

117TH CONGRESS
1ST SESSION

H. R. 5889

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

IN THE HOUSE OF REPRESENTATIVES

NOVEMBER 4, 2021

Mr. WELCH (for himself and Ms. CLARKE of New York) introduced the following bill; which was referred to the Committee on Energy and Commerce

A BILL

To amend title VI of the Public Utility Regulatory Policies Act of 1978 to establish a Federal energy efficiency resource standard for retail electricity suppliers and retail 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; FINDINGS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “American Energy Efficiency Act”.

6 (b) FINDINGS.—Congress finds that—

7 (1) the Federal energy efficiency resource
8 standard established by section 610 of the Public

1 Utility Regulatory Policies Act of 1978 (as added by
2 this Act)—

3 (A) establishes nationwide minimum levels
4 of electricity and natural gas savings to be
5 achieved through utility efficiency programs,
6 building energy codes, appliance standards, and
7 related efficiency measures; and

8 (B) rewards energy-saving improvements
9 achieved through—

10 (i) end-use energy efficiency upgrades;

11 (ii) reduced losses in transmission and
12 distribution of energy; and

13 (iii) fuel switching, to the extent that
14 the switching results in reduced primary
15 energy use; and

16 (2) in light of the cost-effective energy effi-
17 ciency opportunities that exist across the United
18 States in every sector of the economy, retail elec-
19 tricity suppliers, retail natural gas suppliers, and
20 States should—

21 (A) include energy efficiency as a resource
22 in utility planning and procurement activities;
23 and

1 (B) seek to achieve all energy efficiency
 2 measures that are available at lower cost than
 3 other energy supply options.

4 **SEC. 2. ENERGY EFFICIENCY RESOURCE STANDARD FOR**
 5 **RETAIL ELECTRICITY AND NATURAL GAS**
 6 **SUPPLIERS.**

7 Title VI of the Public Utility Regulatory Policies Act
 8 of 1978 (16 U.S.C. 2601 et seq.) is amended by adding
 9 at the end the following:

10 **“SEC. 610. FEDERAL ENERGY EFFICIENCY RESOURCE**
 11 **STANDARD FOR RETAIL ELECTRICITY AND**
 12 **NATURAL GAS SUPPLIERS.**

13 “(a) DEFINITIONS.—In this section:

14 “(1) AFFILIATE.—The term ‘affiliate’ when
 15 used in relation to a person, means another person
 16 that owns or controls, is owned or controlled by, or
 17 is under common ownership control with, that per-
 18 son, as determined under regulations promulgated
 19 by the Secretary.

20 “(2) ASHRAE, ANSI, AND IESNA.—The terms
 21 ‘ASHRAE’, ‘ANSI’, and ‘IESNA’ mean the Amer-
 22 ican Society of Heating, Refrigerating and Air Con-
 23 ditioning Engineers, the American National Stand-
 24 ards Institute, and the Illuminating Engineering So-
 25 ciety of North America, respectively.

1 “(3) BASE QUANTITY.—

2 “(A) IN GENERAL.—The term ‘base quan-
3 tity’, with respect to a retail electricity supplier
4 or retail natural gas supplier, means, for each
5 calendar year for which a performance standard
6 is specified or established under subsection (c),
7 the average annual quantity of electricity deliv-
8 ered by the retail electricity supplier to electric
9 consumers, or the average annual quantity of
10 natural gas delivered by the retail natural gas
11 supplier to gas consumers, during the 3 cal-
12 endar years immediately preceding the year
13 that compliance is required under subsection
14 (c)(1).

15 “(B) EXCLUSION.—The term ‘base quan-
16 tity’, with respect to a retail natural gas sup-
17 plier, does not include natural gas delivered for
18 purposes of electricity generation.

19 “(4) CHP SAVINGS.—The term ‘CHP savings’
20 means—

21 “(A) CHP system savings from a combined
22 heat and power system that commences oper-
23 ation after the date of enactment of this sec-
24 tion; and

1 “(B) the increase in CHP system savings
2 from upgrading or replacing, after the date of
3 enactment of this section, a combined heat and
4 power system that commenced operation on or
5 before the date of enactment of this section.

6 “(5) CHP SYSTEM SAVINGS.—The term ‘CHP
7 system savings’ means the electric output, and the
8 electricity saved due to the mechanical output, of a
9 combined heat and power system, adjusted to reflect
10 any increase in fuel consumption by that system as
11 compared to the fuel that would have been required
12 to produce an equivalent useful thermal energy out-
13 put in a separate thermal-only system, as deter-
14 mined in accordance with regulations promulgated
15 by the Secretary.

16 “(6) CODES AND STANDARDS SAVINGS.—The
17 term ‘codes and standards savings’ means a reduc-
18 tion in electricity or natural gas consumption as a
19 result of the adoption and implementation, after the
20 date of enactment of this section, of new or revised
21 appliance and equipment efficiency standards or
22 building energy codes.

23 “(7) COMBINED HEAT AND POWER SYSTEM.—
24 The term ‘combined heat and power system’ means
25 a system that uses the same energy source both for

1 the generation of electrical or mechanical power and
2 the production of steam or another form of useful
3 thermal energy, if—

4 “(A) the system meets any requirements
5 relating to efficiency and other operating char-
6 acteristics that the Secretary promulgates by
7 regulation; and

8 “(B) the net wholesale sales of electricity
9 by the applicable facility do not exceed 50 per-
10 cent of total annual electric generation by the
11 facility.

