H. R. 5072

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

IN THE HOUSE OF REPRESENTATIVES

JULY 10, 2014

Mr. WELCH (for himself and Mr. BEN RAY Luján of New Mexico) 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 renewable electricity standard for retail electricity suppliers and 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 Renewable
5 Energy and Efficiency Act”.

SEC. 2. FEDERAL RENEWABLE ELECTRICITY STANDARD.

Title VI of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.) is amended by adding after section 609 (7 U.S.C. 918c) the following:

"SEC. 610. FEDERAL RENEWABLE ELECTRICITY STANDARD.

"(a) FINDINGS.—Congress finds that—

"(1) 118 countries have national goals for renewable electricity production and 30 States and the District of Columbia have enacted mandatory renewable electricity standards;

"(2) the Federal renewable electricity standard established by this section establishes a market-based policy to create ongoing competition among renewable electricity generators across the United States and provide the greatest quantity of clean electricity for the lowest price; and

"(3) the United States has vast wind, solar, hydropower, biomass, and geothermal resources that—

"(A) are renewable;

"(B) are dispersed widely across different regions of the United States; and

"(C) can be harnessed to generate a significant share of electricity in the United States.

"(b) DEFINITIONS.—In this section:
“(1) Brownfield site generation facility.—The term ‘brownfield site generation facility’ means a facility that—

“(A) generates renewable electricity; and

“(B) occupies a brownfield site (as that term is defined in section 101 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601)).

“(2) Distributed renewable generation facility.—The term ‘distributed renewable generation facility’ means a facility that—

“(A) generates renewable electricity;

“(B) primarily serves one or more electric consumers at or near the facility site; and

“(C) has not more than 2 megawatts in capacity.

“(3) Federal renewable electricity credit.—The term ‘Federal renewable electricity credit’ means a credit, representing 1 megawatt hour of renewable electricity, issued pursuant to subsection (f).

“(4) Indian land.—The term ‘Indian land’ means—
“(A) any land within the limits of any Indian reservation, pueblo, or rancheria;

“(B) any land not within the limits of any Indian reservation, pueblo, or rancheria, title to which was on the date of enactment of this section held by—

“(i) the United States for the benefit of any Indian tribe or individual; or

“(ii) any Indian tribe or individual subject to restriction by the United States against alienation;

“(C) any dependent Indian community; or

“(D) any land conveyed under the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.) to any Native Corporation (as that term is defined in section 3 of that Act (43 U.S.C. 1602)).

“(5) INDIAN TRIBE.—The term ‘Indian tribe’ means any Indian tribe, band, nation, or other organized group or community (including any Native village, Regional Corporation, or Village Corporation (as those terms are defined in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602))) that is recognized as eligible for the special pro-
grams and services provided by the United States to Indians because of their status as Indians.

“(6) QUALIFIED HYDROPOWER.—The term ‘qualified hydropower’ means—

“(A) energy produced from increased efficiency achieved, or additions of capacity made, on or after January 1, 2001, at a hydroelectric facility that—

“(i) was placed in service before that date; and

“(ii) does not include additional energy generated as a result of operational changes not directly associated with efficiency improvements or capacity additions; or

“(B) energy produced from generating capacity added to a dam on or after January 1, 2001, if the Commission certifies that—

“(i) the dam—

“(I) was placed in service before the date of enactment of this section; and

“(II) was operated for flood control, navigation, or water supply purposes; and
“(III) was not producing hydro-

electric power prior to the addition of

the capacity; and

“(ii) the hydroelectric project installed

on the dam—

“(I) is licensed or is exempt from

licensing by the Commission;

“(II) is in compliance with—

“(aa) the terms and condi-
tions of the license or exemption;

and

“(bb) other applicable legal

requirements for the protection

of environmental quality, includ-
ing applicable fish passage re-
quirements; and

“(III) is operated so that the

water surface elevation at any given

location and time that would have oc-
curred in the absence of the hydro-
electric project is maintained, subject
to any license or exemption require-
ments that require changes in water
surface elevation for the purpose of
improving the environmental quality
of the affected waterway.

"(7) QUALIFIED RENEWABLE BIOMASS.—The
term ‘qualified renewable biomass’ means renewable
biomass that, when combusted, yields, on a weight-
ed-average basis, a 50-percent reduction in lifecycle
greenhouse gas emissions (as defined in section 4(a)
of the American Renewable Energy and Efficiency
Act) per unit of useful energy, as compared to the
operation of a combined cycle natural gas electric
generating facility using the most efficient commer-
cially available technology, when calculated over a
20-year life cycle.

