111TH CONGRESS 1ST SESSION	•
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To promote the production of clean energy, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Mr. Graham introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To promote the production of clean energy, 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.
- This Act may be cited as the "Clean Energy Act of
- 5 2009".
- 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—
- 11 (1) the production and use of energy;

1	(2) the reduction of greenhouse gas emissions;
2	and
3	(3) the reduction of dependence on foreign oil.
4	SEC. 3. FEDERAL CLEAN ENERGY 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:
8	"SEC. 610. FEDERAL CLEAN ENERGY STANDARD.
9	"(a) Definitions.—In this section:
10	"(1) Advanced coal generation.—The term
11	'advanced coal generation' means the generation of
12	electricity produced from coal by a new or existing
13	coal generating facility that captures and perma-
14	nently sequesters or stores at least 65 percent of
15	greenhouse gases produced by the facility.
16	"(2) Affiliate.—The term 'affiliate' when
17	used with respect to a person, means another person
18	that directly or indirectly owns or controls, is owned
19	or controlled by, or is under common ownership or
20	control with, such person, as determined under regu-
21	lations issued by the Secretary.
22	"(3) Base quantity of electricity.—
23	"(A) IN GENERAL.—The term 'base quan-
24	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) in the case of forest-related resources
20	mill residues, precommercial thinning, slash
21	brush, or nonmerchantable material;
22	"(B) solid wood waste materials, including
23	waste pallets, crates, dunnage, manufacturing
24	and construction wood wastes (other than pres-
25	sure-treated, chemically-treated, or painted

1	wood wastes), and landscape or right-of-way
2	tree trimmings, but not including municipal
3	solid waste (such as garbage), gas derived from
4	the biodegration of solid waste, or paper that is
5	commonly recycled;
6	"(C) agricultural waste, including orchard
7	tree crops, vineyards, grains, legumes, sugar,
8	and other crop byproducts or residues, and live-
9	stock waste nutrients;
10	"(D) a plant that is grown exclusively as
11	a fuel for the production of electricity;
12	"(E) animal waste and animal byproducts;
13	"(F) food waste;
14	"(G) algae;
15	"(H) waste cellulosic residue from the pro-
16	duction of biofuels; and
17	"(I) biogas and any solid produced by
18	micro-organisms from any of the materials de-
19	scribed in this paragraph.
20	"(5) CLEAN ENERGY.—The term 'clean energy'
21	means electric energy generated at a facility (includ-
22	ing a distributed generation facility) from—
23	"(A) solar, wind, geothermal, or ocean en-
24	ergy;
25	"(B) biomass;

1	"(C) landfill gas;
2	"(D) qualified hydropower;
3	"(E) marine and hydrokinetic renewable
4	energy (as defined in section 632 of the Energy
5	Independence and Security Act of 2007 (42
6	U.S.C. 17211));
7	"(F) incremental geothermal production;
8	"(G) coal-mined methane;
9	"(H) qualified waste-to-energy;
10	"(I) qualified nuclear energy;
11	"(J) advanced coal generation;
12	"(K) eligible retired fossil fuel generation;
13	or
14	"(L) another clean energy source based on
15	innovative technology, as determined by the
16	Secretary through rulemaking.
17	"(6) Distributed Generation facility.—
18	The term 'distributed generation facility' means a
19	facility at or near a customer site that provides elec-
20	tric energy to 1 or more customers for purposes
21	other than resale other than to a utility through a
22	net metering arrangement.
23	"(7) Eligible retired fossil fuel genera-
24	TION.—The term 'eligible retired fossil fuel genera-

1	tion means the generation of electricity from any
2	fossil fuel that is—
3	"(A) produced by a fossil fuel generating
4	facility (including any petroleum coke or oil-
5	fired steam unit or peaking facility) that had
6	average carbon dioxide emissions during the 3-
7	year period ending on the date of retirement in
8	excess of 2,500 pounds per megawatt hour of
9	generation; and
10	"(B) permanently retired during the period
11	beginning on the date of enactment of this sec-
12	tion and ending on January 1, 2014.
13	"(8) Geothermal energy.—The term 'geo-
14	thermal energy' means energy derived from a geo-
15	thermal deposit (within the meaning of section
16	613(e)(2) of the Internal Revenue Code of 1986).
17	"(9) Incremental cost of compliance.—
18	"(A) IN GENERAL.—The term 'incremental
19	cost of compliance' means—
20	"(i) the costs attributable to all retail
21	sales of electricity incurred in a year by an
22	electric utility to—
23	"(I) generate clean energy eligi-
24	ble for Federal clean energy credits;