12 “(8) COST-EFFECTIVE.—The term ‘cost-effec-
13 tive’ means, with respect to an energy efficiency pro-
14 gram, that the program achieves a net present value
15 of economic benefits over the life of the implemented
16 measures, both directly to the energy consumer and
17 to the economy, that is greater than the net present
18 value of the cost of the program over the life of the
19 program, both directly to the energy consumer and
20 to the economy. The cost-effectiveness of an energy
21 efficiency program shall be calculated using a soci-
22 etal benefit-cost test that uses the lower of a utility
23 weighted average cost of capital or a social discount
24 rate of 3 percent.

1 “(9) CUSTOMER FACILITY SAVINGS.—The term
2 ‘customer facility savings’ means a reduction in elec-
3 tricity or natural gas consumption, including waste
4 heat energy savings, at a facility of an electricity
5 consumer served by a retail electricity supplier or a
6 gas consumer served by a natural gas supplier, as
7 compared to—

8 “(A) in the case of new equipment that re-
9 places existing equipment with remaining useful
10 life—

11 “(i) consumption of the existing
12 equipment for the remaining useful life of
13 the equipment; and

14 “(ii) thereafter, consumption by new
15 equipment of average efficiency of the
16 same equipment type;

17 “(B) in the case of new equipment other
18 than new equipment described in subparagraph
19 (A), consumption by new equipment of average
20 efficiency of the same equipment type;

21 “(C) in the case of consumption, other
22 than consumption described in subparagraphs
23 (A) and (B), at an existing facility, consump-
24 tion at the facility during a base period of not
25 less than 1 year; and

1 “(D) in the case of consumption, other
2 than consumption described in subparagraphs
3 (A) and (B), at a new facility, consumption at
4 a reference new facility of average efficiency for
5 new facilities of the same type.

6 “(10) ELECTRICITY SAVINGS.—The term ‘elec-
7 tricity savings’ means reductions in electricity con-
8 sumption or losses, as determined in accordance
9 with regulations promulgated by the Secretary,
10 that—

11 “(A) are achieved through measures imple-
12 mented after the date of enactment of this sec-
13 tion;

14 “(B) are additional to business-as-usual—

15 “(i) customer purchase practices; and

16 “(ii) distribution system efficiency;

17 “(C) the retail electricity supplier claiming
18 or transferring the electricity savings has
19 played a significant role in achieving;

20 “(D) occur in the service territory of the
21 retail electricity supplier claiming or transfer-
22 ring the electricity savings; and

23 “(E) are limited to—

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

4 “(ii) reductions in distribution system
5 losses of electricity achieved by a retail
6 electricity supplier, as compared to losses
7 that would occur with new distribution sys-
8 tem equipment of average efficiency;

9 “(iii) CHP savings;

10 “(iv) codes and standards savings of
11 electricity; and

12 “(v) fuel-switching energy savings
13 that result in net savings of electricity.

14 “(11) FUEL-SWITCHING ENERGY SAVINGS.—

15 “(A) IN GENERAL.—The term ‘fuel-switch-
16 ing energy savings’ means net energy savings,
17 calculated in accordance with subparagraph
18 (B), from consumer switches from one energy
19 source to another, as determined in accordance
20 with regulations promulgated by the Secretary.

21 “(B) CALCULATION.—For purposes of cal-
22 culating net energy savings under subparagraph
23 (A)—

24 “(i) electricity consumption shall be
25 evaluated based on the average additional

1 quantity of fuel burned at power plants to
2 supply each additional kilowatt-hour of
3 electricity consumption in the region;

4 “(ii) electricity and natural gas con-
5 sumption shall include losses in the trans-
6 mission and distribution systems; and

7 “(iii) fuel-switching that does not re-
8 sult in net cost savings to the consumer
9 shall not be counted.

10 “(12) GAS CONSUMER.—The term ‘gas con-
11 sumer’ has the meaning given such term in section
12 302.

13 “(13) NATURAL GAS SAVINGS.—The term ‘nat-
14 ural gas savings’ means reductions in natural gas
15 consumption or losses, as determined in accordance
16 with regulations promulgated by the Secretary,
17 that—

18 “(A) are achieved through measures imple-
19 mented after the date of enactment of this sec-
20 tion;

21 “(B) are additional to business-as-usual—

22 “(i) customer purchase practices; and

23 “(ii) distribution system efficiency;

1 “(C) the retail natural gas supplier claim-
2 ing or transferring the natural gas savings has
3 played a significant role in achieving;

4 “(D) occur in the service territory of the
5 retail natural gas supplier claiming or transfer-
6 ring the natural gas savings; and

7 “(E) are limited to—

8 “(i) customer facility savings of nat-
9 ural gas, adjusted to reflect any associated
10 increase in electricity consumption or con-
11 sumption of other fuels at the facility;

12 “(ii) reductions in leakage, operational
13 losses, and consumption of natural gas to
14 operate a gas distribution system, achieved
15 by a retail natural gas supplier, as com-
16 pared to similar leakage, losses, and con-
17 sumption during a base period of not less
18 than 1 year;

19 “(iii) codes and standards savings of
20 natural gas; and

21 “(iv) fuel-switching energy savings
22 that results in net savings of natural gas.