"(8) RENEWABLE BIOMASS.—The term ‘renew-
able biomass’ means—

"(A) crops, crop byproducts, or crop resi-
dues harvested from actively managed or fallow
agricultural land that is—

"(i) nonforested; and

"(ii) cleared prior to the date of en-
actment of this section;

"(B) planted trees, brush, slash, and all
residues from an actively managed tree farm lo-
cated on non-Federal land cleared prior to the
date of enactment of this section;
“(C) precommercial-sized thinnings, slash, brush, and residue from milled trees, from forested land that is not—

“(i) old-growth or mature forest;

“(ii) identified under a State natural heritage program as rare, imperiled, or critically imperiled; or

“(iii) Federal land;

“(D) algae;

“(E) nonhazardous plant matter derived from waste—

“(i) including separated yard waste, landscape right-of-way thinnings, or food waste; but

“(ii) not including municipal solid waste, recyclable waste paper, painted, treated or pressurized wood, or wood contaminated with plastic or metals;

“(F) animal waste or animal byproducts, including products of animal waste digesters;

“(G) vegetative matter removed from within 200 yards of any manmade structure or campground;

“(H) slash and precommercial-sized thinnings harvested—
“(i) in environmentally sustainable quantities, as determined by the appropriate Federal land manager; and

“(ii) from National Forest System land or public lands (as defined in section 103 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1702)), other than—

“(I) components of the National Wilderness Preservation System established under the Wilderness Act (16 U.S.C. 1131 et seq.);

“(II) Wilderness Study Areas, as identified by the Bureau of Land Management;

“(III) inventoried roadless areas and all unroaded areas of at least 5,000 acres;

“(IV) old growth and late seral stands;

“(V) components of the National Landscape Conservation System administered by the Bureau of Land Management; and

“(VI) national monuments; and
“(I) forest thinnings sourced as part of
catastrophic wildfire risk mitigation activities.

“(9) RENEWABLE ELECTRICITY.—The term ‘re-
newable electricity’ means electricity generated (in-
cluding by means of a fuel cell) from a renewable en-
ergy resource.

“(10) RENEWABLE ENERGY RESOURCE.—The
term ‘renewable energy resource’ means each of the
following:

“(A) Wind energy.

“(B) Solar energy.

“(C) Geothermal energy.

“(D) Qualified renewable biomass.

“(E) Biogas derived from qualified renew-
able biomass.

“(F) Biofuels derived from qualified re-
newable biomass.

“(G) Qualified hydropower.

“(H) Marine and hydrokinetic renewable
energy (as defined in section 632 of the Energy
Independence and Security Act of 2007 (42
U.S.C. 17211)).

“(I) Landfill gas.

“(11) RETAIL ELECTRIC SUPPLIER.—
“(A) IN GENERAL.—The term ‘retail electric supplier’ means, for any calendar year, an electric utility that sells not fewer than 1,000,000 megawatt hours of electric energy to electric consumers for purposes other than resale during the preceding calendar year.

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

“(i) the sales made by any affiliate of the electric utility to electric consumers, other than sales to lessees or tenants of the affiliate, for purposes other than resale shall be considered to be sales made by the electric utility; and

“(ii) sales made by the electric utility to an affiliate, lessee, or tenant of the electric utility shall not be treated as sales to electric consumers.

“(C) AFFILIATE.—In this paragraph, the term ‘affiliate’ when used in relation to a person, means another person that directly or indirectly owns or controls, is owned or controlled by, or is under common ownership or control
with, that person, as determined under regulations promulgated by the Commission.

"(12) Retail electric supplier’s base quantity.—The term ‘retail electric supplier’s base quantity’ means the total quantity of electric energy sold by the retail electric supplier, expressed in megawatt hours, to electric customers for purposes other than resale during the relevant calendar year, excluding—

“(A) electricity generated by a hydroelectric facility, other than qualified hydro-power; and

“(B) electricity generated by the combustion of municipal solid waste.

“(13) Retire and retirement.—The terms ‘retire’ and ‘retirement’ with respect to a Federal renewable electricity credit, means to disqualify the credit for any subsequent use under this section, regardless of whether the use is a sale, transfer, exchange, or submission in satisfaction of a compliance obligation.

