116TH CONGRESS 1ST SESSION

To amend title VI of the Public Utility Regulatory Policies Act of 1978 to establish a Federal energy efficiency resource standard for electricity and natural gas suppliers, and for other purposes.

## IN THE SENATE OF THE UNITED STATES

Ms. SMITH (for herself, Mr. KING, and Mr. MERKLEY) introduced the following bill; which was read twice and referred to the Committee on

## A BILL

- To amend title VI of the Public Utility Regulatory Policies Act of 1978 to establish a Federal energy efficiency resource standard for electricity and natural gas suppliers, 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 "American Energy Effi-
- 5 ciency Act of 2019".

1	SEC. 2. ENERGY EFFICIENCY RESOURCE STANDARD FOR
2	RETAIL ELECTRICITY AND NATURAL GAS
3	SUPPLIERS.
4	(a) IN GENERAL.—Title VI of the Public Utility Reg-
5	ulatory Policies Act of 1978 is amended by adding after
6	section 609 (7 U.S.C. 918c) the following:
7	"SEC. 610. FEDERAL ENERGY EFFICIENCY RESOURCE
8	STANDARD FOR RETAIL ELECTRICITY AND
9	NATURAL GAS SUPPLIERS.
10	"(a) DEFINITIONS.—In this section:
11	"(1) ASHRAE; ANSI; IESNA.—The terms
12	'ASHRAE', 'ANSI', and 'IESNA' mean the Amer-
13	ican Society of Heating, Refrigerating and Air Con-
14	ditioning Engineers, the American National Stand-
15	ards Institute, and the Illuminating Engineering So-
16	ciety of North America, respectively.
17	"(2) BASE QUANTITY.—
18	"(A) IN GENERAL.—The term 'base quan-
19	tity', with respect to a retail electricity supplier
20	or retail natural gas supplier, means, for each
21	calendar year for which a performance standard
22	is established under subsection (c), the average
23	annual quantity of electricity or natural gas de-
24	livered by the retail electricity supplier or retail
25	natural gas supplier to retail customers during
26	the 3 calendar years immediately preceding the

1	first year that compliance is required under
2	subsection $(c)(1)$ .
3	"(B) EXCLUSION.—The term 'base quan-
4	tity', with respect to a retail natural gas sup-
5	plier, does not include natural gas delivered for
6	purposes of electricity generation.
7	"(3) CHP SAVINGS.—The term 'CHP savings'
8	means—
9	"(A) CHP system savings from a combined
10	heat and power system that commences oper-
11	ation after the date of enactment of this sec-
12	tion; and
13	"(B) the increase in CHP system savings
14	from upgrading or replacing, after the date of
15	enactment of this section, a combined heat and
16	power system that commenced operation on or
17	before the date of enactment of this section.
18	"(4) CHP SYSTEM SAVINGS.—The term 'CHP
19	system savings' means the electric output, and the
20	electricity saved due to the mechanical output, of a
21	combined heat and power system, adjusted to reflect
22	any increase in fuel consumption by that system as
23	compared to the fuel that would have been required
24	to produce an equivalent useful thermal energy out-
25	put in a separate thermal-only system, as deter-

1	mined in accordance with regulations promulgated
2	by the Secretary.
3	"(5) Combined heat and power system.—
4	The term 'combined heat and power system' means
5	a system that uses the same energy source for the
6	generation of electrical or mechanical power and the
7	production of steam or another form of useful ther-
8	mal energy, if—
9	"(A) the system meets all applicable re-
10	quirements relating to efficiency and other op-
11	erating characteristics that the Secretary pro-
12	mulgates by regulation; and
13	"(B) the net quantity of electricity sold
14	wholesale by the facility using the system does
15	not exceed 50 percent of the total quantity of
16	electricity generated annually by the system.
17	"(6) Cost-effective.—The term 'cost-effec-
18	tive' means, with respect to an energy efficiency
19	measure, that the measure achieves, directly to the
20	energy consumer and to the economy, a net present
21	value of economic benefits over the life of the meas-
22	ure that is greater than the net present value of the
23	cost of the measure over the life of the measure,
24	using a societal benefit-cost test calculated using the
25	lower of—