23 “(14) PERFORMANCE STANDARD.—The term
24 ‘performance standard’ means a standard—

1 “(A) established for a calendar year for cu-
 2 mulative electricity savings or cumulative nat-
 3 ural gas savings that is expressed as a percent-
 4 age of base quantity; and

5 “(B) for each of calendar years 2021
 6 through 2035, that is labeled as cumulative
 7 electricity savings percentage or cumulative nat-
 8 ural gas savings percentage, as applicable, in
 9 the table under subsection (c)(2).

10 “(15) POWER POOL.—The term ‘power pool’
 11 means an association of two or more interconnected
 12 electric systems that have entered into an agreement
 13 to coordinate operations and planning for improved
 14 reliability and efficiencies, including a Regional
 15 Transmission Organization or an Independent Sys-
 16 tem Operator, as determined by the Secretary.

17 “(16) REPORTING PERIOD.—The term ‘report-
 18 ing period’ means—

19 “(A) calendar years 2021 through 2023;
 20 and

21 “(B) each successive 2-calendar-year pe-
 22 riod thereafter.

23 “(17) RETAIL ELECTRICITY SUPPLIER.—

24 “(A) IN GENERAL.—The term ‘retail elec-
 25 tricity supplier’ means, for any calendar year,

1 an electric utility that delivered not fewer than
2 1,000,000 megawatt hours of electricity to elec-
3 tric consumers for purposes other than resale
4 during the preceding calendar year.

5 “(B) INCLUSIONS AND LIMITATIONS.—For
6 purposes of determining whether an electric
7 utility qualifies as a retail electricity supplier
8 under subparagraph (A)—

9 “(i) deliveries by any affiliate of the
10 electric utility to electric consumers for
11 purposes other than resale shall be consid-
12 ered to be deliveries by the electric utility;
13 and

14 “(ii) deliveries by any electric utility
15 to a lessee, tenant, or affiliate of the elec-
16 tric utility shall not be considered to be de-
17 liveries to electric consumers.

18 “(18) RETAIL NATURAL GAS SUPPLIER.—

19 “(A) IN GENERAL.—The term ‘retail nat-
20 ural gas supplier’ means, for any calendar year,
21 a local distribution company (as defined in sec-
22 tion 2 of the Natural Gas Policy Act of 1978),
23 that delivered to gas consumers more than
24 5,000,000,000 cubic feet of natural gas for pur-

1 poses other than resale during the preceding
2 calendar year.

3 “(B) INCLUSIONS AND LIMITATIONS.—For
4 purposes of determining whether a local dis-
5 tribution company qualifies as a retail natural
6 gas supplier under subparagraph (A)—

7 “(i) deliveries of natural gas by any
8 affiliate of a local distribution company to
9 consumers for purposes other than resale
10 shall be considered to be deliveries by the
11 local distribution company; and

12 “(ii) deliveries of natural gas to a les-
13 see, tenant, or affiliate of a local distribu-
14 tion company shall not be considered to be
15 deliveries to gas consumers.

16 “(19) STATE REGULATORY AUTHORITY.—The
17 term ‘State regulatory authority’ means any State
18 agency which has ratemaking authority with respect
19 to—

20 “(A) the sale of natural gas by any gas
21 utility (other than by such State agency); or

22 “(B) the sale of electric energy by any
23 electric utility (other than such State agency),
24 and in the case of an electric utility with re-
25 spect to which the Tennessee Valley Authority

1 has ratemaking authority, such term means the
2 Tennessee Valley Authority.

3 “(20) THIRD-PARTY EFFICIENCY PROVIDER.—
4 The term ‘third-party efficiency provider’ means any
5 retailer, building owner, energy service company, fi-
6 nancial institution, or other commercial, industrial,
7 or nonprofit entity that is capable of providing elec-
8 tricity savings or natural gas savings in accordance
9 with subsections (d) and (e).

10 “(21) WASTE HEAT ENERGY SAVINGS.—

11 “(A) IN GENERAL.—The term ‘waste heat
12 energy savings’ means a reduction in electricity
13 or natural gas consumption that results from a
14 modification of an industrial or commercial sys-
15 tem that commenced operation before the date
16 of enactment of this section, in order to recap-
17 ture electrical, mechanical, or thermal energy
18 that would otherwise be wasted, as determined
19 in accordance with regulations promulgated by
20 the Secretary.

21 “(B) INCLUSION.—Waste heat energy sav-
22 ings shall be included as part of customer facil-
23 ity savings.

24 “(b) ESTABLISHMENT.—

1 “(1) REGULATIONS.—Not later than 1 year
2 after the date of enactment of this section, the Sec-
3 retary shall, by regulation, establish a program to
4 implement and enforce the requirements of this sec-
5 tion, including by—

6 “(A) establishing measurement and
7 verification procedures and standards under
8 subsection (e);

9 “(B) establishing requirements under
10 which retail electricity suppliers and retail nat-
11 ural gas suppliers shall—

12 “(i) demonstrate, document, and re-
13 port the compliance of the retail electricity
14 suppliers and retail natural gas suppliers
15 with the performance standards under sub-
16 section (c); and

17 “(ii) estimate the impact of the per-
18 formance standards on current and future
19 electricity and natural gas consumption in
20 the service territories of the suppliers; and

21 “(C) establishing requirements governing
22 applications for, and implementation of, State
23 programs under subsection (g).

