

111<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

**S.** \_\_\_\_\_

To amend the Public Utility Regulatory Policies Act of 1978 to establish a Federal renewable electricity standard, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

Mr. BINGAMAN (for himself, Mr. BROWNBACK, Mr. DORGAN, and Ms. COLLINS) introduced the following bill; which was read twice and referred to the Committee on \_\_\_\_\_

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**A BILL**

To amend the Public Utility Regulatory Policies Act of 1978 to establish a Federal renewable electricity standard, and for other purposes.

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

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Renewable Electricity  
5 Promotion Act of 2010”.

6 **SEC. 2. FEDERAL RENEWABLE ELECTRICITY STANDARD.**

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

1 **“SEC. 610. FEDERAL RENEWABLE ELECTRICITY STANDARD.**

2 “(a) DEFINITIONS.—In this section:

3 “(1) AFFILIATE.—The term ‘affiliate’ when  
4 used with respect to a person, means another person  
5 that directly or indirectly owns or controls, is owned  
6 or controlled by, or is under common ownership or  
7 control with, such person, as determined under regu-  
8 lations issued by the Secretary.

9 “(2) BASE QUANTITY OF ELECTRICITY.—

10 “(A) IN GENERAL.—The term ‘base quan-  
11 tity of electricity’ means the total quantity of  
12 electricity sold by an electric utility to electric  
13 consumers in a calendar year.

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

16 “(i) electricity generated by a hydro-  
17 electric facility (including a pumped stor-  
18 age facility but excluding qualified hydro-  
19 power) owned by an electric utility or sold  
20 under contract or rate order to an electric  
21 utility to meet the needs of the retail cus-  
22 tomers of the utility;

23 “(ii) the quantity of electricity gen-  
24 erated by a fossil-fuel facility that is equal  
25 to the proportion of greenhouse gases pro-

1                   duced by such a unit that are captured  
2                   and geologically sequestered; or

3                   “(iii)(I) electricity generated by a nu-  
4                   clear generating unit placed in service after  
5                   the date of enactment of this section; or

6                   “(II) additional energy generated by  
7                   an existing nuclear facility as a result of  
8                   efficiency improvements or capacity addi-  
9                   tions made on or after the date of enact-  
10                  ment of this section.

11                 “(3) BIOMASS.—The term ‘biomass’ has the  
12                 meaning given the term in section 203(b) of the En-  
13                 ergy Policy Act of 2005 (42 U.S.C. 15852(b)).

14                 “(4) DISTRIBUTED GENERATION FACILITY.—  
15                 The term ‘distributed generation facility’ means a  
16                 facility at or near a customer site that provides elec-  
17                 tric energy to 1 or more customers for purposes  
18                 other than resale other than to a utility through a  
19                 net metering arrangement.

20                 “(5) GEOTHERMAL ENERGY.—The term ‘geo-  
21                 thermal energy’ means energy derived from a geo-  
22                 thermal deposit (within the meaning of section  
23                 613(e)(2) of the Internal Revenue Code of 1986).

24                 “(6) INCREMENTAL COST OF COMPLIANCE.—

1                   “(A) IN GENERAL.—The term ‘incre-  
2                   mental cost of compliance’ means—

3                   “(i) the costs attributable to all retail  
4                   sales of electricity incurred in a year by an  
5                   electric utility to—

6                   “(I) generate renewable energy  
7                   eligible for Federal renewable energy  
8                   credits;

9                   “(II) acquire Federal renewable  
10                  energy credits; or

11                  “(III) make alternative compli-  
12                  ance payments in order to comply  
13                  with the requirements of subsection  
14                  (b); less

15                  “(ii)(I) the costs the electric utility  
16                  would have incurred to serve all of the re-  
17                  tail customers of that electric utility in  
18                  that year to generate or acquire additional  
19                  electricity not eligible for renewable energy  
20                  credits if the requirements of subsection  
21                  (b) did not apply to the electric utility; and

22                  “(II) the costs of compliance with any  
23                  comparable State renewable requirement.

24                  “(B) COST OF ELECTRICITY.—In calcu-  
25                  lating the incremental cost of compliance of an

1 electric utility under this section, the Secretary  
2 shall take into account the reduction, if any, on  
3 the cost of electricity generated with fossil fuels  
4 associated with increased reliance on renewable  
5 electric energy generation.