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1	"(A) a utility weighted average cost of cap-
2	ital; or
3	"(B) a social discount rate of 3 percent.
4	"(7) CUSTOMER FACILITY SAVINGS.—The term
5	'customer facility savings' means a reduction in end-
6	use electricity or natural gas consumption (including
7	waste heat energy savings) at a facility of an end-
8	use consumer of electricity or natural gas served by
9	a retail electricity supplier or natural gas supplier,
10	as compared to—
11	"(A) in the case of a new facility, con-
12	sumption at a reference facility of average effi-
13	ciency;
14	"(B) in the case of an existing facility,
15	consumption at the facility during a base period
16	of not less than 1 year;
17	"(C) in the case of new equipment that re-
18	places existing equipment at the end of the use-
19	ful life of the existing equipment, consumption
20	by new equipment of average efficiency of the
21	same equipment type, except that customer sav-
22	ings under this subparagraph shall not be
23	counted towards customer savings under sub-
24	paragraph (A) or (B); and

1	"(D) in the case of new equipment that re-
2	places existing equipment with remaining useful
3	life—
4	"(i) consumption of the existing
5	equipment for the remaining useful life of
6	the equipment; and
7	"(ii) thereafter, consumption of new
8	equipment of average efficiency.
9	"(8) ELECTRICITY SAVINGS.—The term 'elec-
10	tricity savings' means reductions in electricity con-
11	sumption achieved through measures implemented
12	after the date of enactment of this section, as deter-
13	mined in accordance with regulations promulgated
14	by the Secretary, that are limited to—
15	"(A) customer facility savings of elec-
16	tricity, adjusted to reflect any associated in-
17	crease in fuel consumption at the facility;
18	"(B) reductions in distribution system
19	losses of electricity achieved by a retail elec-
20	tricity supplier, as compared to losses attrib-
21	utable to new or replacement distribution sys-
22	tem equipment of average efficiency, as defined
23	in regulations promulgated by the Secretary;
24	"(C) CHP savings;

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1	"(D) State and local codes and standards
2	savings of electricity; and
3	"(E) fuel switching energy savings that re-
4	sults in net savings of source energy, as defined
5	in regulations promulgated by the Secretary.
6	"(9) FUEL SWITCHING ENERGY SAVINGS.—
7	"(A) IN GENERAL.—The term 'fuel-switch-
8	ing energy savings' means net energy savings,
9	calculated in accordance with subparagraph
10	(B), from end-user switches from 1 energy
11	source to another, as determined in accordance
12	with regulations promulgated by the Secretary.
13	"(B) CALCULATION.—For purposes of cal-
14	culating fuel-switching net energy savings—
15	"(i) electricity use shall be evaluated
16	based on the average quantity of fuel
17	burned at a new power plant, taking into
18	account existing and planned renewable en-
19	ergy generators to provide each kilowatt
20	hour of electricity;
21	"(ii) electricity and natural gas use
22	shall include losses in the transmission and
23	distribution system; and

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1	"(iii) fuel-switching that is not cost-ef-
2	fective to the end-user shall not be count-
3	ed.
4	"(10) NATURAL GAS SAVINGS.—The term 'nat-
5	ural gas savings' means reductions in natural gas
6	consumption from measures implemented after the
7	date of enactment of this section, as determined in
8	accordance with regulations promulgated by the Sec-
9	retary, that are limited to—
10	"(A) customer facility savings of natural
11	gas, adjusted to reflect any associated increase
12	in electricity consumption or consumption of
13	other fuels at the facility;
14	"(B) reductions in leakage, operational
15	losses, and consumption of natural gas fuel to
16	operate a gas distribution system, achieved by
17	a retail natural gas supplier, as compared to
18	similar leakage, losses, and consumption during
19	a base period of not less than 1 year;
20	"(C) State and local codes and standards
21	savings of natural gas; and
22	"(D) fuel switching energy savings that re-
23	sult in net savings of source energy, as defined
24	in regulations promulgated by the Secretary.

1	"(11) Reporting period.—The term 'report-
2	ing period' means—
3	"(A) calendar year 2021; and
4	"(B) each successive 2-calendar-year pe-
5	riod thereafter.
6	"(12) Retail electricity supplier.—
7	"(A) IN GENERAL.—The term 'retail elec-
8	tricity supplier' means, for any given calendar
9	year, an electric utility that delivers not less
10	than 2,000,000 megawatt hours of electric en-
11	ergy to electric consumers for purposes other
12	than resale during the preceding calendar year.
13	"(B) Inclusions and limitations.—For
14	purposes of determining whether an electric
15	utility qualifies as a retail electricity supplier
16	under subparagraph (A)—
17	"(i) deliveries by any affiliate of an
18	electric utility to electric consumers for
19	purposes other than resale shall be consid-
20	ered to be deliveries by the electric utility;
21	and
22	"(ii) deliveries by any electric utility
23	to a lessee, tenant, or affiliate of the elec-
24	tric utility shall not be considered to be de-
25	liveries to electric consumers.