1	"(II) acquire Federal clean en-
2	ergy credits; or
3	"(III) make alternative compli-
4	ance payments in order to comply
5	with the requirements of subsection
6	(b); less
7	"(ii)(I) the costs the electric utility
8	would have incurred to serve all of the re-
9	tail customers of that electric utility in
10	that year to generate or acquire additional
11	electricity not eligible for clean energy
12	credits if the requirements of subsection
13	(b) did not apply to the electric utility; and
14	"(II) the costs of compliance with any
15	comparable State clean energy require-
16	ment.
17	"(B) Cost of electricity.—In calcu-
18	lating the incremental cost of compliance of an
19	electric utility under this section, the Secretary
20	shall take into account the reduction, if any, in
21	the cost of electricity generated with fossil fuels
22	associated with increased reliance on clean en-
23	ergy generation.
24	"(10) Incremental fossil fuel produc-
25	TION.—The term 'incremental fossil fuel production'

means the incremental quantity of electricity gen-
erated at an existing fossil fuel generation facility
over the average quantity of electricity generated at
the facility during the preceding 3-year period that
is attributable to permanent efficiency improvements
or capacity additions made on or after the date of
enactment of this section, if there is no increase in
greenhouse gas emissions associated with the effi-
ciency improvements or capacity additions when
compared to the average greenhouse gas emissions
during the preceding 3-year period.
"(11) Incremental Geothermal Produc-
TION.—
"(A) IN GENERAL.—The term 'incremental
geothermal production' means, for any year, the
excess of—
"(i) the total kilowatt hours of elec-
tricity produced from a facility (including a
distributed generation facility) using geo-
thermal energy; over
"(ii) the average number of kilowatt
hours produced annually at the facility for
5 of the previous 7 calendar years before
the date of enactment of this section after
eliminating the highest and the lowest kilo-

1	watt hour production years in that 7-year
2	period.
3	"(B) Special rule.—A facility described
4	in subparagraph (A) that was placed in service
5	at least 7 years before the date of enactment of
6	this section shall, commencing with the year in
7	which that date of enactment occurs, reduce the
8	amount calculated under subparagraph $(A)(ii)$
9	each year, on a cumulative basis, by the average
10	percentage decrease in the annual kilowatt hour
11	production for the 7-year period described in
12	subparagraph (A)(ii) with such cumulative sum,
13	but not to exceed 30 percent.
14	"(12) Incremental hydropower.—
15	"(A) IN GENERAL.—The term 'incremental
16	hydropower' means additional energy generated
17	as a result of efficiency improvements or capac-
18	ity additions made on or after January 1, 1992.
19	"(B) Exclusion.—The term 'incremental
20	hydropower' does not include additional energy
21	generated as a result of operational changes not
22	directly associated with efficiency improvements
23	or capacity additions.
24	"(C) Measurement and Certifi-
25	CATION.—Efficiency improvements and capacity

1	additions referred to in subparagraph (A) shall
2	be—
3	"(i) measured on the basis of the
4	same water flow information used to deter-
5	mine a historic average annual generation
6	baseline for the hydroelectric facility; and
7	"(ii) certified by the Secretary or the
8	Federal Energy Regulatory Commission.
9	"(13) Incremental nuclear production.—
10	The term 'incremental nuclear production' means
11	the incremental quantity of energy generated by an
12	existing nuclear facility over the average quantity of
13	energy generated at the facility during the preceding
14	3-year period that is attributable to permanent effi-
15	ciency improvements or capacity additions made on
16	or after the date of enactment of this section.
17	"(14) Indian Land.—The term 'Indian land'
18	has the meaning given the term in section 2601 of
19	the Energy Policy Act of 1992 (25 U.S.C. 3501).
20	"(15) Qualified hydropower.—
21	"(A) IN GENERAL.—The term 'qualified
22	hydropower' means—
23	"(i) incremental hydropower;
24	"(ii) additions of capacity made on or
25	after January 1, 2001, or the effective