“(c) Annual compliance obligation.—Except as otherwise provided in subsection (g), for each of calendar years 2015 through 2040, not later than March 31 of the following calendar year, each retail electric supplier shall
submit to the Commission a quantity of Federal renewable electricity credits that is equal to at least the annual target of the retail electric supplier under subsection (e).

“(d) ESTABLISHMENT OF PROGRAM.—

“(1) IN GENERAL.—Not later than 1 year after the date of enactment of this section, the Commission shall promulgate regulations to implement and enforce the requirements of this section.

“(2) CONSIDERATIONS.—In promulgating regulations under paragraph (1), the Commission shall, to the maximum extent practicable—

“(A) preserve the integrity and incorporate best practices of existing State and tribal renewable electricity programs;

“(B) rely on existing and emerging State, tribal, or regional tracking systems that issue and track non-Federal renewable electricity credits; and

“(C) cooperate with States and Indian tribes—

“(i) to facilitate coordination between State, tribal, and Federal renewable electricity programs; and

“(ii) to minimize administrative burdens and costs to retail electric suppliers.
“(e) Annual Compliance Requirement.—

“(1) Annual Targets.—For each of calendar years 2015 through 2040, the annual target of a retail electric supplier shall be equal to the product obtained by multiplying—

“(A) the required annual percentage for that calendar year under paragraph (2); and

“(B) the retail electric supplier’s base quantity for that calendar year.

“(2) Required Annual Percentage.—

“(A) Calendar Years 2015 Through 2040.—Subject to subparagraph (B), for each of calendar years 2015 through 2040, the required annual percentage shall be as follows:

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“(B) Increase Authorized for Calendar Years 2026 Through 2040.—The Commission may issue orders increasing the required annual percentage amounts for each of calendar years 2026 through 2040 to reflect the
maximum achievable level of renewable electricity generation potential, taking into account regional resource availability, economic feasibility, and technological capability.

“(f) FEDERAL RENEWABLE ELECTRICITY CREDITS.—

“(1) IN GENERAL.—

“(A) ISSUANCE; TRACKING; VERIFICATION.—The regulations promulgated under this section shall include provisions governing the issuance, tracking, and verification of Federal renewable electricity credits.

“(B) CREDIT RATIO.—Except as provided in paragraphs (2) through (4), the Commission shall issue to each generator of renewable electricity, 1 Federal renewable electricity credit for each megawatt hour of renewable electricity generated by the generator after December 31, 2014.

“(C) SERIAL NUMBER.—The Commission shall assign a unique serial number to each Federal renewable electricity credit.

“(2) GENERATION FROM CERTAIN STATE RENEWABLE ELECTRICITY PROGRAMS.—
“(A) IN GENERAL.—If renewable electricity is generated with the support of payments from a retail electric supplier pursuant to a State renewable electricity program (whether through State alternative compliance payments or through payments to a State renewable electricity procurement fund or entity), the Commission shall issue Federal renewable electricity credits to the retail electric supplier for the portion of the relevant renewable electricity generation that is attributable to payments made by the retail electric supplier, as determined pursuant to regulations promulgated by the Commission.

“(B) REMAINING PORTION.—For any remaining portion of the relevant renewable electricity generation, the Commission shall issue Federal renewable electricity credits to the generator, as provided in paragraph (1), except that not more than 1 Federal renewable electricity credit shall be issued for the same megawatt hour of electricity.

“(C) STATE GUIDANCE.—In determining how Federal renewable electricity credits will be apportioned among retail electric suppliers and
generators under this paragraph, the Commission shall consider information and guidance issued by the applicable one or more States.

“(3) CERTAIN POWER SALES CONTRACTS.—Except as otherwise provided in paragraph (2), if a generator has sold renewable electricity to a retail electric supplier under a contract for power from a facility placed in service before the date of enactment of this section, and the contract does not provide for the determination of ownership of the Federal renewable electricity credits associated with the generation, the Commission shall issue the Federal renewable electricity credits to the retail electric supplier for the duration of the contract.

“(4) CREDIT MULTIPLIERS.—

“(A) IN GENERAL.—Except as provided in subparagraph (B), the Commission shall issue—

“(i) not more than 3 Federal renewable electricity credits for each megawatt hour of renewable electricity generated by a distributed renewable generation facility;

“(ii) not more than 2 Federal renewable electricity credits for each megawatt
hour of renewable electricity generated on
Indian land; and

“(iii) not more than 2 Federal renew-
able electricity credits for each megawatt
hour of renewable electricity generated by
a brownfield site generation facility.