6 “(7) INCREMENTAL GEOTHERMAL PRODUC-  
7 TION.—

8 “(A) IN GENERAL.—The term ‘incremental  
9 geothermal production’ means, for any year, the  
10 excess of—

11 “(i) the total kilowatt hours of elec-  
12 tricity produced from a facility (including a  
13 distributed generation facility) using geo-  
14 thermal energy; over

15 “(ii) the average number of kilowatt  
16 hours produced annually at the facility for  
17 5 of the previous 7 calendar years before  
18 the date of enactment of this section after  
19 eliminating the highest and the lowest kilo-  
20 watt hour production years in that 7-year  
21 period.

22 “(B) SPECIAL RULE.—A facility described  
23 in subparagraph (A) that was placed in service  
24 at least 7 years before the date of enactment of  
25 this section shall, commencing with the year in

1           which that date of enactment occurs, reduce the  
2           amount calculated under subparagraph (A)(ii)  
3           each year, on a cumulative basis, by the average  
4           percentage decrease in the annual kilowatt hour  
5           production for the 7-year period described in  
6           subparagraph (A)(ii) with such cumulative sum,  
7           but not to exceed 30 percent.

8           “(8) INCREMENTAL HYDROPOWER.—

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

13                   “(B) EXCLUSION.—The term ‘incremental  
14           hydropower’ does not include additional energy  
15           generated as a result of operational changes not  
16           directly associated with efficiency improvements  
17           or capacity additions.

18                   “(C) MEASUREMENT AND CERTIFI-  
19           CATION.—Efficiency improvements and capacity  
20           additions referred to in subparagraph (A) shall  
21           be—

22                           “(i) measured on the basis of the  
23                           same water flow information used to deter-  
24                           mine a historic average annual generation  
25                           baseline for the hydroelectric facility; and

1                   “(ii) certified by the Secretary or the  
2                   Federal Energy Regulatory Commission.

3                   “(9) INDIAN LAND.—The term ‘Indian land’  
4                   has the meaning given the term in section 2601 of  
5                   the Energy Policy Act of 1992 (25 U.S.C. 3501).

6                   “(10) QUALIFIED HYDROPOWER.—

7                   “(A) IN GENERAL.—The term ‘qualified  
8                   hydropower’ means—

9                   “(i) incremental hydropower;

10                   “(ii) additions of capacity made on or  
11                   after January 1, 2001, or the effective  
12                   commencement date of an existing applica-  
13                   ble State renewable electricity standard  
14                   program at an existing nonhydroelectric  
15                   dam, if—

16                   “(I) the hydroelectric project in-  
17                   stalled on the nonhydroelectric dam—

18                   “(aa) is licensed by the Fed-  
19                   eral Energy Regulatory Commis-  
20                   sion, or is exempt from licensing,  
21                   and is in compliance with the  
22                   terms and conditions of the li-  
23                   cense or exemption; and

24                   “(bb) meets all other appli-  
25                   cable environmental, licensing,

1 and regulatory requirements, in-  
2 cluding applicable fish passage  
3 requirements;  
4 “(II) the nonhydroelectric dam—  
5 “(aa) was placed in service  
6 before the date of enactment of  
7 this section;  
8 “(bb) was operated for flood  
9 control, navigation, or water sup-  
10 ply purposes; and  
11 “(cc) did not produce hydro-  
12 electric power as of the date of  
13 enactment of this section; and  
14 “(III) the hydroelectric project is  
15 operated so that the water surface ele-  
16 vation at any given location and time  
17 that would have occurred in the ab-  
18 sence of the hydroelectric project is  
19 maintained, subject to any license re-  
20 quirements imposed under applicable  
21 law that change the water surface ele-  
22 vation for the purpose of improving  
23 the environmental quality of the af-  
24 fected waterway, as certified by the



1 Federal Energy Regulatory Commis-  
2 sion; and

3 “(iii) in the case of the State of Alas-  
4 ka—

5 “(I) energy generated by a small  
6 hydroelectric facility that produces  
7 less than 50 megawatts;

8 “(II) energy from pumped stor-  
9 age; and

10 “(III) energy from a lake tap.

11 “(B) STANDARDS.—Nothing in this para-  
12 graph or the application of this paragraph shall  
13 affect the standards under which the Federal  
14 Energy Regulatory Commission issues licenses  
15 for and regulates hydropower projects under  
16 part I of the Federal Power Act (16 U.S.C.  
17 791a et seq.).

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

1           “(A) a certification that the facility is in  
2 compliance with all applicable Federal and  
3 State environmental permits;

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

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

20           “(12) RENEWABLE ENERGY.—The term ‘renew-  
21 able energy’ means electric energy generated at a fa-  
22 cility (including a distributed generation facility)  
23 from—

24           “(A) solar, wind, or geothermal energy or  
25 ocean energy;

1 “(B) biomass;

2 “(C) landfill gas;

3 “(D) qualified hydropower;

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

8 “(F) incremental geothermal production;

9 “(G) coal-mined methane;

10 “(H) qualified waste-to-energy; or

11 “(I) another renewable energy source  
12 based on innovative technology, as determined  
13 by the Secretary through rulemaking.

