

AMENDMENT NO. \_\_\_\_\_ Calendar No. \_\_\_\_\_

Purpose: To provide a renewable portfolio standard.

**IN THE SENATE OF THE UNITED STATES—110th Cong., 1st Sess.**

**H. R. 6**

To reduce our Nation's dependency on foreign oil by investing in clean, renewable, and alternative energy resources, promoting new emerging energy technologies, developing greater efficiency, and creating a Strategic Energy Efficiency and Renewables Reserve to invest in alternative energy, and for other purposes.

Referred to the Committee on \_\_\_\_\_ and  
ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT intended to be proposed by Mr. BINGAMAN  
to the amendment (No. \_\_\_\_ ) proposed by Mr. REID

Viz:

1 At the end, add the following:

2 **TITLE VIII—RENEWABLE**

3 **PORTFOLIO STANDARD**

4 **SEC. 801. RENEWABLE PORTFOLIO STANDARD.**

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

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

2 “(a) DEFINITIONS.—In this section:

3 “(1) BASE AMOUNT OF ELECTRICITY.—The  
4 term ‘base amount of electricity’ means the total  
5 amount of electricity sold by an electric utility to  
6 electric consumers in a calendar year, excluding—

7 “(A) electricity generated by a hydro-  
8 electric facility (including a pumped storage fa-  
9 cility but excluding incremental hydropower);  
10 and

11 “(B) electricity generated through the in-  
12 cineration of municipal solid waste.

13 “(2) DISTRIBUTED GENERATION FACILITY.—  
14 The term ‘distributed generation facility’ means a  
15 facility at a customer site.

16 “(3) EXISTING RENEWABLE ENERGY.—The  
17 term ‘existing renewable energy’ means, except as  
18 provided in paragraph (7)(B), electric energy gen-  
19 erated at a facility (including a distributed genera-  
20 tion facility) placed in service prior to January 1,  
21 2001, from solar, wind, or geothermal energy, ocean  
22 energy, biomass (as defined in section 203(a) of the  
23 Energy Policy Act of 2005), or landfill gas.

24 “(4) GEOTHERMAL ENERGY.—The term ‘geo-  
25 thermal energy’ means energy derived from a geo-

1 thermal deposit (within the meaning of section  
2 613(e)(2) of the Internal Revenue Code of 1986).

3 “(5) INCREMENTAL GEOTHERMAL PRODUC-  
4 TION.—

5 “(A) IN GENERAL.—The term ‘incremental  
6 geothermal production’ means for any year the  
7 excess of—

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

12 “(ii) the average annual kilowatt  
13 hours produced at such facility for 5 of the  
14 previous 7 calendar years before the date  
15 of enactment of this section after elimi-  
16 nating the highest and the lowest kilowatt  
17 hour production years in such 7-year pe-  
18 riod.

19 “(B) SPECIAL RULE.—A facility described  
20 in subparagraph (A) that was placed in service  
21 at least 7 years before the date of enactment of  
22 this section shall, commencing with the year in  
23 which such date of enactment occurs, reduce  
24 the amount calculated under subparagraph  
25 (A)(ii) each year, on a cumulative basis, by the

1 average percentage decrease in the annual kilo-  
2 watt hour production for the 7-year period de-  
3 scribed in subparagraph (A)(ii) with such cu-  
4 mulative sum not to exceed 30 percent.

5 “(6) INCREMENTAL HYDROPOWER.—The term  
6 ‘incremental hydropower’ means additional energy  
7 generated as a result of efficiency improvements or  
8 capacity additions made on or after January 1,  
9 2001, or the effective date of an existing applicable  
10 State renewable portfolio standard program at a hy-  
11 droelectric facility that was placed in service before  
12 that date. The term does not include additional en-  
13 ergy generated as a result of operational changes not  
14 directly associated with efficiency improvements or  
15 capacity additions. Efficiency improvements and ca-  
16 pacity additions shall be measured on the basis of  
17 the same water flow information used to determine  
18 a historic average annual generation baseline for the  
19 hydroelectric facility and certified by the Secretary  
20 or the Federal Energy Regulatory Commission.