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1	"(13) RETAIL NATURAL GAS SUPPLIER.—
2	"(A) IN GENERAL.—The term 'retail nat-
3	ural gas supplier' means, for any given calendar
4	year, a local distribution company (as defined
5	in section 2 of the Natural Gas Policy Act of
6	1978~(15 U.S.C. $3301)),$ that delivered to nat-
7	ural gas consumers more than 5,000,000,000
8	cubic feet of natural gas for purposes other
9	than resale during the preceding calendar year.
10	"(B) Inclusions and limitations.—For
11	purposes of determining whether a person
12	qualifies as a retail natural gas supplier under
13	subparagraph (A)—
14	"(i) deliveries of natural gas by any
15	affiliate of a local distribution company to
16	consumers for purposes other than resale
17	shall be considered to be deliveries by the
18	local distribution company; and
19	"(ii) deliveries of natural gas to a les-
20	see, tenant, or affiliate of a local distribu-
21	tion company shall not be considered to be
22	deliveries to natural gas consumers.
23	"(14) STATE AND LOCAL CODES AND STAND-
24	ARDS SAVINGS.—

1	"(A) IN GENERAL.—The term 'State and
2	local codes and standards savings' means a re-
3	duction, due to the adoption and implementa-
4	tion, after the date of enactment of this section,
5	of new or revised appliance and equipment effi-
6	ciency standards or building energy codes, in—
7	"(i) end-use electricity consumption
8	for a retail electricity supplier; or
9	"(ii) natural gas consumption in the
10	service territory of a retail natural gas
11	supplier.
12	"(B) BASELINES.—In calculating State
13	and local codes and standards savings under
14	subparagraph (A)—
15	"(i) the baseline for calculating sav-
16	ings from a new or revised building code
17	shall be the more stringent of—
18	((I)(aa) the 2015 International
19	Energy Conservation Code for resi-
20	dential buildings; or
21	"(bb) the ASHRAE/ANSI/
22	IESNA Standard 90.1–2013 for com-
23	mercial buildings; or

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1	"(II) the applicable State build-
2	ing code in effect on the date of en-
3	actment of this section; and
4	"(ii) the baseline for calculating sav-
5	ings from a new or revised appliance
6	standard shall be the estimated average ef-
7	ficiency of new appliances in the applicable
8	1 or more categories during the 1-year pe-
9	riod preceding the date on which the new
10	or revised standard is adopted.
11	"(15) THIRD-PARTY EFFICIENCY PROVIDER.—
12	The term 'third-party efficiency provider' means any
13	retailer, building owner, energy service company, fi-
14	nancial institution, or other commercial, industrial,
15	or nonprofit entity that is capable of providing elec-
16	tricity savings or natural gas savings in accordance
17	with any procedures, standards, and rules estab-
18	lished by the Secretary under subsections $(b)(1)(D)$
19	and (d).
20	"(16) WASTE HEAT ENERGY SAVINGS.—The
21	term 'waste heat energy savings' means the mechan-
22	ical or thermal energy used at a facility or the elec-
23	tric output of a facility, adjusted to reflect any asso-
24	ciated increase in fuel consumption, that results
25	from a modification of an industrial, commercial, or

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institutional system that commenced operation be-
fore the date of enactment of this section, in order
to recapture mechanical or thermal energy that
would otherwise be wasted, as determined in accord-
ance with regulations promulgated by the Secretary.
"(b) Establishment of Program.—
"(1) REGULATIONS.—Not later than 1 year
after the date of enactment of this section, the Sec-
retary shall, by regulation, establish a program to
implement and enforce the requirements of this sec-
tion, including—
"(A) by establishing evaluation, measure-
ment, and verification procedures and stand-
ards under subsection (d);
"(B) by establishing requirements under
which retail electricity suppliers and retail nat-
ural gas suppliers shall—
"(i) demonstrate, document, and re-
port the compliance of the retail electricity
suppliers and retail natural gas suppliers
with the performance standards under sub-
section (c); and
"(ii) estimate the impact of the stand-
ards on current and future electricity and