1	commencement date of an existing applica-
2	ble State clean or renewable electricity
3	standard program at an existing nonhydro-
4	electric dam, if—
5	"(I) the hydroelectric project in-
6	stalled on the nonhydroelectric dam—
7	"(aa) is licensed by the Fed-
8	eral Energy Regulatory Commis-
9	sion, or is exempt from licensing,
10	and is in compliance with the
11	terms and conditions of the li-
12	cense or exemption; and
13	"(bb) meets all other appli-
14	cable environmental, licensing,
15	and regulatory requirements, in-
16	cluding applicable fish passage
17	requirements;
18	"(II) the nonhydroelectric dam—
19	"(aa) was placed in service
20	before the date of enactment of
21	this section;
22	"(bb) was operated for flood
23	control, navigation, or water sup-
24	ply purposes; and

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1	"(cc) did not produce hydro-
2	electric power as of the date of
3	enactment of this section; and
4	"(III) the hydroelectric project is
5	operated so that the water surface ele-
6	vation at any given location and time
7	that would have occurred in the ab-
8	sence of the hydroelectric project is
9	maintained, subject to any license re-
10	quirements imposed under applicable
11	law that change the water surface ele-
12	vation for the purpose of improving
13	the environmental quality of the af-
14	fected waterway, as certified by the
15	Federal Energy Regulatory Commis-
16	sion; and
17	"(iii) in the case of the State of Alas-
18	ka—
19	"(I) energy generated by a small
20	hydroelectric facility that produces
21	less than 50 megawatts;
22	"(II) energy from pumped stor-
23	age; and
24	"(III) energy from a lake tap.

1	"(B) Standards.—Nothing in this para-
2	graph or the application of this paragraph shall
3	affect the standards under which the Federal
4	Energy Regulatory Commission issues licenses
5	for and regulates hydropower projects under
6	part I of the Federal Power Act (16 U.S.C.
7	791a et seq.).
8	"(16) Qualified nuclear energy.—The
9	term 'qualified nuclear energy' means energy from a
10	nuclear generating unit placed in service on or after
11	the date of enactment of this section.
12	"(17) QUALIFIED WASTE-TO-ENERGY.—The
13	term 'qualified waste-to-energy' means energy from
14	the combustion of post-recycled municipal solid
15	waste, or from the gasification or pyrolization of
16	such waste and the combustion of the resulting gas
17	at the same facility, if the owner or operator of the
18	facility generating electricity from the energy pro-
19	vides to the Commission, on an annual basis—
20	"(A) a certification that the facility is in
21	compliance with all applicable Federal and
22	State environmental permits;
23	"(B) in the case of a facility that com-
24	mences operation before the date of enactment
25	of this section, a certification that the facility

1	meets emissions standards promulgated under
2	section 112 or 129 of the Clean Air Act (42
3	U.S.C. 7412, 7429) that apply as of the date
4	of enactment of this section to new facilities
5	within the relevant source category; and
6	"(C) in the case of the combustion,
7	pyrolization, or gasification of municipal solid
8	waste, a certification that each local govern-
9	ment unit from which such waste originates op-
10	erates, participates in the operation of, con-
11	tracts for, or otherwise provides for, recycling
12	services for residents of the local government
13	unit.
14	"(b) Clean Energy and Energy Efficiency Re-
15	QUIREMENT.—
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 clean energy or energy efficiency.
24	"(B) Percentage.—Except as provided

1	endar year under subparagraph (A) shall not be
2	less than the amount specified in the following
3	table:
	"Calendar year: Minimum annual percentage:
	2012 through 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
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 clean en-
8	ergy 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 25 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 5.0 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

1	"(D) a combination of activities described
2	in subparagraphs (A), (B), and (C).
3	"(3) Phase-in.—The Secretary shall prescribe
4	by regulation, a reasonable phase-in of the require-
5	ments of paragraph (1) as the requirements apply to
6	an electric utility that becomes subject to this sec-
7	tion on or after January 1, 2013.
8	"(c) Federal Clean Energy and Energy Effi-
9	CIENCY CREDIT TRADING PROGRAMS.—
10	"(1) In general.—Not later than January 1
11	2011, the Secretary shall establish a Federal clear
12	energy credit trading program, and a Federal energy
13	efficiency credit trading program, under which elec-
14	tric utilities shall submit to the Secretary Federal
15	clean energy credits and Federal energy efficiency
16	credits to certify the compliance of the electric utili-
17	ties with subsection $(b)(1)$.
18	"(2) Administration.—As part of the pro-
19	gram, the Secretary shall—
20	"(A) issue clean energy credits to genera-
21	tors of electric energy from clean energy, re-
22	gardless of whether the energy is transmitted
23	over the national interstate transmission sys-
24	tem;