14 “(b) RENEWABLE ENERGY AND ENERGY EFFI-  
15 CIENCY REQUIREMENT.—

16 “(1) REQUIREMENT.—

17 “(A) IN GENERAL.—Subject to subpara-  
18 graph (B), each electric utility that sells elec-  
19 tricity to electric consumers for a purpose other  
20 than resale shall obtain a percentage of the  
21 base quantity of electricity the electric utility  
22 sells to electric consumers in any calendar year  
23 from renewable energy or energy efficiency.

24 “(B) PERCENTAGE.—Except as provided  
25 in section 611, the percentage obtained in a cal-

1           endar year under subparagraph (A) shall not be  
 2           less than the amount specified in the following  
 3           table:

<b>“Calendar year:</b> .....	<b>Minimum annual percentage:</b>
2012 through 2013 .....	3.0
2014 through 2016 .....	6.0
2017 through 2018 .....	9.0
2019 through 2020 .....	12.0
2021 through 2039 .....	15.0

4           “(2) MEANS OF COMPLIANCE.—An electric util-  
 5           ity shall meet the requirements of paragraph (1)  
 6           by—

7                   “(A) submitting to the Secretary renewable  
 8                   energy credits issued under subsection (c);

9                   “(B) submitting Federal energy efficiency  
 10                  credits issued under subsection (i), except that  
 11                  those credits may not be used to meet more  
 12                  than 26.67 percent of the requirements under  
 13                  paragraph (1) in any calendar year;

14                  “(C) making alternative compliance pay-  
 15                  ments to the Secretary at the rate of 2.1 cents  
 16                  per kilowatt hour (as adjusted for inflation  
 17                  under subsection (g)) if the electric utility does  
 18                  not elect to petition the Secretary to waive the  
 19                  requirements under subsection (d)(3)(C); or

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

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

6           “(c) FEDERAL RENEWABLE ENERGY AND ENERGY  
7           EFFICIENCY CREDIT TRADING PROGRAMS.—

8           “(1) IN GENERAL.—Not later than January 1,  
9           2012, the Secretary shall establish a Federal renew-  
10          able energy credit trading program, and a Federal  
11          energy efficiency credit trading program, under  
12          which electric utilities shall submit to the Secretary  
13          Federal renewable energy credits and Federal energy  
14          efficiency credits to certify the compliance of the  
15          electric utilities with subsection (b)(1).

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

18                 “(A) issue renewable energy credits to gen-  
19                 erators of electric energy from renewable en-  
20                 ergy, regardless of whether the energy is trans-  
21                 mitted over the national interstate transmission  
22                 system;

23                 “(B) to the extent that renewable sources  
24                 of electricity are used in combination with other  
25                 sources of energy, issue credits only to the ex-

1           tent that the electricity generated is from re-  
2           newable resources;

3           “(C) issue renewable energy credits to elec-  
4           tric utilities associated with State renewable  
5           electricity standard compliance mechanisms  
6           pursuant to subsection (h);

7           “(D) issue energy efficiency credits pursu-  
8           ant to subsection (i);

9           “(E) subject to subparagraph (F), ensure  
10          that a kilowatt hour, including the associated  
11          renewable energy credit or energy efficiency  
12          credit, shall be used only once for purposes of  
13          compliance with this Act;

14          “(F) allow double credits for generation  
15          from facilities on Indian land, and triple credits  
16          for generation from small renewable distributed  
17          generators (meaning those no larger than 1  
18          megawatt), except that no distributed renewable  
19          generation facilities on Indian land shall receive  
20          a greater number of credits than triple credits;

21          “(G) allow triple credits for generation of  
22          energy from algae;

23          “(H) ensure that, with respect to a pur-  
24          chaser that, as of the date of enactment of this  
25          section, has a purchase agreement from a re-



1 credits are awarded for the same unit out-  
2 put.

3 “(3) DURATION.—A credit described in sub-  
4 paragraph (A), (B), (C), or (D) of paragraph (2)  
5 may only be used for compliance with this section  
6 during the 3-year period beginning on the date of  
7 issuance of the credit.

8 “(4) TRANSFERS.—An electric utility that holds  
9 credits in excess of the quantity of credits needed to  
10 comply with subsection (b) may transfer the credits  
11 to another electric utility in the same utility holding  
12 company system.