21 “(7) NEW RENEWABLE ENERGY.—The term  
22 ‘new renewable energy’ means—

23 “(A) electric energy generated at a facility  
24 (including a distributed generation facility)

1 placed in service on or after January 1, 2001,  
2 from—

3 “(i) solar, wind, or geothermal energy  
4 or ocean energy;

5 “(ii) biomass (as defined in section  
6 203(b) of the Energy Policy Act of 2005  
7 (42 U.S.C. 15852(b));

8 “(iii) landfill gas;

9 “(iv) incremental hydropower; or

10 “(v) in the case of Alaska, lake taps;

11 and

12 “(B) for electric energy generated at a fa-  
13 cility (including a distributed generation facil-  
14 ity) placed in service before January 1, 2001—

15 “(i) the additional energy above the  
16 average generation during the period be-  
17 ginning on January 1, 1998, and ending  
18 on January 1, 2001, at the facility from—

19 “(I) solar or wind energy or  
20 ocean energy;

21 “(II) biomass (as defined in sec-  
22 tion 203(b) of the Energy Policy Act  
23 of 2005 (42 U.S.C. 15852(b));

24 “(III) landfill gas; or

1                                   “(IV) incremental hydropower;

2                                   and

3                                   “(ii) incremental geothermal produc-

4                                   tion.

5                                   “(8) OCEAN ENERGY.—The term ‘ocean energy’

6                                   includes current, wave, tidal, and thermal energy.

7                                   “(b) RENEWABLE ENERGY AND ENERGY EFFI-

8                                   CIENCY REQUIREMENT.—

9                                   “(1) IN GENERAL.—Each electric utility that

10                                   sells electricity to electric consumers shall obtain a

11                                   percentage of the base amount of electricity it sells

12                                   to electric consumers in any calendar year from new

13                                   renewable energy, existing renewable energy, and en-

14                                   ergy efficiency. Except as provided in section 611,

15                                   the percentage obtained in a calendar year shall not

16                                   be less than the amount specified in the following

17                                   table:

<b>“Calendar year:</b>	<b>Minimum annual percentage:</b>
2010 through 2013 .....	3.75
2014 through 2017 .....	7.50
2018 through 2021 .....	11.25
2022 through 2032 .....	15.0

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

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

6                   “(B) submitting Federal energy efficiency  
7                   credits issued under subsection (j), except that  
8                   Federal energy efficiency credits may not be  
9                   used to meet more than 27 percent of the re-  
10                  quirements under paragraph (1) in any cal-  
11                  endar year;

12                  “(C) making alternative compliance pay-  
13                  ments to the Secretary at the rate of 2 cents  
14                  per kilowatt hour (as adjusted for inflation  
15                  under subsection (h)); or

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

18           “(3) PHASE-IN.—The Secretary shall prescribe,  
19           by regulation, a reasonable phase-in of the require-  
20           ments of paragraph (1) as the requirements apply to

1 an electric utility that becomes subject to this sec-  
2 tion after 2013.

3 “(4) SPECIAL RULE.—Nothing in this section  
4 authorizes or requires the Tennessee Valley Author-  
5 ity to make any capital expenditure on new gener-  
6 ating capacity, except to the extent that budget au-  
7 thority for the expenditure is provided in advance in  
8 an appropriations Act.

9 “(c) FEDERAL RENEWABLE ENERGY AND ENERGY  
10 EFFICIENCY CREDIT TRADING PROGRAMS.—

11 “(1) IN GENERAL.—Not later than July 1,  
12 2009, the Secretary shall establish a Federal renew-  
13 able energy credit trading program, and a Federal  
14 energy efficiency credit trading program, under  
15 which electric utilities shall submit to the Secretary  
16 Federal renewable energy credits and Federal energy  
17 efficiency credits to certify the compliance of the  
18 electric utilities with respect to obligations under  
19 subsection (b)(1).

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

22 “(A) issue tradeable renewable energy  
23 credits to generators of electric energy from  
24 new renewable energy;



1           “(B) issue nontradeable renewable energy  
2 credits to generators of electric energy from ex-  
3 isting renewable energy;

4           “(C) issue renewable energy credits to elec-  
5 tric utilities associated with State renewable  
6 portfolio standard compliance mechanisms pur-  
7 suant to subsection (i);

8           “(D) issue energy efficiency credits pursu-  
9 ant to subsection (j);

10           “(E) ensure that a kilowatt hour, including  
11 the associated renewable energy credit or en-  
12 ergy efficiency credit, shall be used only once  
13 for purposes of 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); and

19           “(G) ensure that, with respect to a pur-  
20 chaser that, as of the date of enactment of this  
21 section, has a purchase agreement from a re-  
22 newable energy facility placed in service before  
23 that date, the credit associated with the genera-  
24 tion of renewable energy under the contract is  
25 issued to the purchaser of the electric energy to

1           the extent that the contract does not already  
2           provide for the allocation of the Federal credit.