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1	"(B) to the extent that clean sources of
2	electricity are used in combination with other
3	sources of energy, issue credits only to the ex-
4	tent that the electricity generated is from clean
5	energy resources;
6	"(C) issue clean energy credits to electric
7	utilities associated with State clean energy
8	standard compliance mechanisms pursuant to
9	subsection (h);
10	"(D) issue energy efficiency credits pursu-
11	ant to subsection (i);
12	"(E) subject to subparagraph (F), ensure
13	that a kilowatt hour, including the associated
14	clean energy credit or energy efficiency credit,
15	shall be used only once for purposes of compli-
16	ance with this Act;
17	"(F) allow double credits for generation
18	from facilities on Indian land, and triple credits
19	for generation from small clean energy distrib-
20	uted generators no larger than 1 megawatt, ex-
21	cept that no distributed clean energy generation
22	facilities on Indian land shall receive a greater
23	number of credits than triple credits;
24	"(G) ensure that, with respect to a pur-
25	chaser that, as of the date of enactment of this

1	section, has a purchase agreement from a clean
2	energy facility placed in service before that
3	date, the credit associated with the generation
4	of clean energy under the contract is issued to
5	the purchaser of the electric energy to the ex-
6	tent that the contract does not already provide
7	for the allocation of the Federal credit;
8	"(H) in the case of eligible retired fossi
9	fuel generation, issue 0.25 credits per kilowatt
10	hour during the 5 year-period beginning on the
11	date of retirement based on the average annual
12	quantity of electricity generated by eligible re-
13	tired fossil fuel generation during the final 3
14	years of operation of the facility;
15	"(I) calculate the quantity of clean energy
16	credits issued for advanced coal generation,
17	which shall be equal to the product obtained by
18	multiplying—
19	"(i) the kilowatt hours of electricity
20	generated by a facility and supplied to the
21	grid during the prior year; by
22	"(ii) during the same year, the ratio
23	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	and
11	"(J) issue clean energy credits for the use-
12	ful electric and thermal output from a facility
13	that produces the output from biomass, using a
14	system under which—
15	"(i) in the case of efficiency that is
16	less than 50 percent, 1 clean energy credit
17	is awarded;
18	"(ii) in the case of efficiency that is
19	50 percent or more but less than 70 per-
20	cent, 1.1 clean energy credits are awarded
21	for the same unit output;
22	"(iii) in the case of efficiency that is
23	70 percent or more but less than 90 per-
24	cent, 1.25 clean energy credits are awarded
25	for the same unit output; and

1	"(iv) in the case of efficiency that is
2	90 percent or more, 1.5 clean energy cred-
3	its are awarded for the same unit output.
4	"(3) Clean energy credit borrowing.—At
5	any time before the end of calendar year 2015 and
6	any subsequent calendar year, an electric utility that
7	has reason to believe the electric utility will not have
8	sufficient clean energy credits to comply with sub-
9	section (b) may—
10	"(A) submit to the Secretary a plan that
11	demonstrates that the electric utility, as a con-
12	sequence of having facilities under construction
13	at the time the plan is submitted, will earn suf-
14	ficient clean energy credits during the subse-
15	quent 3 calendar years to meet the require-
16	ments of subsection (b) for calendar year 2015
17	and the subsequent calendar years affected; and
18	"(B) on approval of the plan by the Sec-
19	retary, apply clean energy credits that the plan
20	demonstrates will be earned during the subse-
21	quent 3 calendar years to meet the require-
22	ments of subsection (b) for each calendar year
23	affected.
24	"(4) Credit trading and banking.—