13 “(5) DELEGATION OF MARKET FUNCTION.—

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

16 “(i) an appropriate market-making  
17 entity the administration of a national re-  
18 newable energy credit market and a na-  
19 tional energy efficiency credit market for  
20 purposes of creating a transparent national  
21 market for the sale or trade of renewable  
22 energy credits and energy efficiency cred-  
23 its; and

24 “(ii) regional entities the tracking of  
25 dispatch of renewable generation.



1           “(B) ADMINISTRATION.—Any delegation  
2           under subparagraph (A) shall ensure that the  
3           tracking and reporting of information con-  
4           cerning the dispatch of renewable generation is  
5           transparent, verifiable, and independent of any  
6           generation or load interests with obligations  
7           under this section. .

8           “(d) ENFORCEMENT.—

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

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

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

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

21          “(3) MITIGATION OR WAIVER.—

22               “(A) PENALTY.—

23                       “(i) IN GENERAL.—The Secretary  
24                       may mitigate or waive a civil penalty under  
25                       this subsection if the electric utility is un-

1           able to comply with subsection (b) due to  
2           a reason outside of the reasonable control  
3           of the electric utility.

4           “(ii) AMOUNT.—The Secretary shall  
5           reduce the amount of any penalty deter-  
6           mined under paragraph (2) by the amount  
7           paid by the electric utility to a State for  
8           failure to comply with the requirement of  
9           a State renewable energy program if the  
10          State requirement is greater than the ap-  
11          plicable requirement of subsection (b).

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

21          “(C) RATEPAYER PROTECTION.—Effective  
22          beginning June 1, 2010, and not later than  
23          June 1 of each year thereafter, an electric util-  
24          ity may petition the Secretary to waive, for the  
25          following compliance year, all or part of the re-

1            requirements of subsection (b) in order to limit  
2            the rate impact of the incremental cost of com-  
3            pliance of the electric utility to not more than  
4            4 percent per retail customer in any year.

5            “(D) VARIANCE.—A State public utility  
6            commission or electric utility may submit an  
7            application to the Secretary that requests a  
8            variance from the requirements of subsection  
9            (b) for 1 or more calendar years (including sus-  
10          pension or reduction of the requirements) on  
11          the basis of transmission constraints preventing  
12          delivery of service.

13          “(4) PROCEDURE FOR ASSESSING PENALTY.—  
14          The Secretary shall assess a civil penalty under this  
15          subsection in accordance with the procedures pre-  
16          scribed by section 333(d) of the Energy Policy and  
17          Conservation Act (42 U.S.C. 6303(d)).

18          “(e) ALTERNATIVE COMPLIANCE PAYMENTS.—

19          “(1) IN GENERAL.—An electric utility may sat-  
20          isfy the requirements of subsection (b), in whole or  
21          in part, by submitting in accordance with this sub-  
22          section, in lieu of each Federal renewable electricity  
23          credit or megawatt hour of demonstrated total an-  
24          nual electricity savings that would otherwise be due,  
25          a payment equal to the amount required under sub-

1 section (b) in accordance with such regulations as  
2 the Secretary may promulgate.

3 “(2) PAYMENT TO STATE FUNDS.—An amount  
4 equal to 75 percent of the payments made under  
5 this subsection shall be made directly to the State in  
6 which the electric utility is located, if the payments  
7 are deposited directly into a fund within the treasury  
8 of the State for use in accordance with paragraph  
9 (3).

10 “(3) USE OF GRANTS.—The Governor of any  
11 State may expend amounts in a State renewable en-  
12 ergy escrow account solely for purposes of—

13 “(A) increasing the quantity of electric en-  
14 ergy produced from a renewable energy source  
15 in the State, including nuclear and advanced  
16 coal technologies for carbon capture and seques-  
17 tration;

18 “(B) promoting the deployment and use of  
19 electric drive vehicles in the State, including the  
20 development of electric drive vehicles and bat-  
21 teries; and

22 “(C) offsetting the costs of carrying out  
23 this section paid by electric consumers in the  
24 State through—

1                   “(i) direct grants to electric con-  
2                   sumers; or

3                   “(ii) energy efficiency investments.

4                   “(4) INFORMATION AND REPORTS.—As a condi-  
5                   tion of providing payments to a State under this  
6                   subsection, the Secretary may require the Governor  
7                   to keep such accounts or records, and furnish such  
8                   information and reports, as the Secretary determines  
9                   are necessary and appropriate for determining com-  
10                  pliance with this subsection.