“(B) ADJUSTMENT.—Except as provided
in subparagraph (C), not later than January 1,
2017, and not less frequently than every 4
years thereafter, the Commission shall review
the effect of this paragraph on the aggregate
quantity of renewable electricity produced under
the standard and shall, as necessary and after
providing 1 year of notice, reduce the number
of Federal renewable electricity credits per
megawatt hour issued under this paragraph for
any given energy source or facility, but not
below one, to ensure that the number is no
higher than the Commission determines is nec-
essary—

“(i) to incentivize incremental renew-
able energy generation on Indian land and
brownfield sites; and

“(ii) to make distributed renewable
generation facilities cost competitive with
other sources of renewable electricity generation.

“(C) Facilities placed in service after enactment.—

“(i) In general.—For any renewable generation facility placed in service after the date of enactment of this section, subparagraph (B) shall not apply for the first 10 years after the date on which the facility is placed in service.

“(ii) Initial period.—For each year during the 10-year period described in clause (i), the Commission shall issue to the facility the same number of Federal renewable electricity credits per megawatt hour as are issued to that facility in the year in which the facility is placed in service.

“(iii) Subsequent period.—After the 10-year period described in clause (i), the Commission shall issue Federal renewable electricity credits to the facility in accordance with subparagraph (B).

“(5) Credits based on qualified hydropower.—For purposes of this subsection, the num-
ber of Federal renewable electricity credits issued for qualified hydropower shall be calculated—

“(A) based solely on the increase in average annual generation directly resulting from the efficiency improvements or capacity additions described in subsection (a)(6)(A); and

“(B) using the same water flow information used to determine a historic average annual generation baseline for the hydroelectric facility, as certified by the Commission.

“(6) GENERATION FROM MIXED RENEWABLE AND NONRENEWABLE RESOURCES.—If electricity is generated using both a renewable energy resource and an energy source that is not a renewable energy resource (such as cofiring of renewable biomass and fossil fuel), the Commission shall issue Federal renewable electricity credits based on the proportion of the electricity that is attributable to the renewable energy resource.

“(7) PROHIBITION AGAINST DOUBLE-COUNTING.—The Commission shall ensure that—

“(A) no Federal renewable electricity credit is used more than once for compliance with this section; and
“(B) except as provided in paragraph (4),
not more than 1 Federal renewable electricity
credit is issued for any megawatt hour of re-
newable electricity.

“(8) TRADING.—The lawful holder of a Federal
renewable electricity credit may—

“(A) sell, exchange, or transfer the credit;
“(B) submit the credit for compliance
under subsection (c); or
“(C) submit the credit for retirement by
the Commission.

“(9) BANKING.—

“(A) IN GENERAL.—A Federal renewable
electricity credit may be submitted in satisfac-
tion of the compliance obligation under sub-
section (c) for the compliance year in which the
credit was issued or for any of the 3 imme-
diately subsequent compliance years.

“(B) RETIREMENT.—The Commission
shall retire any Federal renewable electricity
credit that has not been retired by April 2 of
the calendar year that is 3 years after the cal-
endar year during which the credit was issued.

“(10) RETIREMENT.—The Commission shall re-
tire a Federal renewable electricity credit imme-
diately upon submission by the lawful holder of the credit, whether in satisfaction of a compliance obligation under subsection (c) or for another reason.

“(g) ALTERNATIVE COMPLIANCE PAYMENTS.—

“(1) IN GENERAL.—A retail electric supplier may satisfy the requirements of subsection (c) in whole or in part by submitting in accordance with this subsection, in lieu of each Federal renewable electricity credit that would otherwise be due, a payment equal to $50, adjusted for inflation on January 1 of each year following calendar year 2015, in accordance with regulations promulgated by the Commission.

“(2) PAYMENT TO STATE FUNDS.—

“(A) IN GENERAL.—Except as otherwise provided in this paragraph, payments made under this subsection shall be made directly to one or more States in which the retail electric supplier sells electric energy, in proportion to the portion of the retail electric supplier’s base quantity that is sold within each applicable State, if—

“(i) the payments are deposited directly into a fund of the State treasury established for that purpose; and
“(ii) the State uses the funds in accordance with paragraphs (3) and (4).