1	"(A) IN GENERAL.—An electric utility that
2	holds clean energy credits in excess of the quan-
3	tity of credits needed to comply with subsection
4	(b) may transfer the credits to another electric
5	utility in the same utility holding company sys-
6	tem or sell the credits to another electric utility.
7	"(B) Carrying forward.—A clean en-
8	ergy credit for any year that is not used to sat-
9	isfy the minimum clean energy requirements of
10	subsection (b) for that year may be carried for-
11	ward for use in any subsequent year.
12	"(5) Delegation of Market function.—
13	"(A) IN GENERAL.—The Secretary may
14	delegate to—
15	"(i) an appropriate market-making
16	entity the administration of a national
17	clean energy credit market and a national
18	energy efficiency credit market for pur-
19	poses of creating a transparent national
20	market for the sale or trade of clean en-
21	ergy credits and energy efficiency credits;
22	and
23	"(ii) regional entities the tracking of
24	dispatch of clean energy 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 clean energy generation
5	is transparent, verifiable, and independent of
6	any 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 clean or renewable energy program
10	if the State requirement is greater than
11	the applicable requirement of subsection
12	(b).
13	"(B) REQUIREMENT.—The Secretary may
14	waive the requirements of subsection (b) for a
15	period of up to 5 years with respect to an elec-
16	tric utility if the Secretary determines that the
17	electric utility cannot meet the requirements
18	due to a hurricane, tornado, fire, flood, earth-
19	quake, ice storm, or other natural disaster or
20	act of God beyond the reasonable control of the
21	utility.
22	"(C) Ratepayer protection.—
23	"(i) In general.—Subject to clause
24	(ii), effective beginning June 1, 2010, and
25	not later than June 1 of each year there-

24

1 after, an electric utility may petition the 2 Secretary to waive, for the following compliance year, all or part of the require-3 4 ments of subsection (b) in order to limit 5 the rate impact of the incremental cost of 6 compliance of the electric utility to not 7 more than 4 percent per retail customer in 8 any year. 9 "(ii) Requirements.— "(I) EXHAUSTION OF OPPORTU-10 11 NITIES.—The Secretary may waive all 12 or port of the requirements of sub-13 section (b) only on a demonstration by 14 the petitioner that the petitioner has 15 exhausted all opportunities under this 16 section to comply with the require-17 ments of subsection (b). 18 "(II) LIMITATIONS.—Any waiver 19 granted by the Secretary under this 20 subparagraph shall be limited to the 21 maximum extent practicable while en-22 suring that the increased cost of com-

pliance does not exceed 4 percent per

retail customer for any year.

1	"(D) VARIANCE.—A State public utility
2	commission or electric utility may submit an
3	application to the Secretary that requests a
4	variance from the requirements of subsection
5	(b) for 1 or more calendar years (including sus-
6	pension or reduction of the requirements) on
7	the basis of transmission constraints preventing
8	delivery of clean energy.
9	"(4) Procedure for assessing penalty.—
10	The Secretary shall assess a civil penalty under this
11	subsection in accordance with the procedures pre-
12	scribed by section 333(d) of the Energy Policy and
13	Conservation Act (42 U.S.C. 6303(d)).
14	"(e) Alternative Compliance Payments.—
15	"(1) In general.—An electric utility may sat-
16	isfy the requirements of subsection (b), in whole or
17	in part, by submitting in accordance with this sub-
18	section, in lieu of each Federal clean energy credit
19	or megawatt hour of demonstrated total annual elec-
20	tricity savings that would otherwise be due, a pay-
21	ment equal to the amount required under subsection
22	(b) in accordance with such regulations as the Sec-
23	retary may promulgate.
24	"(2) Payment to state funds.—Payments
25	made under this subsection shall be made directly to

1	the State in which the electric utility is located, if
2	the payments are deposited directly into a fund with-
3	in the treasury of the State for use in accordance
4	with paragraph (3).
5	"(3) Use of grants.—The Governor of any
6	State may expend amounts in a State clean energy
7	escrow account solely for purposes of—
8	"(A) increasing the quantity of electric en-
9	ergy produced from a clean energy source in the
10	State, including nuclear and advanced coal
11	technologies for carbon capture and sequestra-
12	tion;
13	"(B) promoting the deployment and use of
14	electric drive vehicles in the State, including the
15	development of electric drive vehicles and bat-
16	teries; and
17	"(C) offsetting the costs of carrying out
18	this section paid by electric consumers in the
19	State through—
20	"(i) direct grants to electric con-
21	sumers; or
22	"(ii) energy efficiency investments.
23	"(4) Information and reports.—As a condi-
24	tion of providing payments to a State under this
25	subsection, the Secretary may require the Governor

to keep such accounts or records, and furnish	such
information and reports, as the Secretary deter-	mines
are necessary and appropriate for determining	com-
pliance with this subsection.	
"(f) Exemptions.—	
"(1) In general.—During any calendar	year,
this section shall not apply to an electric utility-	
"(A) that sold less than $4,000,000$ n	mega-
watt hours of electric energy to electric	con-
sumers during the preceding calendar year	r, ex-
cept that sales to an affiliate, lessee, or t	enant
of the electric utility shall not be treat	ed as
sales to electric consumers under this	para-
graph; or	
"(B) in Hawaii.	
"(2) Administration.—	
"(A) Voluntary Coverage.—Para	graph
(1) shall not apply to an electric utility	y de-
scribed in paragraph (1) that voluntary	elects
to be covered by this section.	
"(B) Sale of clean energy credi	TS.—
An electric utility that is not covered by	v this
section and has not elected to be covered	ed by
this section shall not be eligible to sell any	cred-
section and has not elected to be ed	overe