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1	natural gas use in the service territories of
2	the suppliers;
3	"(C) by establishing requirements gov-
4	erning applications for, and implementation of,
5	delegated State administration under subsection
6	(f); and
7	"(D) by establishing rules to govern trans-
8	fers of electricity or natural gas savings—
9	"(i) between suppliers and third-party
10	efficiency providers serving the same State;
11	and
12	"(ii) between suppliers and third-
13	party efficiency providers serving different
14	States.
15	"(2) NATIONAL ACADEMY OF SCIENCES
16	STUDY.—In establishing and implementing this sec-
17	tion, the Secretary shall take into consideration a re-
18	port published under subsection $(d)(2)(C)$ .
19	"(3) Coordination with state programs.—
20	In establishing and implementing this section, the
21	Secretary shall, to the maximum extent practicable,
22	preserve the integrity and incorporate best practices
23	of existing State energy efficiency programs.
24	"(4) Savings programs for low-income
25	CUSTOMERS.—In implementing this section, the Sec-

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retary shall encourage retail electricity suppliers and retail natural gas suppliers to ensure that a portion of the customer facility savings achieved for a cal- endar year shall result from programs that target households that are at or below 200 percent of the poverty line (as defined in section 673 of the Com- munity Services Block Grant Act (42 U.S.C. 9902)). "(c) PERFORMANCE STANDARDS.— "(1) COMPLIANCE OBLIGATION.—Not later than May 1 of the calendar year immediately fol- lowing each reporting period— "(A) each retail electricity supplier shall
of the customer facility savings achieved for a cal- endar year shall result from programs that target households that are at or below 200 percent of the poverty line (as defined in section 673 of the Com- munity Services Block Grant Act (42 U.S.C. 9902)). "(c) PERFORMANCE STANDARDS.— "(1) COMPLIANCE OBLIGATION.—Not later than May 1 of the calendar year immediately fol- lowing each reporting period—
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<ul> <li>munity Services Block Grant Act (42 U.S.C. 9902)).</li> <li>"(c) PERFORMANCE STANDARDS.—</li> <li>"(1) COMPLIANCE OBLIGATION.—Not later</li> <li>than May 1 of the calendar year immediately fol-</li> <li>lowing each reporting period—</li> </ul>
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lowing each reporting period—
"(A) each retail electricity supplier shall
submit to the Secretary a report, in accordance
with regulations promulgated by the Secretary,
demonstrating that the retail electricity supplier
has achieved cumulative consistent electricity
savings (adjusted to account for any attrition of
savings measures implemented in prior years)
in each calendar year that are equal to the ap-
plicable percentage of the base quantity of the
retail electricity supplier; and
"(B) each retail natural gas supplier shall
submit to the Secretary a report, in accordance
with regulations promulgated by the Secretary,
demonstrating that it has achieved cumulative

consistent natural gas savings (adjusted to ac count for any attrition of savings measures im plemented in prior years) in each calendar year
 that are equal to the applicable percentage of
 the base quantity of such retail natural gas
 supplier.

7 "(2) STANDARDS FOR 2021 THROUGH 2035.—
8 For each of calendar years 2021 through 2035, the
9 applicable percentages are as follows:

"Calendar Year	Cumulative Electricity Savings Percentage	Cumulative Natural Gas Savings Percentage
2021	1.00	0.50
2022	2.00	1.25
2023	3.00	2.00
2024	4.25	3.00
2025	5.50	4.00
2026	7.00	5.00
2027	8.50	6.00
2028	10.00	7.00
2029	11.50	8.00
2030	13.00	9.00
2031	14.75	10.00
2032	16.50	11.00
2033	18.25	12.00
2034	20.00	13.00
2035	22.00	14.00

10 "(3) SUBSEQUENT YEARS.—

11 "(A) CALENDAR YEARS 2036 THROUGH
12 2045.—Not later than December 31, 2030, the

1	Secretary shall promulgate regulations estab-
2	lishing performance standards (expressed as ap-
3	plicable percentages of base quantity for both
4	cumulative electricity savings and cumulative
5	natural gas savings) for each of calendar years
6	2036 through 2045.
7	"(B) REQUIREMENTS.—The Secretary
8	shall establish standards under this paragraph
9	at levels reflecting the maximum achievable
10	level of cost-effective energy efficiency potential,
11	taking into account—
12	"(i) cost-effective energy savings
13	achieved by leading retail electricity sup-
14	pliers and retail natural gas suppliers;
15	"(ii) opportunities for new State and
16	local codes and standards savings;
17	"(iii) technology improvements; and
18	"(iv) other indicators of cost-effective
19	energy efficiency potential including dif-
20	ferences between States.
21	"(C) MINIMUM PERCENTAGE.—In no case
22	shall the applicable percentages for any cal-
22 23	shall the applicable percentages for any cal- endar year be less than the applicable percent-