“(B) NONCOMPLIANCE.—If the Commission determines that a State is in substantial noncompliance with paragraph (3) or (4), the Commission shall direct that any future alternative compliance payments that would otherwise be paid to the State under this subsection shall instead be paid to the Commission and deposited in the Treasury.

“(3) STATE USE OF FUNDS.—As a condition of receipt of alternative compliance payments under this subsection, a State shall use the payments exclusively for—

“(A) deploying technologies that generate electricity from renewable energy resources; or

“(B) implementing cost-effective energy efficiency programs to achieve energy savings.

“(4) REPORTING.—

“(A) IN GENERAL.—As a condition of receipt of alternative compliance payments pursuant to this subsection, a State shall submit to the Commission an annual report, in accordance with regulations promulgated by the Commission, containing a full accounting of the use
of the payments, including a detailed description of the activities funded by the payments and demonstrating compliance with the requirements of this subsection.

“(B) DEADLINE.—A State shall submit a report under this paragraph—

“(i) not later than 1 year after the date on which the first alternative compliance payment is received; and

“(ii) every 1 year thereafter until all alternative compliance payments are expended.

“(h) INFORMATION COLLECTION.—

“(1) IN GENERAL.—The Commission may require any retail electric supplier, renewable electricity generator, or any other entity that the Commission determines appropriate, to provide any information the Commission determines appropriate to carry out this section.

“(2) FAILURE TO SUBMIT; FALSE OR MISLEADING INFORMATION.—Any entity required to submit information under paragraph (1) that fails to submit the information or submits false or misleading information shall be in violation of this section.
“(i) Enforcement and Judicial Review.—

“(1) Failure to submit credits.—If any person fails to comply with the requirements of subsection (c) or (g), the person shall be liable to pay to the Commission a civil penalty equal to the product obtained by multiplying—

“(A) double the alternative compliance payment calculated under subsection (g)(1); and

“(B) the aggregate quantity of Federal renewable electricity credits or equivalent alternative compliance payments that the person failed to submit in violation of the requirements of subsections (c) and (g).

“(2) Enforcement.—The Commission shall assess a civil penalty under paragraph (1) in accordance with the procedures described in section 31(d) of the Federal Power Act (16 U.S.C. 823b(d)).

“(3) Violation of requirement of regulations or orders.—

“(A) In general.—Any person who violates or fails or refuses to comply with any requirement of a regulation promulgated or order issued under this section shall be subject to a
civil penalty under section 316A(b) of the Federal Power Act (16 U.S.C. 825o–1(b)).

“(B) ASSESSMENT.—The penalty under subparagraph (A) shall be assessed by the Commission in the same manner as in the case of a violation referred to in section 316A(b) of that Act.

“(4) JUDICIAL REVIEW.—

“(A) IN GENERAL.—Any person aggrieved by a final action taken by the Commission under this section, other than the assessment of a civil penalty under paragraphs (1) through (3), may use the procedures for review described in section 313 of the Federal Power Act (16 U.S.C. 825l).

“(B) REFERENCE.—For purposes of this paragraph, references to an order in section 313 of that Act shall be considered to refer also to all other final actions of the Commission under this section other than the assessment of a civil penalty under paragraphs (1) through (3).

“(j) ADMINISTRATION.—Nothing in this section—
“(1) diminishes or qualifies any authority of a State, a political subdivision of a State, or an Indian tribe—

“(A) to adopt or enforce any law or regulation respecting renewable electricity, including any law or regulation establishing requirements that are more stringent than those established by this section, provided that no such law or regulation may relieve any person of any requirement otherwise applicable under this section; or

“(B) to regulate the acquisition and disposition of Federal renewable electricity credits by retail electric suppliers within the jurisdiction of the State, political subdivision, or Indian tribe, including the authority to require the retail electric supplier to acquire and submit to the Commission for retirement Federal renewable electricity credits in excess of those submitted under this section; or

“(2) affects the application of or the responsibility for compliance with any other provision of law or regulation, including environmental and licensing requirements.
“(k) SUNSET.—The authority provided by this section expires on December 31, 2041.”.

SEC. 3. CLARIFYING STATE AUTHORITY TO ADOPT RENEWABLE ENERGY INCENTIVES.

Section 210 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 824a–3) is amended by adding at the end the following:

“(o) CLARIFICATION OF STATE AUTHORITY TO ADOPT RENEWABLE ENERGY INCENTIVES.—

“(1) DEFINITION OF STATE-APPROVED PRODUCTION INCENTIVE PROGRAM.—In this subsection, the term ‘State-approved production incentive program’ means a requirement imposed pursuant to State law or by a State regulatory authority acting within its authority under State law that an electric utility purchase renewable energy (as defined in section 609(a)) at a specified rate.