11                  “(f) EXEMPTIONS.—During any calendar year, this  
12                  section shall not apply to an electric utility—

13                   “(1) that sold less than 4,000,000 megawatt-  
14                  hours of electric energy to electric consumers during  
15                  the preceding calendar year, except that sales to an  
16                  affiliate, lessee, or tenant of the electric utility shall  
17                  not be treated as sales to electric consumers under  
18                  this paragraph; or

19                   “(2) in Hawaii.

20                  “(g) INFLATION ADJUSTMENT.—Not later than De-  
21                  cember 31 of each year beginning in 2013, the Secretary  
22                  shall adjust for inflation the rate of the alternative compli-  
23                  ance payment under subsection (b)(2)(C).

24                  “(h) STATE PROGRAMS.—

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

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

11          “(3) COORDINATION.—The Secretary, in con-  
12          sultation with States having such renewable energy  
13          and energy efficiency programs, shall, to the max-  
14          imum extent practicable, facilitate coordination be-  
15          tween the Federal program and State programs.

16          “(4) REGULATIONS.—

17                 “(A) IN GENERAL.—The Secretary, in con-  
18                 sultation with States, shall promulgate regula-  
19                 tions to ensure that an electric utility that is  
20                 subject to the requirements of this section and  
21                 is subject to a State renewable energy standard  
22                 receives renewable energy credits if—

23                         “(i) the electric utility complies with  
24                         the State standard by generating or pur-  
25                         chasing renewable electric energy or renew-

1           able energy certificates or credits rep-  
2           resenting renewable electric energy; or

3                   “(ii) the State imposes or allows other  
4           mechanisms for achieving the State stand-  
5           ard, including the payment of taxes, fees,  
6           surcharges, or other financial obligations.

7                   “(B) AMOUNT OF CREDITS.—The amount  
8           of credits received by an electric utility under  
9           this subsection shall equal—

10                   “(i) in the case of subparagraph  
11           (A)(i), the quantity of renewable energy re-  
12           sulting from the generation or purchase by  
13           the electric utility of renewable energy; and

14                   “(ii) in the case of subparagraph  
15           (A)(ii), the pro rata share of the electric  
16           utility, based on the contributions to the  
17           mechanism made by the electric utility or  
18           customers of the electric utility, in the  
19           State, of the quantity of renewable energy  
20           resulting from those mechanisms.

21                   “(C) PROHIBITION ON DOUBLE COUNT-  
22           ING.—The regulations promulgated under this  
23           paragraph shall ensure that a kilowatt-hour as-  
24           sociated with a renewable energy credit issued  
25           pursuant to this subsection shall not be used

1 for compliance with this section more than  
2 once.

3 “(i) ENERGY EFFICIENCY CREDITS.—

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

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

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

17 “(ii) in the case of new equipment (re-  
18 gardless of whether the new equipment re-  
19 places existing equipment at the end of the  
20 useful life of the existing equipment), con-  
21 sumption by similar equipment of average  
22 efficiency available for purchase at the  
23 time that new equipment is acquired.

24 “(B) ELECTRICITY SAVINGS.—The term  
25 ‘electricity savings’ means—



1                   “(i) customer facility savings of elec-  
2                   tricity consumption adjusted to reflect any  
3                   associated increase in fuel consumption at  
4                   the facility;

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

12                  “(iii) the output of new combined heat  
13                  and power systems, to the extent provided  
14                  under paragraph (5).

15                  “(C) QUALIFIED ELECTRICITY SAVINGS.—  
16                  The term ‘qualified electricity savings’ means  
17                  electricity saving that meet the measurement  
18                  and verification requirements of paragraph (4).

19                  “(2) PETITION.—On petition by the Governor  
20                  of a State or, in the case of the power service area  
21                  of the Tennessee Valley Authority, the Board of Di-  
22                  rectors of the Tennessee Valley Authority, the Sec-  
23                  retary shall allow up to 26.67 percent of the require-  
24                  ments of an electric utility under subsection (b)(1)  
25                  associated with the sales of electricity of the utility

1 in the State to be met by submitting Federal energy  
2 efficiency credits issued pursuant to this subsection.

3 “(3) ISSUANCE OF ENERGY EFFICIENCY CRED-  
4 ITS.—

5 “(A) IN GENERAL.—The Secretary shall  
6 issue energy efficiency credits for qualified elec-  
7 tricity savings achieved in States described in  
8 paragraph (2) in accordance with this sub-  
9 section.

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

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

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

21 “(I) the measures used to achieve  
22 the qualified electricity savings were  
23 installed or placed in operation by the  
24 entity seeking the credit; and

1                   “(II) an electric utility eligible to  
2                   receive efficiency did not pay a sub-  
3                   stantial portion of the cost of achiev-  
4                   ing the qualified electricity savings  
5                   (unless the utility has waived any en-  
6                   titlement to the credit).