1	"(4) Delay of submission for first re-
2	PORTING PERIOD.—
3	"(A) IN GENERAL.—Notwithstanding
4	paragraphs $(1)$ and $(2)$ , for the 2021 reporting
5	period, the Secretary may accept a request from
6	a retail electricity supplier or a retail natural
7	gas supplier to delay the required submission of
8	documentation of all or part of the required
9	savings for up to 2 years.
10	"(B) PLAN FOR COMPLIANCE.—The re-
11	quest for delay under subparagraph (A) shall
12	include a plan for coming into full compliance
13	by the end of the 2022–2023 reporting period.
14	"(5) Applying unused savings to future
15	YEARS.—If savings achieved in a year exceed the
16	performance standards specified in this subsection,
17	any savings in excess of the performance standards
18	may be applied toward performance standards speci-
19	fied for the first 3 years following the year in which
20	the excess savings are achieved.
21	"(d) Evaluation, Measurement, and
22	VERIFICATION OF SAVINGS.—
23	"(1) REGULATIONS.—The regulations promul-
24	gated pursuant to subsection (b) shall—

1	"(i) the Uniform Methods Project of
2	the Department of Energy;
3	"(ii) the National Standard Practice
4	Manual for Assessing the Cost-Effective-
5	ness of Energy Efficiency Resources, devel-
6	oped by the National Efficiency Screening
7	Project; and
8	"(iii) other best practices recognized
9	in the energy efficiency industry; and
10	"(B) include—
11	"(i) procedures and standards for
12	evaluating, measuring, and verifying elec-
13	tricity savings and natural gas savings that
14	count towards the performance standards
15	established under subsection (c) that—
16	"(I) specify the types of energy
17	efficiency and energy conservation
18	measures that may be counted;
19	"(II) require that energy con-
20	sumption estimates for customer fa-
21	cilities or portions of facilities in the
22	applicable base and current years be
23	adjusted, as appropriate, to account
24	for changes in weather, level of pro-
25	duction, and building area;

1	"(III) do not prevent overall load
2	growth due to beneficial electrifica-
3	tion;
4	"(IV) account for the useful life
5	of energy efficiency and energy con-
6	servation measures;
7	"(V) allow for savings from a
8	program to be estimated based on ex-
9	trapolation from a representative sam-
10	ple of participating customers;
11	"(VI) include procedures for cal-
12	culating and documenting CHP sav-
13	ings, fuel-switching energy savings,
14	and waste heat energy savings;
15	"(VII) establish methods for cal-
16	culating codes and standards energy
17	savings, including the use of verified
18	compliance rates;
19	"(VIII) include procedures for
20	calculating and documenting—
21	"(aa) customer facility sav-
22	ings and reductions in distribu-
23	tion system losses of electricity
24	and natural gas that are achieved
25	as a result of smart grid deploy-

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1	ment, as described in section
2	1301 of the Energy Independ-
3	ence and Security Act of 2007
4	(42 U.S.C. 17381); and
5	"(bb) reductions in natural
6	gas distribution system losses at-
7	tributable to pipeline repair and
8	replacement programs;
9	"(IX) count only measures and
10	savings that are additional to busi-
11	ness-as-usual customer purchase prac-
12	tices;
13	"(X) ensure that the retail elec-
14	tricity supplier or retail natural gas
15	supplier claiming the electricity sav-
16	ings or natural gas savings, including
17	State and local codes and standards
18	savings, has played a significant role
19	in achieving the savings (including
20	through the activities of a designated
21	agent of the supplier or through the
22	purchase of transferred electricity sav-
23	ings or natural gas savings);

1	"(XI) avoid double-counting of
2	savings used for compliance with this
3	section, including transferred savings;
4	"(XII) include electricity savings
5	or natural gas savings from programs
6	administered by retail electricity sup-
7	pliers or natural gas suppliers that
8	are funded by Federal, State, or other
9	sources;
10	"(XIII) credit large customer
11	self-directed electricity savings or nat-
12	ural gas savings to the retail elec-
13	tricity supplier or retail natural gas
14	supplier if the large customer receives
15	incentives or rate reductions from the
16	retail electricity supplier or retail nat-
17	ural gas supplier for self-directed en-
18	ergy efficiency improvements;
19	"(XIV) include guidance, as ap-
20	propriate, for additional alternative
21	approaches to evaluate electricity sav-
22	ings and natural gas savings for large
23	commercial and industrial customers
24	in energy-intensive industries that are
25	subject to international competition;