1	its generated pursuant to this section to any
2	other person.
3	"(g) Inflation Adjustment.—Not later than De-
4	cember 31 of each year beginning in 2011, the Secretary
5	shall adjust for inflation the rate of the alternative compli-
6	ance payment under subsection (b)(2)(C).
7	"(h) State Programs.—
8	"(1) In general.—Subject to paragraph (2),
9	nothing in this section diminishes any authority of
10	a State or political subdivision of a State to adopt
11	or enforce any law or regulation respecting clean en-
12	ergy or energy efficiency, or the regulation of electric
13	utilities.
14	"(2) Compliance.—Except as provided in sub-
15	section (d)(3), no such law or regulation shall relieve
16	any person of any requirement otherwise applicable
17	under this section.
18	"(3) Coordination.—The Secretary, in con-
19	sultation with States having such clean energy and
20	energy efficiency programs, shall, to the maximum
21	extent practicable, facilitate coordination between
22	the Federal program and State programs.
23	"(4) Regulations.—
24	"(A) IN GENERAL.—The Secretary, in con-
25	sultation with States, shall promulgate regula-

1	tions to ensure that an electric utility that is
2	subject to the requirements of this section and
3	is subject to a State renewable energy or clean
4	energy standard receives clean energy credits
5	if—
6	"(i) the electric utility complies with
7	the State standard by generating or pur-
8	chasing clean energy or renewable energy
9	certificates or credits representing clean
10	energy; or
11	"(ii) the State imposes or allows other
12	mechanisms for achieving the State stand-
13	ard, including the payment of taxes, fees,
14	surcharges, or other financial obligations.
15	"(B) Amount of credits.—The amount
16	of credits received by an electric utility under
17	this subsection shall equal—
18	"(i) in the case of subparagraph
19	(A)(i), the quantity of clean energy result-
20	ing from the generation or purchase by the
21	electric utility of clean energy; and
22	"(ii) in the case of subparagraph
23	(A)(ii), the pro rata share of the electric
24	utility, based on the contributions to the
25	mechanism made by the electric utility or

1	customers of the electric utility, in the
2	State, of the quantity of clean energy re-
3	sulting from those mechanisms.
4	"(C) Prohibition on double count
5	ING.—The regulations promulgated under this
6	paragraph shall ensure that a kilowatt-hour as
7	sociated with a clean energy credit issued pur-
8	suant to this subsection shall not be used for
9	compliance with this section more than once.
10	"(i) Energy Efficiency Credits.—
11	"(1) Definitions.—In this subsection:
12	"(A) CUSTOMER FACILITY SAVINGS.—The
13	term 'customer facility savings' means a reduc-
14	tion in the consumption of end-use electricity a
15	a facility of an end-use consumer of electricity
16	served by an electric utility, as compared to—
17	"(i) consumption at the facility during
18	a base year, taking into account reductions
19	attributable to causes other than energy ef
20	ficiency investments (such as economic
21	downturns, reductions in customer base
22	favorable weather conditions, or other such
23	causes); or
24	"(ii) in the case of new equipment (re-
25	gardless of whether the new equipment re-

1	places existing equipment at the end of the
2	useful life of the existing equipment), con-
3	sumption by similar equipment of average
4	efficiency available for purchase at the
5	time that new equipment is acquired.
6	"(B) ELECTRICITY SAVINGS.—The term
7	'electricity savings' means—
8	"(i) customer facility savings of elec-
9	tricity consumption adjusted to reflect any
10	associated increase in fuel consumption at
11	the facility;
12	"(ii) reductions in distribution system
13	losses of electricity achieved by a retain
14	electricity distributor, as compared to
15	losses attributable to new or replacement
16	distribution system equipment of average
17	efficiency (as defined by the Secretary by
18	regulation); and
19	"(iii) the output of new combined heat
20	and power systems, to the extent provided
21	under paragraph (5).
22	"(C) QUALIFIED ELECTRICITY SAVINGS.—
23	The term 'qualified electricity savings' means
24	electricity saving that meet the measurement
25	and verification requirements of paragraph (4)