24 “(2) COORDINATION WITH STATE PROGRAMS.—
25 In establishing and implementing this section, the

1 Secretary shall, to the maximum extent practicable,
2 preserve the integrity and incorporate best practices
3 of existing State energy efficiency programs.

4 “(c) PERFORMANCE STANDARDS.—

5 “(1) COMPLIANCE OBLIGATION.—Not later
6 than May 1 of the calendar year immediately fol-
7 lowing each reporting period—

8 “(A) each retail electricity supplier shall
9 submit to the Secretary a report, in accordance
10 with regulations promulgated by the Secretary,
11 demonstrating that such retail electricity sup-
12 plier has achieved cumulative electricity savings
13 (adjusted to account for any attrition of savings
14 from measures implemented in prior years) in
15 each calendar year of such reporting period that
16 are equal to or greater than the applicable per-
17 formance standard; and

18 “(B) each retail natural gas supplier shall
19 submit to the Secretary a report, in accordance
20 with regulations promulgated by the Secretary,
21 demonstrating that such retail natural gas sup-
22 plier has achieved cumulative natural gas sav-
23 ings (adjusted to account for any attrition of
24 savings from measures implemented in prior
25 years) in each calendar year of such reporting

1 period that are equal to or greater than the ap-
2 plicable performance standard.

3 “(2) PERFORMANCE STANDARDS FOR 2021
4 THROUGH 2035.—For each of calendar years 2021
5 through 2035, the performance standards are as fol-
6 lows:

“Calendar Year	Cumulative Electricity Savings Percentage	Cumulative Natural Gas Savings Percentage
2021	1.00	0.50
2022	2.25	1.25
2023	3.75	2.00
2024	5.25	3.00
2025	7.00	4.00
2026	9.00	5.00
2027	11.00	5.50
2028	13.00	7.00
2029	15.00	8.50
2030	17.00	10.00
2031	19.00	12.00
2032	21.00	14.00
2033	23.00	16.00
2034	25.00	18.00
2035	27.00	20.00

7 “(3) SUBSEQUENT YEARS.—

8 “(A) CALENDAR YEARS 2036 THROUGH
9 2045.—Not later than December 31, 2033, the
10 Secretary shall promulgate regulations estab-
11 lishing performance standards for each of cal-
12 endar years 2036 through 2045.

1 “(B) SUBSEQUENT EXTENSIONS.—Except
2 as provided in subparagraph (A), not later than
3 the last day of the penultimate reporting period
4 for which performance standards have been es-
5 tablished under this paragraph, the Secretary
6 shall promulgate regulations establishing per-
7 formance standards for the 10-calendar-year
8 period following the last calendar year for which
9 performance standards previously were estab-
10 lished.

11 “(C) REQUIREMENTS.—The Secretary
12 shall establish performance standards under
13 this paragraph at levels reflecting the maximum
14 achievable level of cost-effective energy effi-
15 ciency potential, taking into account—

16 “(i) cost-effective energy savings
17 achieved by leading retail electricity sup-
18 pliers and retail natural gas suppliers;

19 “(ii) opportunities for new codes and
20 standards savings;

21 “(iii) technology improvements; and

22 “(iv) other indicators of cost-effective
23 energy efficiency potential.

24 “(D) MINIMUM PERCENTAGE.—In no case
25 shall a performance standard established under

1 this paragraph for any calendar year be less
2 than the applicable performance standard for
3 calendar year 2035 (including any increase in
4 the standard for calendar year 2035 established
5 pursuant to paragraph (4)).

6 “(4) MIDCOURSE REVIEW AND ADJUSTMENT OF
7 PERFORMANCE STANDARDS.—

8 “(A) IN GENERAL.—Not later than De-
9 cember 31, 2029, and at 10-year intervals
10 thereafter, the Secretary shall—

11 “(i) review the most recent perform-
12 ance standards established under para-
13 graph (2) or (3); and

14 “(ii) increase the performance stand-
15 ards by regulation if the Secretary deter-
16 mines that additional cost-effective energy
17 efficiency potential is achievable, taking
18 into account the requirements described in
19 paragraph (3)(C).

20 “(B) LEAD TIME.—If the Secretary revises
21 performance standards under this paragraph,
22 the regulations shall provide adequate lead time
23 to ensure that compliance with the increased
24 performance standards is feasible.

1 “(5) DELAY OF SUBMISSION FOR FIRST RE-
2 PORTING PERIOD.—

3 “(A) IN GENERAL.—Notwithstanding
4 paragraphs (1) and (2), for the first 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 second reporting period.

14 “(6) APPLYING UNUSED SAVINGS TO FUTURE
15 YEARS.—If electricity savings or natural gas savings
16 achieved by a retail electricity supplier or retail nat-
17 ural gas supplier in a year exceed the applicable per-
18 formance standard specified or established under
19 this subsection, any savings in excess of the per-
20 formance standard may be applied toward perform-
21 ance standards specified or established for any of
22 the 2 immediately subsequent compliance years.