1	"(XV) include procedures for
2	counting electricity savings and nat-
3	ural gas savings achieved by solar
4	heating and cooling technologies, solar
5	light pipe technology, geothermal heat
6	pumps, and other technologies uti-
7	lizing renewable resources that do not
8	produce electricity or gaseous fuel and
9	reduce on-site energy use;
10	"(XVI) include procedures for
11	counting electricity savings and nat-
12	ural gas savings achieved by weather-
13	ization measures, such as installing
14	mechanical insulation, repairing or re-
15	placing heating and cooling systems,
16	repairing or replacing windows and
17	doors, performing air sealing, and re-
18	placing lights and appliances with
19	more energy efficient models;
20	"(XVII) include procedures for
21	counting electricity savings and nat-
22	ural gas savings achieved from in-
23	creased utilization of mechanical insu-
24	lation for new, retrofit, and mainte-
25	nance construction for commercial, in-

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dustrial, public, and nonprofit buildings and facilities;

3 "(XVIII) in any State in which 4 the State regulatory authority has 5 designated 1 or more entities to ad-6 minister electric ratepayer-funded effi-7 ciency programs approved by the 8 State regulatory authority, provide 9 that electricity savings and natural 10 gas savings achieved through those 11 programs shall be distributed propor-12 tionally among retail electricity sup-13 pliers and retail natural gas suppliers; 14 "(XIX) include guidance for re-15 tail electricity suppliers and retail nat-16 ural gas suppliers to calculate and 17 document business-as-usual consump-

- 18 tion projections;
- 19"(XX) include guidance for esti-20mating savings using information21from the database established under22paragraph (3) based on similar meas-23ures and programs in other settings24with appropriate adjustments, as nec-25essary; and

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1	"(XXI) incorporate advances in
2	the science of policy evaluation, such
3	as the use of—
4	"(aa) randomized control
5	trials;
6	"(bb) other experimental
7	and quasi-experimental ap-
8	proaches; and
9	"(cc) large data sets and
10	machine learning techniques; and
11	"(ii) procedures and standards for
12	third-party verification of reported elec-
13	tricity savings or natural gas savings.
14	"(2) NATIONAL ACADEMY OF SCIENCES
15	STUDY.—Not later than 180 days after the date of
16	enactment of this section, the Secretary shall offer
17	to enter into an agreement with the National Acad-
18	emy of Sciences, under which the Academy shall—
19	"(A) evaluate existing state-of-the-art
20	methods for evaluating energy efficiency policies
21	and measures;
22	"(B) identify approaches in program eval-
23	uation literature that may be brought into the
24	energy efficiency domain, including—

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1	"(i) randomized control trials and
2	other experimental or quasi-experimental
3	approaches;
4	"(ii) control of confounding factors;
5	"(iii) longitudinal studies;
6	"(iv) assessments by neutral arbitres;
7	and
8	"(v) disclosure of data for replication;
9	and
10	"(C) not later than 18 months after the
11	date of enactment of this section, publish a re-
12	port that includes—
13	"(i) a description of the evaluation
14	under subparagraph (A);
15	"(ii) a description of the approaches
16	identified under subparagraph (B); and
17	"(iii) recommendations for advancing
18	and adopting rigorous state-of-the-art
19	methods for evaluating energy efficiency
20	policies and measures.
21	"(3) ENERGY EFFICIENCY PROGRAM EVALUA-
22	TION DATABASE.—
23	"(A) IN GENERAL.—The Secretary shall
24	establish and maintain a searchable public data-
25	base, accessible on the website of the Depart-

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1	ment of Energy, that contains a list of random-
2	ized control trials and other experimental or
3	quasi-experimental evaluations of energy effi-
4	ciency programs.
5	"(B) REQUIREMENTS.—Each trial or eval-
6	uation on the list described in subparagraph
7	(A) shall include, at a minimum—
8	"(i) the State in which the trial or
9	evaluation was conducted;
10	"(ii) the type of trial or evaluation
11	$\operatorname{conducted};$
12	"(iii) the type of program evaluated;
13	"(iv) an abstract or summary of the
14	program evaluated;
15	"(v) a summary of the trial or evalua-
16	tion methodology;
17	"(vi) the revealed energy savings from
18	the trial or evaluation; and
19	"(vii) to the extent practicable, the
20	underlying data used to conduct the trial
21	or evaluation.
22	"(e) Enforcement and Judicial Review.—
23	"(1) REVIEW OF RETAIL SUPPLIER REPORTS.—
24	"(A) IN GENERAL.—The Secretary shall
25	review each report submitted to the Secretary

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by a retail electricity supplier or retail natural 2 gas supplier under subsection (c) to verify that 3 the applicable performance standards under 4 subsection (c) have been met.