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

12                  “(4) MEASUREMENT AND VERIFICATION OF  
13                  ELECTRICITY SAVINGS.—Not later than January  
14                  2010, the Secretary shall promulgate regulations re-  
15                  garding the measurement and verification of elec-  
16                  tricity savings under this subsection, including regu-  
17                  lations covering—

18                  “(A) procedures and standards for defining  
19                  and measuring electricity savings that will be  
20                  eligible to receive credits under paragraph (3),  
21                  which shall—

22                  “(i) specify the types of energy effi-  
23                  ciency and energy conservation that will be  
24                  eligible for the credits;

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

7                   “(iii) account for the useful life of  
8                   electricity savings measures;

9                   “(iv) include specified electricity sav-  
10                  ings values for specific, commonly-used ef-  
11                  ficiency measures; and

12                  “(v) exclude electricity savings that—

13                         “(I) are not properly attributable  
14                         to measures carried out by the entity  
15                         seeking the credit;

16                         “(II) have already been credited  
17                         under this section to another entity;  
18                         or

19                         “(III) do not result from actions  
20                         not intended to achieve electricity sav-  
21                         ings;

22                         “(B) procedures and standards for third-  
23                         party verification of reported electricity savings;  
24                         and

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

4           “(5) COMBINED HEAT AND POWER.—Under  
5           regulations promulgated by the Secretary, the incre-  
6           ment of electricity output of a new combined heat  
7           and power system that is attributable to the higher  
8           efficiency of the combined system (as compared to  
9           the efficiency of separate production of the electric  
10          and thermal outputs), shall be considered electricity  
11          savings under this subsection.

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

16          “(k) LOANS FOR PROJECTS TO COMPLY WITH FED-  
17          ERAL RENEWABLE ELECTRICITY STANDARD.—

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

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

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

1           “(2) LOANS.—The Secretary shall make loans  
2           available to electric utilities to carry out qualified  
3           projects approved by the Secretary to comply with  
4           the requirements of this section.

5           “(3) QUALIFIED PROJECTS.—

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

8                   “(i) to construct a renewable energy  
9                   generation facility;

10                   “(ii) to install an energy efficiency or  
11                   electricity demand reduction technology; or

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

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

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

1                   “(ii) the project is not otherwise con-  
2                   sistent with the purposes of this sub-  
3                   section.

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

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

8                   “(B) bear an annual interest rate that is  
9                   50 basis points more than the Federal funds  
10                  rate established by the Board of Governors of  
11                  the Federal Reserve System.

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

18                  “(6) AUTHORIZATION OF APPROPRIATIONS.—  
19                  There are authorized to be appropriated such sums  
20                  as are necessary to carry out this subsection.

21                  “(l) RECONSIDERATION.—

22                  “(1) REVIEW.—

23                  “(A) IN GENERAL.—Not later than Janu-  
24                  ary 15, 2017, and every 5 years thereafter, the  
25                  Secretary shall review and make recommenda-

1           tions to Congress on the program established  
2           under this section.

3                   “(B) ANALYSIS.—The review shall analyze  
4           whether—

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

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

12                           “(iii) new technologies and clean, re-  
13                           newable energy sources will advance the  
14                           purposes of this section.

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

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

20                           “(B) the percentage of renewable elec-  
21                           tricity required under subsection (b)(1) should  
22                           be increased or decreased; and

23                           “(C) the definition of ‘renewable energy’  
24                          should be expanded to reflect advances in tech-



1 nology or previously unavailable sources of  
2 clean or renewable energy.

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

8 “(m) REGULATIONS.—

9 “(1) IN GENERAL.—Not later than 1 year after  
10 the date of enactment of this section, the Secretary  
11 shall promulgate interim final rules establishing reg-  
12 ulations implementing this section.

13 “(2) INFORMATION COLLECTION.—Chapter 35  
14 of title 44, United States Code, shall not apply to  
15 any information collection requirement necessary for  
16 the implementation of the program established by  
17 this section.

18 “(n) TERMINATION OF AUTHORITY.—This section  
19 and the authority provided by this section terminate on  
20 December 31, 2039.”.

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

“Sec. 610. Federal renewable electricity standard.”.

1 **SEC. 3. FEDERAL PURCHASE REQUIREMENT AMENDMENTS.**

2 Section 203 of the Energy Policy Act of 2005 (42  
3 U.S.C. 15852) is amended—

4 (1) by striking subsection (b) and inserting the  
5 following:

6 “(b) DEFINITIONS.—In this section:

7 “(1) BIOMASS.—The term ‘biomass’ means the  
8 following types of nonhazardous organic materials:

9 “(A) Residues and byproducts from milled  
10 logs.