23 “(d) TRANSFERS OF ELECTRICITY OR NATURAL GAS
24 SAVINGS.—

1 “(1) BILATERAL CONTRACTS FOR SAVINGS
2 TRANSFERS.—Subject to the limitations of this sub-
3 section, a retail electricity supplier or retail natural
4 gas supplier may use electricity savings or natural
5 gas savings purchased pursuant to a bilateral con-
6 tract from another retail electricity supplier or retail
7 natural gas supplier, a State, or a third-party effi-
8 ciency provider to meet the applicable performance
9 standard under subsection (c).

10 “(2) REQUIREMENTS.—Electricity savings or
11 natural gas savings purchased and used for compli-
12 ance under this subsection shall be—

13 “(A) measured and verified in accordance
14 with subsection (e);

15 “(B) reported in accordance with sub-
16 section (c); and

17 “(C) achieved within the same State as is
18 served by the retail electricity supplier or retail
19 natural gas supplier.

20 “(3) EXCEPTION.—Notwithstanding paragraph
21 (2)(C), a State regulatory authority may authorize a
22 retail electricity supplier or a retail natural gas sup-
23 plier regulated by the State regulatory authority to
24 purchase savings achieved in a different State, if—

1 “(A) the savings are achieved within the
2 same power pool; and

3 “(B) the State regulatory authority that
4 regulates the purchaser oversees the measure-
5 ment and verification of the savings pursuant to
6 the procedures and standards applicable in the
7 State in which the purchaser is located.

8 “(4) REGULATORY APPROVAL.—Nothing in this
9 subsection limits or affects the authority of a State
10 regulatory authority to require a retail electricity
11 supplier or retail natural gas supplier that is regu-
12 lated by the State regulatory authority to obtain the
13 authorization or approval of the State regulatory au-
14 thority of a contract for transfer of electricity sav-
15 ings or natural gas savings under this subsection.

16 “(5) LIMITATIONS.—To optimize the achieve-
17 ment of cost-effective energy efficiency potential, the
18 Secretary may prescribe such limitations as the Sec-
19 retary determines appropriate with respect to the
20 proportion of the compliance obligation of a retail
21 electricity or natural gas supplier under the applica-
22 ble performance standards under subsection (c) that
23 may be met using electricity savings or natural gas
24 savings that are purchased under this subsection.

1 “(e) EVALUATION, MEASUREMENT, AND
2 VERIFICATION OF SAVINGS.—

3 “(1) REGULATIONS.—The regulations promul-
4 gated pursuant to subsection (b) shall—

5 “(A) be based on—

6 “(i) the Uniform Methods Project of
7 the Department of Energy;

8 “(ii) the National Standard Practice
9 Manual for Assessing the Cost-Effective-
10 ness of Energy Efficiency Resources, devel-
11 oped by the National Efficiency Screening
12 Project; and

13 “(iii) other best practices recognized
14 in the energy efficiency industry; and

15 “(B) include—

16 “(i) procedures and standards for
17 evaluating, measuring, and verifying elec-
18 tricity savings and natural gas savings that
19 count towards the performance standards
20 under subsection (c) that—

21 “(I) specify the types of energy
22 efficiency and energy conservation
23 measures that may be counted;

24 “(II) require that energy con-
25 sumption estimates for customer fa-

1 cilities or portions of facilities in the
2 applicable base and current years be
3 adjusted, as appropriate, to account
4 for changes in weather, level of pro-
5 duction, and building area;

6 “(III) do not prevent overall load
7 growth due to beneficial electrifica-
8 tion;

9 “(IV) account for the useful life
10 of energy efficiency and energy con-
11 servation measures;

12 “(V) allow for savings from a
13 program to be estimated based on ex-
14 trapolation from a representative sam-
15 ple of participating customers;

16 “(VI) include procedures for cal-
17 culating and documenting CHP sav-
18 ings, fuel-switching energy savings,
19 and waste heat energy savings;

20 “(VII) establish methods for cal-
21 culating codes and standards savings,
22 including—

23 “(aa) the use of verified
24 compliance rates;

1 “(bb) requiring that the
2 baseline for calculating savings
3 from building energy codes shall
4 be the more stringent of—

5 “(AA) the 2021 Inter-
6 national Energy Conserva-
7 tion Code for residential
8 buildings, or the ASHRAE/
9 ANSI/IESNA Standard
10 90.1–2019 for commercial
11 buildings; or

12 “(BB) the applicable
13 State building code in effect
14 on the date of enactment of
15 this section; and

16 “(cc) requiring that the
17 baseline for calculating savings
18 from appliance and equipment
19 standards shall be the average ef-
20 ficiency of new appliances and
21 equipment in the applicable one
22 or more categories prior to the
23 adoption and implementation of
24 the new standard;

1 “(VIII) include procedures for
2 calculating and documenting—

3 “(aa) customer facility sav-
4 ings and reductions in distribu-
5 tion system losses of electricity
6 and natural gas that are achieved
7 as a result of smart grid deploy-
8 ment, as described in section
9 1301 of the Energy Independ-
10 ence and Security Act of 2007;
11 and

12 “(bb) reductions in natural
13 gas distribution system losses at-
14 tributable to pipeline repair and
15 replacement programs;

16 “(IX) count only measures and
17 savings that are additional to busi-
18 ness-as-usual customer purchase prac-
19 tices;

20 “(X) ensure that the retail elec-
21 tricity supplier or retail natural gas
22 supplier claiming the electricity sav-
23 ings or natural gas savings, including
24 State and local codes and standards
25 savings, has played a significant role