1	"(2) Petition.—On petition by the Governor
2	of a State or, in the case of the power service area
3	of the Tennessee Valley Authority, the Board of Di-
4	rectors of the Tennessee Valley Authority, the Sec-
5	retary shall allow up to 25 percent of the require-
6	ments of an electric utility under subsection $(b)(1)$
7	associated with the sales of electricity of the utility
8	in the State to be met by submitting Federal energy
9	efficiency credits issued pursuant to this subsection.
10	"(3) Issuance of energy efficiency cred-
11	ITS.—
12	"(A) IN GENERAL.—The Secretary shall
13	issue energy efficiency credits for qualified elec-
14	tricity savings achieved in States described in
15	paragraph (2) in accordance with this sub-
16	section.
17	"(B) Qualified electricity savings.—
18	Subject to subparagraph (C), in accordance
19	with regulations promulgated by the Secretary,
20	the Secretary shall issue credits for—
21	"(i) qualified electricity savings
22	achieved by an electric utility on or after
23	the date of enactment of this section; and
24	"(ii) qualified electricity savings
25	achieved by other entities (including State

1	agencies) on or after the date of enactment
2	of this section if—
3	"(I) the measures used to achieve
4	the qualified electricity savings were
5	installed or placed in operation by the
6	entity seeking the credit; and
7	"(II) an electric utility eligible to
8	receive efficiency credits did not pay a
9	substantial portion of the cost of
10	achieving the qualified electricity sav-
11	ings (unless the utility has waived any
12	entitlement to the credit).
13	"(C) Standards.—No credits shall be
14	issued for electricity savings achieved as a re-
15	sult of compliance with a national, State, or
16	local building, equipment, or appliance effi-
17	ciency standard.
18	"(4) Measurement and verification of
19	ELECTRICITY SAVINGS.—Not later than January
20	2010 the Secretary shall promulgate regulations re-
21	garding the measurement and verification of elec-
22	tricity savings under this subsection, including regu-
23	lations covering—
24	"(A) procedures and standards for defining
25	and measuring electricity savings that will be

1	eligible to receive credits under paragraph (3),
2	which shall—
3	"(i) specify the types of energy effi-
4	ciency and energy conservation that will be
5	eligible for the credits;
6	"(ii) require that energy consumption
7	for customer facilities or portions of facili-
8	ties in the applicable base and current
9	years be adjusted, as appropriate, to ac-
10	count for changes in weather, level of pro-
11	duction, and building area;
12	"(iii) account for the useful life of
13	electricity savings measures;
14	"(iv) include specified electricity sav-
15	ings values for specific, commonly-used ef-
16	ficiency measures; and
17	"(v) exclude electricity savings that—
18	"(I) are not properly attributable
19	to measures carried out by the entity
20	seeking the credit;
21	"(II) have already been credited
22	under this section to another entity;
23	or

1	"(III) do not result from actions
2	not intended to achieve electricity sav-
3	ings;
4	"(B) procedures and standards for third
5	party verification of reported electricity savings;
6	and
7	"(C) such requirements for information,
8	reports, and access to facilities as may be nec-
9	essary to carry out this subsection.
10	"(5) COMBINED HEAT AND POWER.—Under
11	regulations promulgated by the Secretary, the incre-
12	ment of electricity output of a new combined heat
13	and power system that is attributable to the higher
14	efficiency of the combined system (as compared to
15	the efficiency of separate production of the electric
16	and thermal outputs), shall be considered electricity
17	savings under this subsection.
18	"(6) Incremental nuclear and incre-
19	MENTAL FOSSIL FUEL PRODUCTION.—
20	"(A) In general.—Subject to subpara-
21	graph (B), under regulations promulgated by
22	the Secretary, the increment of electricity out-
23	put attributable to incremental nuclear produc-
24	tion and incremental fossil fuel production shall