11 “(B) Wood, paper products that are not  
12 commonly recyclable, and vegetation (including  
13 trees and trimmings, yard waste, pallets, rail-  
14 road ties, crates, and solid-wood manufacturing  
15 and construction debris), if diverted from or  
16 separated from other waste out of a municipal  
17 waste stream.

18 “(C) Hazard trees, trimmings, and brush  
19 that are necessary to remove in order to main-  
20 tain a utility right-of-way or a public road (not  
21 including any unpaved road within Federal  
22 land).

23 “(D) Trees, trimmings, and brush har-  
24 vested from the immediate vicinity of any build-  
25 ing, campground, or other structure in wildfire-

1 prone areas to reduce the risk to the structure  
2 or campground or to human life from wildfires.

3 “(E) Invasive species (as defined in Execu-  
4 tive Order 13112 (42 U.S.C. 4321 note; relat-  
5 ing to invasive species)) removed to control or  
6 eradicate the invasive species.

7 “(F) Animal waste and animal byproducts  
8 (including biogas and any solid produced by  
9 micro-organisms).

10 “(G) Food waste.

11 “(H) Algae.

12 “(I) Slash, brush, trees, and other vegeta-  
13 tion that is harvested from non-Federal land or  
14 Indian land—

15 “(i) that is, at the time of harvest—

16 “(I) naturally regenerated forest  
17 land;

18 “(II) forest land that was planted  
19 for the purpose of restoring land to a  
20 naturally regenerated forest; or

21 “(III) if harvested in quantities  
22 and through practices that maintain  
23 or contribute toward the restoration  
24 of the species, ecological systems, and  
25 ecological communities for which the

1 conservation forest land was identi-  
2 fied, conservation forest land; or

3 “(ii) that is—

4 “(I) at the time of harvest, plant-  
5 ed forest land; and

6 “(II) on the date of enactment of  
7 this section, cropland (including fallow  
8 land), pastureland, or planted forest  
9 land.

10 “(J) Crops, crop byproducts, and crop resi-  
11 dues from non-Federal land or Indian land that  
12 is—

13 “(i) at the time of harvest, not forest  
14 land; and

15 “(ii) on the date of enactment of this  
16 section—

17 “(I) cropland (including fallow  
18 land and not including planted forest  
19 land); or

20 “(II) pastureland.

21 “(K) If harvested from Federal land in ac-  
22 cordance with applicable law and land manage-  
23 ment plans and in quantities and through prac-  
24 tices that maintain or contribute toward the  
25 restoration of ecological sustainability—

1 “(i) slash; and

2 “(ii) brush and trees that are byprod-  
3 ucts of ecological restoration, disease or in-  
4 sect infestation control, or hazardous fuels  
5 reduction treatments and—

6 “(I) are from stands that—

7 “(aa) were killed by an in-  
8 sect or disease epidemic or a nat-  
9 ural disaster; and

10 “(bb) do not meet the utili-  
11 zation standards for sawtimber;  
12 or

13 “(II) do not exceed the minimum  
14 size standards for sawtimber.

15 “(2) CONSERVATION FOREST LAND.—

16 “(A) IN GENERAL.—The term ‘conserva-  
17 tion forest land’ means forest land that con-  
18 tains a species, or includes all or part of an eco-  
19 logical system or community, that is at risk of  
20 extinction or elimination within a State or glob-  
21 ally.

22 “(B) IDENTIFICATION.—Conservation for-  
23 est land shall be identified based on the best  
24 available science and data by any of—

1                   “(i) the State in which the land is lo-  
2                   cated, unless the land is under the jurisdic-  
3                   tion of an Indian tribe;

4                   “(ii) an Indian tribe with jurisdiction  
5                   over the land; or

6                   “(iii) in consultation with the State in  
7                   which the land is located or the Indian  
8                   tribe with jurisdiction over the land—

9                                 “(I) the Secretary of Agriculture;

10                                or

11                               “(II) the Secretary of the Inte-  
12                               rior.

13                   “(C) EXCEPTIONS.—A tract of conserva-  
14                   tion forest land may not be removed from con-  
15                   servation forest land status under this section  
16                   as a result of land management practices on the  
17                   tract that—

18                               “(i) occurred on or after the date of  
19                               enactment of this subparagraph; and

20                               “(ii) contributed toward the elimi-  
21                               nation of the species, or all or part of an  
22                               ecological system or ecological community,  
23                               for which the land was identified as con-  
24                               servation forest land.