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          The Secretary may delegate to an appropriate mar-  
15          ket-making entity the administration of a national  
16          tradeable renewable energy credit market and a na-  
17          tional energy efficiency credit market for purposes of  
18          creating a transparent national market for the sale  
19          or trade of renewable energy credits and energy effi-  
20          ciency credits.

21          “(d) ENFORCEMENT.—

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

1           “(2) AMOUNT OF PENALTY.—The amount of  
2           the civil penalty shall be determined by multiplying  
3           the number of kilowatt-hours of electric energy sold  
4           to electric consumers in violation of subsection (b)  
5           by the greater of—

6                   “(A) the value of the alternative compli-  
7                   ance payment, as adjusted for inflation under  
8                   subsection (h); or

9                   “(B) 200 percent of the average market  
10                  value of renewable energy credits and energy ef-  
11                  ficiency credits during the year in which the  
12                  violation occurred.

13           “(3) MITIGATION OR WAIVER.—

14                   “(A) PENALTY.—

15                           “(i) IN GENERAL.—The Secretary  
16                           may mitigate or waive a civil penalty under  
17                           this subsection if the electric utility is un-  
18                           able to comply with subsection (b) for a  
19                           reason outside of the reasonable control of  
20                           the 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 renewable energy program if the  
2 State requirement is greater than the ap-  
3 plicable requirement of subsection (b).

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

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 of 1954 (42 U.S.C. 6303).

18 “(e) STATE RENEWABLE ENERGY ACCOUNT PRO-  
19 GRAM.—

20 “(1) IN GENERAL.—There is established in the  
21 Treasury a State renewable energy account program.

22 “(2) DEPOSITS.—All money collected by the  
23 Secretary from alternative compliance payments and  
24 the assessment of civil penalties under this section

1 shall be deposited into the renewable energy account  
2 established pursuant to this subsection.

3 “(3) USE.—Proceeds deposited in the State re-  
4 newable energy account shall be used by the Sec-  
5 retary, subject to appropriations, for a program to  
6 provide grants to the State agency responsible for  
7 developing State energy conservation plans under  
8 section 362 of the Energy Policy and Conservation  
9 Act (42 U.S.C. 6322) for the purposes of promoting  
10 renewable energy production, including programs  
11 that promote technologies that reduce the use of  
12 electricity at customer sites such as solar water  
13 heating.

14 “(4) ADMINISTRATION.—The Secretary may  
15 issue guidelines and criteria for grants awarded  
16 under this subsection. State energy offices receiving  
17 grants under this section shall maintain such  
18 records and evidence of compliance as the Secretary  
19 may require.

20 “(5) PREFERENCE.—In allocating funds under  
21 this program, the Secretary shall give preference—

22 “(A) to States in regions which have a dis-  
23 proportionately small share of economically sus-  
24 tainable renewable energy generation capacity;  
25 and

1                   “(B) to State programs to stimulate or en-  
2                   hance innovative renewable energy technologies.

3           “(f) RULES.—The Secretary shall issue rules imple-  
4           menting this section not later than 1 year after the date  
5           of enactment of this section.

6           “(g) EXEMPTIONS.—The requirements of this section  
7           shall not apply in any calendar year to an electric utility—

8                   “(1) that sold less than 4,000,000 megawatt-  
9                   hours of electric energy to electric consumers during  
10                  the preceding calendar year; or

11                  “(2) in Hawaii.

12           “(h) INFLATION ADJUSTMENT.—Not later than De-  
13           cember 31 of each year beginning in 2008, the Secretary  
14           shall adjust for inflation the rate of the alternative compli-  
15           ance payment under subsection (b)(2)(C).

16           “(i) STATE PROGRAMS.—

17                   “(1) IN GENERAL.—Nothing in this section di-  
18                   minishes any authority of a State or political sub-  
19                   division of a State to adopt or enforce any law or  
20                   regulation respecting renewable energy or energy ef-  
21                   ficiency, or the regulation of electric utilities, but,  
22                   except as provided in subsection (d)(3), no such law  
23                   or regulation shall relieve any person of any require-  
24                   ment otherwise applicable under this section. The  
25                   Secretary, in consultation with States having such

1 renewable energy and energy efficiency programs,  
2 shall, to the maximum extent practicable, facilitate  
3 coordination between the Federal program and State  
4 programs.