1 in achieving the savings (including
2 through the activities of a designated
3 agent of the supplier);

4 “(XI) avoid double-counting of
5 savings used for compliance with this
6 section, including transferred savings;

7 “(XII) include electricity savings
8 or natural gas savings from programs
9 administered by retail electricity sup-
10 pliers or natural gas suppliers that
11 are funded by Federal, State, or other
12 sources, unless the funding source
13 specifies otherwise;

14 “(XIII) credit large customer
15 self-directed electricity savings or nat-
16 ural gas savings to the retail elec-
17 tricity supplier or retail natural gas
18 supplier if the large customer receives
19 incentives or rate reductions from the
20 retail electricity supplier or retail nat-
21 ural gas supplier for self-directed en-
22 ergy efficiency improvements;

23 “(XIV) include guidance, as ap-
24 propriate, for additional alternative
25 approaches to evaluate electricity sav-

1 ings and natural gas savings for large
2 commercial and industrial customers
3 in energy-intensive industries that are
4 subject to international competition;

5 “(XV) include procedures for
6 counting electricity savings and nat-
7 ural gas savings achieved by solar
8 heating and cooling technologies, solar
9 light pipe technology, geothermal heat
10 pumps, and other technologies uti-
11 lizing renewable resources that do not
12 produce electricity or gaseous fuel and
13 reduce on-site energy consumption;

14 “(XVI) include procedures for
15 counting electricity savings and nat-
16 ural gas savings achieved by weather-
17 ization measures, such as installing
18 mechanical insulation, repairing or re-
19 placing heating and cooling systems,
20 repairing or replacing windows and
21 doors, performing air sealing, and re-
22 placing lights and appliances with
23 more energy efficient models;

24 “(XVII) include procedures for
25 counting electricity savings and nat-

1 ural gas savings achieved from in-
2 creased utilization of mechanical insu-
3 lation for new, retrofit, and mainte-
4 nance construction for commercial, in-
5 dustrial, public, and nonprofit build-
6 ings and facilities;

7 “(XVIII) in any State in which
8 the State regulatory authority has
9 designated one or more entities to ad-
10 minister electric ratepayer-funded effi-
11 ciency programs approved by the
12 State regulatory authority, provide
13 that electricity savings and natural
14 gas savings achieved through those
15 programs shall be distributed propor-
16 tionally among retail electricity sup-
17 pliers and retail natural gas suppliers;

18 “(XIX) include guidance for re-
19 tail electricity suppliers and retail nat-
20 ural gas suppliers to calculate and
21 document business-as-usual consump-
22 tion projections;

23 “(XX) include guidance for esti-
24 mating savings using information
25 from the database established under

paragraph (3) based on similar measures and programs in other settings with appropriate adjustments, as necessary; and

“(XXI) incorporate advances in methods of policy evaluation, such as the use of—

“(aa) randomized control trials;

“(bb) other experimental and quasi-experimental approaches; and

“(cc) large data sets and machine learning techniques; and

“(ii) procedures and standards for third-party verification of reported electricity savings or natural gas savings.

“(2) NATIONAL ACADEMY OF SCIENCES STUDY.—Not later than 180 days after the date of enactment of this section, the Secretary shall seek to enter into an agreement with the National Academy of Sciences, under which the Academy shall—

“(A) evaluate existing state-of-the-art methods for evaluating energy efficiency policies and measures;

“(B) identify approaches in program evaluation literature that may be brought into the energy efficiency domain, including—

“(i) randomized control trials and other experimental or quasi-experimental approaches;

“(ii) control of confounding factors;

“(iii) longitudinal studies;

“(iv) assessments by neutral arbiters;

and

“(v) disclosure of data for replication;

and

“(C) not later than 18 months after the date of enactment of this section, publish a report that includes—

“(i) a description of the evaluation under subparagraph (A);

“(ii) a description of the approaches identified under subparagraph (B); and

“(iii) recommendations for advancing and adopting rigorous state-of-the-art methods for evaluating energy efficiency policies and measures.

“(3) ENERGY EFFICIENCY PROGRAM EVALUATION DATABASE.—

1 “(A) IN GENERAL.—The Secretary shall
2 establish and maintain a searchable public data-
3 base, accessible on the website of the Depart-
4 ment of Energy, that contains a list of random-
5 ized control trials and other experimental or
6 quasi-experimental evaluations of energy effi-
7 ciency programs.

8 “(B) REQUIREMENTS.—Each trial or eval-
9 uation on the list described in subparagraph
10 (A) shall include, at a minimum—

11 “(i) the State in which the trial or
12 evaluation was conducted;

13 “(ii) the type of trial or evaluation
14 conducted;

15 “(iii) the type of program evaluated;

16 “(iv) an abstract or summary of the
17 program evaluated;

18 “(v) a summary of the trial or evalua-
19 tion methodology;

20 “(vi) the revealed energy savings from
21 the trial or evaluation; and

22 “(vii) to the extent practicable, the
23 underlying data used to conduct the trial
24 or evaluation.

25 “(f) ENFORCEMENT AND JUDICIAL REVIEW.—

1 “(1) REVIEW OF RETAIL SUPPLIER REPORTS.—

2 “(A) IN GENERAL.—The Secretary shall
3 review each report submitted to the Secretary
4 by a retail electricity supplier or retail natural
5 gas supplier under subsection (c) to verify that
6 the applicable performance standards under
7 subsection (c) have been met.