5 "(B) EXCLUSION.—In determining compli-6 ance with the applicable performance standards under subsection (c), the Secretary shall ex-7 8 clude reported electricity savings or natural gas 9 savings that are not adequately demonstrated 10 and documented, in accordance with the regula-11 tions promulgated under subsections (b) and 12 (c).

13 "(2) PENALTY FOR FAILURE TO DOCUMENT 14 ADEQUATE SAVINGS.—If a retail electricity supplier or a retail natural gas supplier fails to demonstrate 15 16 compliance with an applicable performance standard 17 under subsection (c), or to pay to the State an appli-18 cable alternative compliance payment under sub-19 section (f)(3), the Secretary shall assess against the 20 retail electricity supplier or retail natural gas sup-21 plier a civil penalty for each failure in an amount 22 equal to, as adjusted for inflation in accordance with 23 such regulations as the Secretary may promulgate— "(A) \$100 per megawatt hour of electricity 24 25

savings or alternative compliance payment that

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1	the retail electricity supplier failed to achieve or
2	make, respectively; or
3	"(B) \$10 per million Btu of natural gas
4	savings or alternative compliance payment that
5	the retail natural gas supplier failed to achieve
6	or make, respectively.
7	"(3) Offsetting state penalties.—The
8	Secretary shall reduce the amount of any penalty
9	under paragraph (2) by the amount paid by the rel-
10	evant retail electricity supplier or retail natural gas
11	supplier to a State for failure to comply with the re-
12	quirements of a State energy efficiency resource
13	standard during the same compliance period.
14	"(4) Use of payments.—
15	"(A) Definition of covered rate.—In
16	this paragraph, the term 'covered rate' means
17	the proportion that—
18	"(i) the amount of penalty payments
19	made by retail electricity suppliers and
20	natural gas suppliers in a State under
21	paragraph (2); bears to
22	"(ii) the total amount of penalty pay-
23	ments collected by the Secretary under
24	that paragraph.

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1	"(B) USE OF PAYMENTS.—Penalty pay-
2	ments collected under paragraph $(2)$ by the
3	Secretary shall be—
4	"(i) provided to each State at the cov-
5	ered rate for the State; and
6	"(ii) used by the State to implement
7	cost-effective energy efficiency programs
8	that—
9	"(I) to the maximum extent prac-
10	ticable, achieve electricity savings and
11	natural gas savings in the State suffi-
12	cient to make up the deficit associated
13	with the penalty payments; and
14	"(II) can be measured and
15	verified in accordance with the appli-
16	cable procedures and standards estab-
17	lished under subsection (d).
18	"(5) Enforcement procedures.—The Sec-
19	retary shall assess a civil penalty, as provided under
20	paragraph (2), in accordance with the procedures
21	described in section 333(d) of the Energy Policy and
22	Conservation Act (42 U.S.C. 6303(d)).
23	"(f) STATE ADMINISTRATION.—
24	"(1) IN GENERAL.—On receipt of an applica-
25	tion from the Governor of a State (including the

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Mayor of the District of Columbia), the Secretary
 may delegate to the State responsibility for admin istering this section within the territory of the State
 if the Secretary determines that the State will imple ment an energy efficiency program that meets or exceeds the requirements of this section.

7 "(2) SECRETARIAL DETERMINATION.—Not
8 later than 180 days after the date on which a com9 plete application is received by the Secretary, the
10 Secretary shall make a substantive determination
11 approving or disapproving a State application, after
12 public notice and comment.

13 "(3) ALTERNATIVE COMPLIANCE PAYMENTS.— 14 "(A) IN GENERAL.—As part of an applica-15 tion submitted under paragraph (1), a State 16 may permit retail electricity suppliers or retail 17 natural gas suppliers to pay to the State, by 18 not later than May 1 of the calendar year im-19 mediately following the applicable reporting pe-20 riod, an alternative compliance payment in an 21 amount equal to, as adjusted for inflation in ac-22 cordance with such regulations as the Secretary 23 may promulgate, not less than—

24 "(i) \$50 per megawatt hour of elec25 tricity savings needed to make up any def-