5 “(2) REGULATIONS.—

6 “(A) IN GENERAL.—The Secretary, in con-  
7 sultation with States, shall promulgate regula-  
8 tions to ensure that an electric utility that is  
9 subject to the requirements of this section and  
10 is subject to a State renewable energy standard  
11 receives renewable energy credits if—

12 “(i) the electric utility complies with  
13 State standard by generating or pur-  
14 chasing renewable electric energy or renew-  
15 able energy certificates or credits; or

16 “(ii) the State imposes or allows other  
17 mechanisms for achieving the State stand-  
18 ard, including the payment of taxes, fees,  
19 surcharges, or other financial obligations.

20 “(B) AMOUNT OF CREDITS.—The amount  
21 of credits received by an electric utility under  
22 this subsection shall equal—

23 “(i) in the case of subparagraph  
24 (A)(i), the renewable energy resulting from  
25 the generation or purchase by the electric

1 utility of existing renewable energy or new  
2 renewable energy; and

3 “(ii) in the case of subparagraph  
4 (A)(ii), the pro rata share of the electric  
5 utility, based on the contributions to the  
6 mechanism made by the electric utility or  
7 customers of the electric utility, in the  
8 State, of the renewable energy resulting  
9 from those mechanisms.

10 “(C) PROHIBITION ON DOUBLE COUNT-  
11 ING.—The regulations promulgated under this  
12 paragraph shall ensure that a kilowatt-hour as-  
13 sociated with a renewable energy credit issued  
14 pursuant to this subsection shall not be used  
15 for compliance with this section more than  
16 once.

17 “(j) ENERGY EFFICIENCY CREDITS.—

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

19 “(A) CUSTOMER FACILITY SAVINGS.—The  
20 term ‘customer facility savings’ means a reduc-  
21 tion in end-use electricity at a facility of an  
22 end-use consumer of electricity served by an  
23 electric utility, as compared to—

24 “(i) consumption at the facility during  
25 a base year;



1           “(ii) in the case of new equipment (re-  
2           gardless of whether the new equipment re-  
3           places existing equipment at the end of the  
4           useful life of the existing equipment), con-  
5           sumption by the new equipment of average  
6           efficiency; or

7           “(iii) in the case of a new facility,  
8           consumption at a reference facility.

9           “(B) ELECTRICITY SAVINGS.—The term  
10          ‘electricity savings’ means—

11           “(i) customer facility savings of elec-  
12           tricity consumption adjusted to reflect any  
13           associated increase in fuel consumption at  
14           the facility;

15           “(ii) reductions in distribution system  
16           losses of electricity achieved by a retail  
17           electricity distributor, as compared to  
18           losses attributable to new or replacement  
19           distribution system equipment of average  
20           efficiency (as defined by the Secretary by  
21           regulation);

22           “(iii) the output of new combined heat  
23           and power systems, to the extent provided  
24           under paragraph (5); and

25           “(iv) recycled energy savings.

1           “(C) QUALIFYING ELECTRICITY SAV-  
2           INGS.—The term ‘qualifying electricity savings’  
3           means electricity saving that meet the measure-  
4           ment and verification requirements of para-  
5           graph (4).

6           “(D) RECYCLED ENERGY SAVINGS.—The  
7           term ‘recycled energy savings’ means a reduc-  
8           tion in electricity consumption that is attrib-  
9           utable to electrical or mechanical power, or  
10          both, produced by modifying an industrial or  
11          commercial system that was in operation before  
12          July 1, 2007, in order to recapture energy that  
13          would otherwise be wasted.

14          “(2) PETITION.—The Governor of a State may  
15          petition the Secretary to allow up to 27 percent of  
16          the requirements of an electric utility under sub-  
17          section (b)(1) in the State to be met by submitting  
18          Federal energy efficiency credits issued pursuant to  
19          this subsection.

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

22          “(A) IN GENERAL.—The Secretary shall  
23          issue energy efficiency credits for States de-  
24          scribed in paragraph (2) in accordance with this  
25          subsection.