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

15 “(2) PENALTY FOR FAILURE TO DEM-
16 ONSTRATE.—If a retail electricity supplier or a retail
17 natural gas supplier that is subject to the require-
18 ments of the Federal program established under this
19 section fails to demonstrate compliance with an ap-
20 plicable performance standard under subsection (c),
21 or a retail electricity supplier or a retail natural gas
22 supplier that is subject to the requirements of a
23 State program approved pursuant to subsection (g)
24 fails to comply with a requirement to achieve elec-
25 tricity savings or natural gas savings under such

1 State program, the Secretary shall assess against
2 the retail electricity supplier or retail natural gas
3 supplier a civil penalty in an amount equal to, as ad-
4 justed for inflation in accordance with such regula-
5 tions as the Secretary may promulgate—

6 “(A) \$100 per megawatt hour of electricity
7 savings or alternative compliance payment that
8 the retail electricity supplier failed to achieve or
9 make, respectively; or

10 “(B) \$10 per million Btu of natural gas
11 savings or alternative compliance payment that
12 the retail natural gas supplier failed to achieve
13 or make, respectively.

14 “(3) OFFSETTING STATE PENALTIES.—The
15 Secretary shall reduce the amount of any penalty
16 under paragraph (2) by the amount paid by the rel-
17 evant retail electricity supplier or retail natural gas
18 supplier to a State for failure to comply with the re-
19 quirements of a State energy efficiency resource
20 standard during the same compliance period, if the
21 State standard—

22 “(A) is comparable in type to performance
23 standards under subsection (c); and

24 “(B) is more stringent than the applicable
25 performance standard under subsection (c).

1 “(4) USE OF PAYMENTS.—

2 “(A) DEFINITION OF COVERED RATE.—In
3 this paragraph, the term ‘covered rate’ means
4 the proportion that—

5 “(i) the amount of penalty payments
6 made by retail electricity suppliers and
7 natural gas suppliers in a State under
8 paragraph (2); bears to

9 “(ii) the total amount of penalty pay-
10 ments collected by the Secretary under
11 that paragraph.

12 “(B) USE OF PAYMENTS.—Penalty pay-
13 ments collected under paragraph (2) by the
14 Secretary shall be—

15 “(i) provided to each State at the cov-
16 ered rate for the State; and

17 “(ii) used by the State to implement
18 cost-effective energy efficiency programs
19 that—

20 “(I) to the maximum extent prac-
21 ticable, achieve electricity savings and
22 natural gas savings in the State suffi-
23 cient to make up the deficit associated
24 with the penalty payments; and

1 “(II) are measured and verified
2 in accordance with the applicable pro-
3 cedures and standards established
4 under subsection (e).

5 “(5) ENFORCEMENT PROCEDURES.—The Sec-
6 retary shall assess a civil penalty, as provided under
7 paragraph (2), in accordance with the procedures
8 described in section 333(d) of the Energy Policy and
9 Conservation Act.

10 “(6) JUDICIAL REVIEW.—

11 “(A) IN GENERAL.—Any person adversely
12 affected by a final action taken by the Sec-
13 retary under this section, other than the assess-
14 ment of a civil penalty, may use the procedures
15 for review described in section 336(b) of the
16 Energy Policy and Conservation Act.

17 “(B) REFERENCE.—In this paragraph,
18 references to a rule in section 336(b) of the En-
19 ergy Policy and Conservation Act shall be con-
20 sidered to refer also to all other final actions of
21 the Secretary under this section other than the
22 assessment of a civil penalty.

23 “(g) STATE PROGRAMS.—

24 “(1) IN GENERAL.—Upon receipt of an applica-
25 tion from the Governor of a State (including the

1 Mayor of the District of Columbia), the Secretary
2 may authorize the State to implement a State en-
3 ergy efficiency program in lieu of the Federal pro-
4 gram established under subsection (b) if the Sec-
5 retary determines that the requirements of such
6 State program meet or exceed the requirements of
7 such Federal program, including—

8 “(A) achieving electricity savings and nat-
9 ural gas savings that are equal to or greater
10 than savings required under the applicable per-
11 formance standards under subsection (c);

12 “(B) reviewing reports and verifying elec-
13 tricity savings and natural gas savings achieved
14 in the State (including savings transferred from
15 outside the State); and

16 “(C) if applicable, collecting any alter-
17 native compliance payments under paragraph
18 (4) and using the payments to implement cost-
19 effective energy efficiency programs.

20 “(2) SECRETARIAL DETERMINATION.—Not
21 later than 180 days after the date on which a com-
22 plete application is received by the Secretary under
23 this subsection, the Secretary, after public notice
24 and opportunity for comment, shall approve or dis-
25 approve such application.

1 “(3) ALTERNATIVE MEASUREMENT AND
2 VERIFICATION PROCEDURES AND STANDARDS.—As
3 part of an application pursuant to paragraph (1), a
4 State may request to use alternative measurement
5 and verification procedures and standards from the
6 procedures and standards described in subsection
7 (e), if the State demonstrates that the alternative
8 procedures and standards provide a level of accuracy
9 of measurement and verification that are at least
10 equivalent to the Federal procedures and standards
11 under subsection (e).