“(2) STATE AUTHORITY TO ADOPT RENEWABLE ENERGY INCENTIVES.—Notwithstanding any other provision of this Act or the Federal Power Act (16 U.S.C. 791a et seq.), a State legislature or regulatory authority may set the rates for a sale of electric energy by a facility generating electric energy from renewable energy sources pursuant to a State-approved production incentive program under which
the facility voluntarily participates in the State-app-
proved production incentive program.”.

SEC. 4. GUIDELINES FOR DETERMINING QUALIFIED RE-
NEWABLE BIOMASS.

(a) DEFINITIONS.—In this section:

(1) ADMINISTRATOR.—The term “Adminis-
trator” means the Administrator of the Environ-
mental Protection Agency.

(2) LIFECYCLE GREENHOUSE GAS EMIS-
SIONS.—

(A) IN GENERAL.—The term “lifecycle
greenhouse gas emissions” means the aggregate
quantity of greenhouse gas emissions, adjusted
to account for the relative global warming po-
tential of the emissions relative to all green-
house gas emissions.

(B) INCLUSIONS.—For purposes of sub-
paragraph (A), the term “greenhouse gas emis-
sions” includes—

(i) direct emissions; and

(ii) significant indirect emissions, in-
cluding from—

(I) land use changes and tem-
poral changes in forest carbon seques-
tration;
(II) biomass harvests, regrowth, and avoided decomposition related to the full fuel lifecycle, including all stages of fuel and feedstock production and distribution; and

(III) feedstock generation or extraction through the distribution and delivery of the finished fuel to the ultimate consumer.

(b) GUIDELINES.—Not later than 1 year after the date of enactment of this Act, the Administrator shall, recognizing the recommendations of and coordinating with the Scientific Advisory Board of the Environmental Protection Agency regarding the accounting of biogenic carbon dioxide emissions and after notice and public comment, issue guidelines for calculating lifecycle greenhouse gas emissions for renewable biomass (as that term is defined in section 610(b) of the Public Utility Regulatory Policies Act of 1978).

SEC. 5. ENERGY EFFICIENCY RESOURCE STANDARD FOR RETAIL ELECTRICITY AND NATURAL GAS SUPPLIERS.

(a) IN GENERAL.—Title VI of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2601 et seq.) (as...
amended by section 2) is amended by adding after section 610 the following:

“SEC. 611. FEDERAL ENERGY EFFICIENCY RESOURCE STANDARD FOR RETAIL ELECTRICITY AND NATURAL GAS SUPPLIERS.

“(a) FINDINGS.—Congress finds that—

“(1) the Federal energy efficiency resource standard established by this section—

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

“(B) rewards energy-saving improvements achieved through—

“(i) end-use energy efficiency upgrades;

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

“(iii) fuel-switching, to the extent that the switching results in reduced primary energy use; and

“(2) in light of the cost-effective energy efficiency opportunities that exist across the United States in every sector of the economy, retail elec-
tricity suppliers, retail natural gas suppliers, and States should—

“(A) consider energy efficiency as a resource in utility planning and procurement activities; and

“(B) seek to achieve all energy efficiency that is available at lower cost than other energy supply options.

“(b) DEFINITIONS.—In this section:

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

“(2) ASHRAE, ANSI, AND IESNA.—The terms ‘ASHRAE’, ‘ANSI’, and ‘IESNA’ mean the American Society of Heating, Refrigerating and Air Conditioning Engineers, the American National Standards Institute, and the Illuminating Engineering Society of North America, respectively.

“(3) BASE QUANTITY.—

“(A) IN GENERAL.—The term ‘base quantity’, with respect to a retail electricity supplier or retail natural gas supplier, means, for each
calendar year for which a performance standard is established under subsection (d), the average annual quantity of electricity or natural gas delivered by the retail electricity supplier or retail natural gas supplier to retail customers during the 3 calendar years immediately preceding the year that compliance is required under subsection (d)(1).

“(B) EXCLUSION.—The term ‘base quantity’, with respect to a retail natural gas supplier, does not include natural gas delivered for purposes of electricity generation.

