specify the types of energy effi-  
2 ciency and energy conservation that will be  
3 eligible for the credits;

4 “(ii) require that energy consumption  
5 for customer facilities or portions of facili-  
6 ties in the applicable base and current  
7 years be adjusted, as appropriate, to ac-  
8 count for changes in weather, level of pro-  
9 duction, and building area;

10 “(iii) account for the useful life of  
11 electricity savings measures;

12 “(iv) include specified electricity sav-  
13 ings values for specific, commonly-used ef-  
14 ficiency measures; and

15 “(v) exclude electricity savings that—

16 “(I) are not properly attributable  
17 to measures carried out by the entity  
18 seeking the credit;

19 “(II) have already been credited  
20 under this section to another entity;  
21 or

22 “(III) do not result from actions  
23 not intended to achieve electricity sav-  
24 ings;

1           “(B) procedures and standards for third  
2 party verification of reported electricity savings;  
3 and

4           “(C) such requirements for information,  
5 reports, and access to facilities as may be nec-  
6 essary to carry out this subsection.

7           “(5) COMBINED HEAT AND POWER.—

8           “(A) IN GENERAL.—Under regulations  
9 promulgated by the Secretary, the increment of  
10 electricity output of a new combined heat and  
11 power system that is attributable to the higher  
12 efficiency of the combined system (as compared  
13 to the efficiency of separate production of the  
14 electric and thermal outputs), shall be consid-  
15 ered electricity savings under this subsection.

16           “(B) EXISTING SYSTEMS.—In addition to  
17 subparagraph (A), the regulations shall apply to  
18 the increment of electricity output of an exist-  
19 ing combined heat and power system that is at-  
20 tributable to permanent efficiency improve-  
21 ments or capacity additions.

22           “(6) INCREMENTAL NUCLEAR AND INCRE-  
23 MENTAL FOSSIL FUEL PRODUCTION.—

24           “(A) IN GENERAL.—Subject to subpara-  
25 graph (B), under regulations promulgated by

1           the Secretary, the increment of electricity out-  
 2           put attributable to incremental nuclear produc-  
 3           tion and incremental fossil fuel production shall  
 4           be considered electricity savings under this sub-  
 5           section.

6                   “(B) LIMITATION.—The increment of elec-  
 7           tricity output described in subparagraph (A)  
 8           shall meet not more than 10 percent of the  
 9           total obligation of an electric utility under sub-  
 10          section (b).

11          “(j) BIOMASS HARVESTING AND SUSTAINABILITY.—  
 12   The provisions of this section relating to biomass shall be  
 13   administered in accordance with section 203(e) of the En-  
 14   ergy Policy Act of 2005 (42 U.S.C. 15852(e)).

15          “(k) LOANS FOR PROJECTS TO COMPLY WITH FED-  
 16   ERAL CLEAN ENERGY STANDARD.—

17                   “(1) PURPOSES.—The purposes of this sub-  
 18          section are—

19                           “(A) to reduce the cost incurred by electric  
 20          utilities in complying with the requirements of  
 21          this section; and

22                           “(B) to minimize the impact of the re-  
 23          quirements on electricity rates for consumers.

24                   “(2) LOANS.—The Secretary shall make loans  
 25          available to electric utilities to carry out qualified

1 projects approved by the Secretary to comply with  
 2 the requirements of this section.

3 “(3) QUALIFIED PROJECTS.—

4 “(A) IN GENERAL.—A loan may be made  
 5 under this subsection for a project—

6 “(i) to construct a clean energy gen-  
 7 eration facility;

8 “(ii) to install an energy efficiency or  
 9 electricity demand reduction technology; or

10 “(iii) to carry out any other project  
 11 approved by the Secretary that the Sec-  
 12 retary determines is consistent with the  
 13 purposes of this subsection.

14 “(B) DISAPPROVAL.—The Secretary may  
 15 disapprove an application for a loan for a  
 16 project under this subsection if the Secretary  
 17 determines that—

18 “(i) the revenues generated under the  
 19 project are unlikely to be sufficient to  
 20 cover the repayment obligations of the pro-  
 21 posed loan; or

22 “(ii) the project is not otherwise con-  
 23 sistent with the purposes of this sub-  
 24 section.

1           “(4) TERMS.—A loan made by the Secretary to  
2           an electric utility under this subsection shall—

3                   “(A) be for a term of not to exceed 30  
4           years; and

5                   “(B) bear an annual interest rate that is  
6           50 basis points more than the Federal funds  
7           rate established by the Board of Governors of  
8           the Federal Reserve System.

9           “(5) PRIORITY.—Notwithstanding any other  
10          provision of law, the debt to the Federal Government  
11          under a loan made to an electric utility under this  
12          subsection shall have priority in any case in which  
13          the electric utility files for bankruptcy protection  
14          under title 11, United States Code.

15          “(6) AUTHORIZATION OF APPROPRIATIONS.—  
16          There are authorized to be appropriated such sums  
17          as are necessary to carry out this subsection.

18          “(l) RECONSIDERATION.—

19               “(1) REVIEW.—

20                   “(A) IN GENERAL.—Not later than Janu-  
21           ary 15, 2017, and every 5 years thereafter, the  
22           Secretary shall review and make recommenda-  
23           tions to Congress on the program established  
24           under this section.



1                   “(B) ANALYSIS.—The review shall analyze  
2                   whether—

3                   “(i) the program established under  
4                   this section has contributed to an economi-  
5                   cally harmful increase in electricity rates in  
6                   regions of the United States;

7                   “(ii) the program has resulted in net  
8                   economic benefits for the United States;  
9                   and

10                  “(iii) new technologies and clean en-  
11                  ergy sources will advance the purposes of  
12                  this section.

13                  “(2) RECOMMENDATIONS.—The Secretary shall  
14                  submit to Congress recommendations on whether—

15                  “(A) the percentage of energy efficiency  
16                  credits eligible to be submitted under subsection  
17                  (b)(1) should be increased or decreased;

18                  “(B) the percentage of clean energy elec-  
19                  tricity required under subsection (b)(1) should  
20                  be increased or decreased; and

21                  “(C) the definition of ‘clean energy’ should  
22                  be expanded to reflect advances in technology  
23                  or previously unavailable sources of clean or re-  
24                  newable energy.

1           “(3) REPORT.—Not later than January 15,  
 2           2017, the Secretary shall submit to Congress a re-  
 3           port that describes any recommendations of the Sec-  
 4           retary on changes to the program established under  
 5           this section.

6           “(m) REGULATIONS.—Not later than 1 year after the  
 7           date of enactment of this section, the Secretary shall pro-  
 8           mulgate regulations implementing this section.

9           “(n) TERMINATION OF AUTHORITY.—This section  
 10          and the authority provided by this section terminate on  
 11          December 31, 2050.”.

12          (b) TABLE OF CONTENTS AMENDMENT.—The table  
 13          of contents of the Public Utility Regulatory Policies Act  
 14          of 1978 (16 U.S.C. prec. 2601) is amended by adding at  
 15          the end of the items relating to title VI the following:

“Sec. 610. Federal clean energy standard.”.