1                   “(B) QUALIFIED ELECTRICITY SAVINGS.—

2                   In accordance with regulations promulgated by  
3                   the Secretary, the Secretary shall issue credits  
4                   for—

5                   “(i) qualified electricity savings  
6                   achieved by an electric utility in a calendar  
7                   year; and

8                   “(ii) qualified electricity savings  
9                   achieved by other entities (including State  
10                  agencies) if —

11                  “(I) the measures used to achieve  
12                  the qualifying electricity savings were  
13                  installed or place in operation by the  
14                  entity seeking the credit or the des-  
15                  ignated agent of the entity; and

16                  “(II) no electric utility paid a  
17                  substantial portion of the cost of  
18                  achieving the qualified electricity sav-  
19                  ings (unless the utility has waived any  
20                  entitlement to the credit).

21                  “(4) MEASUREMENT AND VERIFICATION OF  
22                  ELECTRICITY SAVINGS.—Not later than June 30,  
23                  2009, the Secretary shall promulgate regulations re-  
24                  garding the measurement and verification of elec-

1       tricity savings under this subsection, including regu-  
2       lations covering—

3               “(A) procedures and standards for defining  
4               and measuring electricity savings that will be  
5               eligible to receive credits under paragraph (3),  
6               which shall—

7                       “(i) specify the types of energy effi-  
8                       ciency and energy conservation that will be  
9                       eligible for the credits;

10                      “(ii) require that energy consumption  
11                      for customer facilities or portions of facili-  
12                      ties in the applicable base and current  
13                      years be adjusted, as appropriate, to ac-  
14                      count for changes in weather, level of pro-  
15                      duction, and building area;

16                      “(iii) account for the useful life of  
17                      electricity savings measures;

18                      “(iv) include specified electricity sav-  
19                      ings values for specific, commonly-used ef-  
20                      ficiency measures;

21                      “(v) specify the extent to which elec-  
22                      tricity savings attributable to measures  
23                      carried out before the date of enactment of  
24                      this section are eligible to receive credits  
25                      under this subsection; and

1 “(vi) exclude electricity savings that—

2 “(I) are not properly attributable

3 to measures carried out by the entity

4 seeking the credit; or

5 “(II) have already been credited

6 under this section to another entity;

7 “(B) procedures and standards for third-

8 party verification of reported electricity savings;

9 and

10 “(C) such requirements for information,

11 reports, and access to facilities as may be nec-

12 essary to carry out this subsection.

13 “(5) COMBINED HEAT AND POWER.—Under

14 regulations promulgated by the Secretary, the incre-

15 ment of electricity output of a new combined heat

16 and power system that is attributable to the higher

17 efficiency of the combined system (as compared to

18 the efficiency of separate production of the electric

19 and thermal outputs), shall be considered electricity

20 savings under this subsection.

21 “(6) STATE DELEGATION.—On application of

22 the Governor of a State, the Secretary may delegate

23 to the State the administration of this subsection in

24 the State if the Secretary determines that the State

1 is willing and able to carry out the functions de-  
2 scribed in this subsection.

3 “(k) RECONSIDERATION.—

4 “(1) REVIEW.—

5 “(A) IN GENERAL.—Not later than Janu-  
6 ary 15, 2016, and every 5 years thereafter, the  
7 Secretary shall review and make recommenda-  
8 tions relating to the program established under  
9 this section.

10 “(B) ANALYSIS.—The review shall analyze  
11 whether—

12 “(i) the program established under  
13 this section has contributed to an economi-  
14 cally harmful increase in electricity rates in  
15 regions of the United States;

16 “(ii) the program has resulted in net  
17 economic benefits for the United States;  
18 and

19 “(iii) new technologies and clean, re-  
20 newable energy sources will advance the  
21 purposes of this section.

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

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

4           “(B) the percentage of renewable elec-  
5 tricity required under subsection (b)(1) should  
6 be increased or decreased; and

7           “(C) the definition of ‘new renewable en-  
8 ergy’ should be expanded to reflect advances in  
9 technology or previously unavailable sources of  
10 clean or renewable energy.

11          “(3) REPORT.—Not later than January 15,  
12 2017, the Secretary shall submit to Congress a re-  
13 port that describes any recommendations of the Sec-  
14 retary on changes to the program established under  
15 this section.

16          “(1) SUNSET.—This section expires on December 31,  
17 2032.”.

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

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