1	be considered electricity savings under this sub-
2	section.
3	"(B) LIMITATION.—The increment of elec-
4	tricity output described in subparagraph (A)
5	shall meet not more than 10 percent of the
6	total obligation of an electric utility under sub-
7	section (b).
8	"(j) Biomass Harvesting and Sustainability.—
9	The provisions of this section relating to biomass shall be
10	administered in accordance with section 203(e) of the En-
11	ergy Policy Act of 2005 (42 U.S.C. 15852(e)).
12	"(k) Loans for Projects to Comply With Fed-
13	ERAL CLEAN ENERGY STANDARD.—
14	"(1) Purposes.—The purposes of this sub-
15	section are—
16	"(A) to reduce the cost incurred by electric
17	utilities in complying with the requirements of
18	this section; and
19	"(B) to minimize the impact of the re-
20	quirements on electricity rates for consumers.
21	"(2) Loans.—The Secretary shall make loans
22	available to electric utilities to carry out qualified
23	projects approved by the Secretary to comply with
24	the requirements of this section.
25	"(3) Qualified projects.—

1	"(A) In GENERAL.—A loan may be made
2	under this subsection for a project—
3	"(i) to construct a clean energy gen-
4	eration facility;
5	"(ii) to install an energy efficiency or
6	electricity demand reduction technology; or
7	"(iii) to carry out any other project
8	approved by the Secretary that the Sec-
9	retary determines is consistent with the
10	purposes of this subsection.
11	"(B) DISAPPROVAL.—The Secretary may
12	disapprove an application for a loan for a
13	project under this subsection if the Secretary
14	determines that—
15	"(i) the revenues generated under the
16	project are unlikely to be sufficient to
17	cover the repayment obligations of the pro-
18	posed loan; or
19	"(ii) the project is not otherwise con-
20	sistent with the purposes of this sub-
21	section.
22	"(4) Terms.—A loan made by the Secretary to
23	an electric utility under this subsection shall—
24	"(A) be for a term of not to exceed 30
25	years; and

1	"(B) bear an annual interest rate that is
2	50 basis points more than the Federal funds
3	rate established by the Board of Governors of
4	the Federal Reserve System.
5	"(5) Priority.—Notwithstanding any other
6	provision of law, the debt to the Federal Government
7	under a loan made to an electric utility under this
8	subsection shall have priority in any case in which
9	the electric utility files for bankruptcy protection
10	under title 11, United States Code.
11	"(6) Authorization of appropriations.—
12	There are authorized to be appropriated such sums
13	as are necessary to carry out this subsection.
14	"(l) Reconsideration.—
15	"(1) Review.—
16	"(A) IN GENERAL.—Not later than Janu-
17	ary 15, 2017, and every 5 years thereafter, the
18	Secretary shall review and make recommenda-
19	tions to Congress on the program established
20	under this section.
21	"(B) Analysis.—The review shall analyze
22	whether—
23	"(i) the program established under
24	this section has contributed to an economi-

1	cally harmful increase in electricity rates in
2	regions of the United States;
3	"(ii) the program has resulted in net
4	economic benefits for the United States;
5	and
6	"(iii) new technologies and clean en-
7	ergy sources will advance the purposes of
8	this section.
9	"(2) RECOMMENDATIONS.—The Secretary shall
10	submit to Congress recommendations on whether—
11	"(A) the percentage of energy efficiency
12	credits eligible to be submitted under subsection
13	(b)(1) should be increased or decreased;
14	"(B) the percentage of clean energy elec-
15	tricity required under subsection (b)(1) should
16	be increased or decreased; and
17	"(C) the definition of 'clean energy' should
18	be expanded to reflect advances in technology
19	or previously unavailable sources of clean or re-
20	newable energy.
21	"(3) Report.—Not later than January 15,
22	2017, the Secretary shall submit to Congress a re-
23	port that describes any recommendations of the Sec-
24	retary on changes to the program established under
25	this section.

- 1 "(m) REGULATIONS.—Not later than 1 year after the
- 2 date of enactment of this section, the Secretary shall pro-
- 3 mulgate regulations implementing this section.
- 4 "(n) TERMINATION OF AUTHORITY.—This section
- 5 and the authority provided by this section terminate on
- 6 December 31, 2039.".
- 7 (b) Table of Contents Amendment.—The table
- 8 of contents of the Public Utility Regulatory Policies Act
- 9 of 1978 (16 U.S.C. prec. 2601) is amended by adding at
- 10 the end of the items relating to title VI the following: "Sec. 610. Federal clean energy standard.".
- 11 SEC. 4. NUCLEAR LOAN GUARANTEE LANGUAGE SUFFI-
- 12 CIENT TO BUILD 60 ADDITIONAL NUCLEAR
- 13 REACTORS.

[To be supplied.]

- 14 SEC. 5. CCS RESEARCH, DEMONSTRATION AND DEPLOY-
- 15 MENT PROGRAM.

[To be supplied.]