12 “(4) ALTERNATIVE COMPLIANCE PAYMENTS.—

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

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

1 icit in achieving electricity savings required
2 under the applicable State program; or

3 “(ii) \$5 per million Btu of natural gas
4 savings needed to make up any deficit in
5 achieving natural gas savings required
6 under the applicable State program.

7 “(B) USE OF PAYMENTS.—Alternative
8 compliance payments collected by a State under
9 subparagraph (A) shall be used by the State to
10 implement the State program authorized under
11 this section and to implement cost-effective en-
12 ergy efficiency programs that—

13 “(i) to the maximum extent prac-
14 ticable, achieve electricity savings and nat-
15 ural gas savings in the State sufficient to
16 make up the deficit associated with the al-
17 ternative compliance payments; and

18 “(ii) can be measured and verified in
19 accordance with the applicable procedures
20 and standards under subsection (e) or
21 paragraph (3), as applicable.

22 “(5) REVIEW OF STATE PROGRAM.—

23 “(A) PERIODIC REVIEW.—Every 2 years,
24 the Secretary shall review State programs au-
25 thorized under this section in approximately ½

1 of the States with such authorized State pro-
2 grams, so that each such State program shall
3 be reviewed at least every 4 years.

4 “(B) REPORT.—To facilitate review under
5 subparagraph (A), the Secretary may require a
6 State to submit a report demonstrating the
7 State program authorized under this section
8 meets the requirements of this section, includ-
9 ing—

10 “(i) reports submitted by retail elec-
11 tricity suppliers and retail natural gas sup-
12 pliers to the State demonstrating compli-
13 ance with applicable requirements;

14 “(ii) the impact of applicable require-
15 ments on projected electricity and natural
16 gas demand within the State;

17 “(iii) an accounting of the use of al-
18 ternative compliance payments by the
19 State and the resulting electricity savings
20 and natural gas savings achieved; and

21 “(iv) any other information that the
22 Secretary determines appropriate.

23 “(C) REVIEW UPON PETITION.—Notwith-
24 standing subparagraph (A), upon receipt of a
25 public petition containing credible allegation of

1 substantial deficiencies of a State program au-
2 thorized under this section, the Secretary shall
3 promptly re-review the State program.

4 “(D) DEFICIENCIES.—

5 “(i) IN GENERAL.—In completing a
6 review of a State program authorized
7 under this section, if the Secretary finds
8 deficiencies, the Secretary shall—

9 “(I) notify the State of the defi-
10 ciencies;

11 “(II) direct the State to correct
12 the deficiencies; and

13 “(III) require the State to report
14 to the Secretary on progress made by
15 not later than 180 days after the date
16 on which the State receives notice
17 under subclause (I).

18 “(ii) SUBSTANTIAL DEFICIENCIES.—If
19 the deficiencies are substantial, the Sec-
20 retary shall—

21 “(I) disallow the reported elec-
22 tricity savings or natural gas savings
23 that the Secretary determines are not
24 credible due to deficiencies;

1 “(II) re-review the State program
 2 2 years after the date on which the
 3 original review was completed; and

4 “(III) if substantial deficiencies
 5 remain uncorrected after the review
 6 provided for under subclause (II), re-
 7 voke the authorization for the State to
 8 implement a State program under this
 9 section.

10 “(6) CALLS FOR REVISION OF STATE APPLICA-
 11 TIONS.—As a condition of maintaining the author-
 12 ization to implement a State program under this
 13 section, the Secretary may require the State to sub-
 14 mit a revised application under paragraph (1) if the
 15 Secretary has—

16 “(A) established new or revised perform-
 17 ance standards under subsection (c);

18 “(B) promulgated new or substantially re-
 19 vised measurement and verification procedures
 20 and standards under subsection (e); or

21 “(C) otherwise substantially revised the
 22 Federal program established under this section.

23 “(h) INFORMATION AND REPORTS.—In accordance
 24 with section 13 of the Federal Energy Administration Act
 25 of 1974, the Secretary may require any retail electricity

1 supplier, retail natural gas supplier, third-party efficiency
2 provider, or any other entity that the Secretary determines
3 appropriate, to provide any information the Secretary de-
4 termines appropriate to carry out this section.

5 “(i) STATE LAW.—Nothing in this section diminishes
6 or qualifies any authority of a State or political subdivision
7 of a State to adopt or enforce any law or regulation re-
8 specting electricity savings or natural gas savings, includ-
9 ing any law or regulation establishing energy efficiency re-
10 quirements that are more stringent than those under this
11 section.

12 “(j) SENSE OF CONGRESS REGARDING COST RECOV-
13 ERY, FIXED COST RECOVERY, AND SHAREHOLDER IN-
14 CENTIVES.—It is the sense of Congress that each State
15 regulatory authority is encouraged to review the rules and
16 regulations of the State regulatory authority to ensure
17 that retail electric suppliers and retail natural gas sup-
18 pliers under its jurisdiction can—

19 “(1) recover the direct costs of energy efficiency
20 programs;

21 “(2) fully recover authorized fixed costs, includ-
22 ing lost margins from lower annual sales due to en-
23 ergy efficiency programs; and

24 “(3) earn an incentive for shareholders if the
25 energy efficiency standards are achieved.”.

1 **SEC. 3. CONFORMING AMENDMENT.**

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

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

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