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

“(A) CHP system savings from a combined heat and power system that commences operation after the date of enactment of this section; and

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

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

“(6) CODES AND STANDARDS SAVINGS.—

“(A) IN GENERAL.—The term ‘codes and standards savings’ means a reduction in end-use electricity or natural gas consumption by a retail electricity supplier or in the service territory of a retail natural gas supplier as a result of the adoption and implementation, after the date of enactment of this section, of new or revised appliance and equipment efficiency standards or building energy codes.

“(B) BASELINES.—In calculating codes and standards savings under subparagraph (A)—

“(i) the baseline for calculating savings from building codes shall be the more stringent of—
“(I)(aa) the 2009 International Energy Conservation Code for residential buildings; or

“(bb) the ASHRAE/ANSI/IESNA Standard 90.1–2007 for commercial buildings; or

“(II) the applicable State building code in effect on the date of enactment of this section; and

“(ii) the baseline for calculating savings from appliance standards shall be the average efficiency of new appliances in the applicable one or more categories prior to the adoption and implementation of the new standard.

“(7) COMBINED HEAT AND POWER SYSTEM.— The term ‘combined heat and power system’ means a system that uses the same energy source both for the generation of electrical or mechanical power and the production of steam or another form of useful thermal energy, if—

“(A) the system meets any requirements relating to efficiency and other operating characteristics that the Secretary promulgates by regulation; and
“(B) the net wholesale sales of electricity by a facility does not exceed 50 percent of total annual electric generation by the facility.

“(8) COST-EFFECTIVE.—The term ‘cost-effective’, with respect to an energy efficiency measure, means that the measure achieves a net present value of economic benefits over the life of the measure, both directly to the energy consumer and to the economy, that is greater than the net present value of the cost of the measure over the life of the measure, both directly to the energy consumer and to the economy, using the societal benefit-cost test calculated using the weighted average utility cost of capital as the discount rate.

“(9) CUSTOMER FACILITY SAVINGS.—The term ‘customer facility savings’ means a reduction in end-use electricity or natural gas consumption (including waste heat energy savings) at a facility of an end-use consumer of electricity or natural gas served by a retail electricity supplier or natural gas supplier, as compared to—

“(A) in the case of a new facility, consumption at a reference facility of average efficiency;
“(B) in the case of an existing facility, consumption at the facility during a base period of not less than 1 year;

“(C) in the case of new equipment that replaces existing equipment at the end of the useful life of the existing equipment, consumption by new equipment of average efficiency of the same equipment type, except that customer savings under this subparagraph shall not be counted towards customer savings under subparagraph (A) or (B); and

“(D) in the case of new equipment that replaces existing equipment with remaining useful life—

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

“(ii) thereafter, consumption of new equipment of average efficiency.

“(10) ELECTRICITY SAVINGS.—The term ‘electricity savings’ means reductions in electricity consumption achieved through measures implemented after the date of enactment of this section, as determined in accordance with regulations promulgated by the Secretary, that are limited to—
“(A) customer facility savings of electricity, adjusted to reflect any associated increase in fuel consumption at the facility;

“(B) reductions in distribution system losses of electricity achieved by a retail electricity supplier, as compared to losses attributable to new or replacement distribution system equipment of average efficiency, as defined in regulations promulgated by the Secretary;

“(C) CHP savings;

“(D) codes and standards savings of electricity; and

“(E) fuel switching energy savings that results in net savings of electricity.

“(11) FUEL SWITCHING ENERGY SAVINGS.—

“(A) IN GENERAL.—The term ‘fuel-switching energy savings’ means net energy savings, calculated in accordance with subparagraph (B), from end-user switches from 1 energy source to another, as determined in accordance with regulations promulgated by the Secretary.

“(B) CALCULATION.—For purposes of calculating fuel-switching net energy savings—

“(i) electricity use shall be evaluated based on the average quantity of fuel
burned at a power plant to provide each kilowatt hour of electricity;

“(ii) electricity and natural gas use shall include losses in the transmission and distribution system; and

“(iii) fuel-switching that is not cost-effective to the end-user shall not be counted.

“(12) Natural gas savings.—The term ‘natural gas savings’ means reductions in natural gas consumption from measures implemented after the date of enactment of this section, as determined in accordance with regulations promulgated by the Secretary, that are limited to—

“(A) customer facility savings of natural gas, adjusted to reflect any associated increase in electricity consumption or consumption of other fuels at the facility;

“(B) reductions in leakage, operational losses, and consumption of natural gas fuel to operate a gas distribution system, achieved by a retail natural gas supplier, as compared to similar leakage, losses, and consumption during a base period of not less than 1 year;
“(C) codes and standards savings of natural gas; and

“(D) fuel switching energy savings that results in net savings of natural gas.