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1	icit with regard to a compliance obligation
2	under the applicable performance stand-
3	ard; or
4	"(ii) \$5 per million Btu of natural gas
5	savings needed to make up any deficit with
6	regard to a compliance obligation under
7	the applicable performance standard.
8	"(B) USE OF PAYMENTS.—Alternative
9	compliance payments collected by a State under
10	subparagraph (A) shall be used by the State to
11	administer the delegated authority of the State
12	under this section and to implement cost-effec-
13	tive energy efficiency programs that—
14	"(i) to the maximum extent prac-
15	ticable, achieve electricity savings and nat-
16	ural gas savings in the State sufficient to
17	make up the deficit associated with the al-
18	ternative compliance payments; and
19	"(ii) can be measured and verified in
20	accordance with the applicable procedures
21	and standards established under subsection
22	(d).
23	"(4) REVIEW OF STATE IMPLEMENTATION.—
24	"(A) PERIODIC REVIEW.—Every 2 years,
25	the Secretary shall review State implementation

1	of this section for conformance with the re-
2	quirements of this section in approximately $\frac{1}{2}$
3	of the States that have received approval under
4	this subsection to administer the program, so
5	that each State shall be reviewed not less fre-
6	quently than once every 4 years.
7	"(B) REPORT.—To facilitate the review
8	under subparagraph (A), the Secretary may re-
9	quire the State to submit a report dem-
10	onstrating the conformance of the State with
11	the requirements of this section.
12	"(C) Deficiencies.—
13	"(i) IN GENERAL.—In completing a
14	review under this paragraph, if the Sec-
15	retary finds deficiencies, the Secretary
16	shall—
17	"(I) notify the State of the defi-
18	ciencies;
19	"(II) direct the State to correct
20	the deficiencies; and
21	"(III) require the State to report
22	to the Secretary on progress made by
23	not later than 180 days after the date
24	on which the State receives notice
25	under subclause (I).

1	"(ii) Substantial deficiencies.—If
2	the deficiencies are substantial, the Sec-
3	retary shall—
4	"(I) disallow the reported elec-
5	tricity savings or natural gas savings
6	that the Secretary determines are not
7	credible due to deficiencies;
8	"(II) re-review the State not
9	later than 2 years after the date on
10	which the original review was com-
11	pleted; and
12	"(III) if substantial deficiencies
13	remain uncorrected after the review
14	provided for under subclause (II), re-
15	voke the authority of the State to ad-
16	minister the program established
17	under this section.
18	"(5) Cost recovery, fixed cost recovery,
19	and shareholder incentives.—The Secretary
20	shall encourage State utility regulatory commissions
21	to review the rules and regulations of the Commis-
22	sion to ensure that utilities under the jurisdiction of
23	the Commission may—
24	"(A) recover the direct costs of energy effi-
25	ciency programs;

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1	"(B)(i) fully recover authorized fixed costs
2	from customers, including recovery of revenue
3	associated with fixed costs that was lost due to
4	annual sales that were lower than forecasted;
5	but
6	"(ii) return to customers the revenue asso-
7	ciated with fixed costs collected in excess of the
8	authorized amount under clause (i); and
9	"(C) earn a performance-based incentive
10	for shareholders for the achievement of energy
11	efficiency standards.
12	"(6) EVALUATION, MEASUREMENT, AND
13	VERIFICATION INCENTIVES.—The Secretary shall en-
14	courage States that have delegated authority to ad-
15	minister this section to provide incentives to retail
16	electricity suppliers, retail natural gas suppliers, and
17	third-party efficiency providers to use randomized
18	control trials and other experimental or quasi-experi-
19	mental approaches to evaluate energy efficiency
20	measures and programs within the State.
21	"(g) INFORMATION AND REPORTS.—In accordance
22	with section 13 of the Federal Energy Administration Act
23	of 1974 (15 U.S.C. 772), the Secretary may require any
24	retail electricity supplier, retail natural gas supplier, third-
25	party efficiency provider, or any other entity that the Sec-

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retary determines appropriate, to provide any information
 the Secretary determines appropriate to carry out this sec tion.

4 "(h) STATE LAW.—Nothing in this section dimin-5 ishes or qualifies any authority of a State or political subdivision of a State to adopt or enforce any law or regula-6 7 tion respecting electricity savings or natural gas savings, 8 including any law or regulation establishing energy effi-9 ciency requirements that are more stringent than those 10 under this section, except that no State law or regulation shall relieve any person of any requirement otherwise ap-11 plicable under this section.". 12

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

"Sec. 609. Rural and remote communities electrification grants.

"Sec. 610. Federal energy efficiency resource standard for retail electricity and natural gas suppliers.".