25                   “(3) FEDERAL LAND.—

1                   “(A) IN GENERAL.—The term ‘Federal  
2 land’ means—

3                   “(i) National Forest System land; and

4                   “(ii) public lands (as defined in sec-  
5 tion 103 of the Federal Land Policy and  
6 Management Act of 1976 (43 U.S.C.  
7 1702)).

8                   “(B) EXCLUSIONS.—

9                   “(i) IN GENERAL.—The term ‘Federal  
10 land’ does not include—

11                   “(I) any area designated by Con-  
12 gress to be administered for conserva-  
13 tion purposes; or

14                   “(II) a National Monument pro-  
15 claimed by the President.

16                   “(ii) OLD GROWTH OR LATE SUCCES-  
17 SIONAL FOREST STANDS.—The term ‘Fed-  
18 eral land’ does not include an old growth  
19 or late successional forest stand unless bio-  
20 mass from the stand does not exceed the  
21 minimum size standards for sawtimber and  
22 is a byproduct of an ecological restoration  
23 treatment that fully maintains, or contrib-  
24 utes toward the restoration of, the struc-  
25 ture and composition of an old growth for-

1 est stand in accordance with the old  
2 growth conditions characteristic of the for-  
3 est type and retains the large trees con-  
4 tributing to old growth structure.

5 “(4) INDIAN LAND.—The term ‘Indian land’  
6 has the meaning given the term ‘Indian country’ in  
7 section 1151 of title 18, United States Code.

8 “(5) INDIAN TRIBE.—The term ‘Indian tribe’  
9 has the meaning given the term in section 4 of the  
10 Indian Self-Determination and Education Assistance  
11 Act (25 U.S.C. 450b).

12 “(6) NON-FEDERAL LAND.—The term ‘non-  
13 Federal land’ means land that is not owned by the  
14 Federal Government.

15 “(7) RENEWABLE ENERGY.—The term ‘renew-  
16 able energy’ means energy generated from solar,  
17 wind, biomass, landfill gas, ocean (including tidal,  
18 wave, current, and thermal), geothermal, municipal  
19 solid waste, or new hydroelectric generation capacity  
20 achieved from increased efficiency or additions of  
21 new capacity at an existing hydroelectric project.

22 “(8) SECRETARY CONCERNED.—The term ‘Sec-  
23 retary concerned’ means—

24 “(A) the Secretary of Agriculture, with re-  
25 gard to—



1 “(i) National Forest System land; and

2 “(ii) except as provided by subpara-  
3 graph (B), non-Federal land; and

4 “(B) the Secretary of the Interior, with re-  
5 gard to—

6 “(i) public lands (as defined in section  
7 103 of the Federal Land Policy and Man-  
8 agement Act of 1976 (43 U.S.C. 1702));  
9 and

10 “(ii) Indian land.”; and

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

12 “(e) BIOMASS HARVESTING AND SUSTAINABILITY.—

13 “(1) IN GENERAL.—The Secretaries concerned  
14 shall administer the provisions covered by subsection  
15 (b)(1) relating to the harvesting of biomass from  
16 Federal land and forest land.

17 “(2) INTER-AGENCY BIOMASS SUSTAINABILITY  
18 STUDY.—

19 “(A) IN GENERAL.—The Secretary, in con-  
20 sultation with the Secretary of Agriculture, the  
21 Secretary of the Interior, and the Administrator  
22 of the Environmental Protection Agency, shall  
23 conduct a study that assesses the impacts of  
24 biomass harvesting for energy production on—

1                   “(i) landscape-level water quality, soil  
2                   productivity, wildlife habitat, and biodiver-  
3                   sity; and

4                   “(ii) conservation forest land.

5                   “(B) TIMING.—The Secretary shall—

6                   “(i) complete the study required  
7                   under this paragraph not later than 5  
8                   years after the date of enactment of this  
9                   subsection; and

10                  “(ii) update the study not later than  
11                  every 5 years thereafter.

12                  “(C) BASIS.—The Secretary shall base the  
13                  study on the best available data and science.

14                  “(D) RECOMMENDATIONS.—The Secretary  
15                  shall include in the study such recommenda-  
16                  tions as are appropriate to reduce the impacts  
17                  described in subparagraph (A).

18                  “(E) PUBLIC PARTICIPATION AND AVAIL-  
19                  ABILITY.—In carrying out this paragraph, the  
20                  Secretary shall—

21                  “(i) consult with States, Indian tribes,  
22                  and other interested stakeholders;

23                  “(ii) make available, and seek public  
24                  comment on, a draft version of the study  
25                  results; and

1                   “(iii) make the final study results  
2                   available to the public.”.