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

“(14) REPORTING PERIOD.—The term ‘reporting period’ means—

“(A) calendar year 2015; and

“(B) each successive 2-calendar-year period thereafter.

“(15) RETAIL ELECTRICITY SUPPLIER.—

“(A) IN GENERAL.—The term ‘retail electricity supplier’ means, for any given calendar year, an electric utility that sells not less than 1,000,000 megawatt hours of electric energy to electric consumers for purposes other than resale during the preceding calendar.

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

“(i) deliveries by any affiliate of an electric utility to electric consumers for purposes other than resale shall be considered to be deliveries by the electric utility; and

“(ii) deliveries by any electric utility to a lessee, tenant, or affiliate of the electric utility shall not be considered to be deliveries to electric consumers.

“(16) RETAIL NATURAL GAS SUPPLIER.—

“(A) IN GENERAL.—The term ‘retail natural gas supplier’ means, for any given calendar year, a local distribution company (as defined in section 2 of the Natural Gas Policy Act of 1978 (15 U.S.C. 3301)), that delivered to natural gas consumers more than 5,000,000,000 cubic feet of natural gas for purposes other than resale during the preceding calendar year.

“(B) INCLUSIONS AND LIMITATIONS.—For purposes of determining whether a person qualifies as a retail natural gas supplier under subparagraph (A)—
“(i) deliveries of natural gas by any affiliate of a local distribution company to consumers for purposes other than resale shall be considered to be deliveries by the local distribution company; and

“(ii) deliveries of natural gas to a lessee, tenant, or affiliate of a local distribution company shall not be considered to be deliveries to natural gas consumers.

“(17) THIRD-PARTY EFFICIENCY PROVIDER.—The term ‘third-party efficiency provider’ means any retailer, building owner, energy service company, financial institution or other commercial, industrial or nonprofit entity that is capable of providing electricity savings or natural gas savings in accordance with subsections (e) and (f).

“(18) WASTE HEAT ENERGY SAVINGS.—

“(A) IN GENERAL.—The term ‘waste heat energy savings’ means a reduction in electricity or natural gas consumption that results from a modification of an industrial or commercial system that commenced operation before the date of enactment of this section, in order to recapture electrical, mechanical, or thermal energy that would otherwise be wasted, as determined
in accordance with regulations promulgated by the Secretary.

“(B) INCLUSION.—Such savings shall be included as part of customer facility savings.

“(c) ESTABLISHMENT OF PROGRAM.—

“(1) REGULATIONS.—Not later than 1 year after the date of enactment of this section, the Secretary shall, by regulation, establish a program to implement and enforce the requirements of this section, including by—

“(A) establishing measurement and verification procedures and standards under subsection (f);

“(B) establishing requirements under which retail electricity suppliers and retail natural gas suppliers shall—

“(i) demonstrate, document, and report the compliance of the retail electricity suppliers and retail natural gas suppliers with the performance standards under subsection (d); and

“(ii) estimate the impact of the standards on current and future electricity and natural gas use in the service territories of the suppliers; and
“(C) establishing requirements governing applications for, and implementation of, delegated State administration under subsection (h).

“(2) COORDINATION WITH STATE PROGRAMS.—In establishing and implementing this section, the Secretary shall, to the maximum extent practicable, preserve the integrity and incorporate best practices of existing State energy efficiency programs.

“(d) PERFORMANCE STANDARDS.—

“(1) COMPLIANCE OBLIGATION.—Not later than May 1 of the calendar year immediately following 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 annual electricity savings (adjusted to account for any attrition of savings measures implemented in prior years) in each calendar year that are equal to the applicable percentage, established under paragraph (2), (3), or (4), 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 natural gas savings (adjusted to account for any attrition of savings measures implemented in prior years) in each calendar year that are equal to the applicable percentage, established under paragraph (2), (3), or (4), of the base quantity of such retail natural gas supplier, subject to business-as-usual consumption projections calculated in accordance with subsection (f)(1)(P).

“(2) Standards for 2015 through 2025.— For each of calendar years 2015 through 2025, the applicable percentages are as follows:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Cumulative Electricity Savings Percentage</th>
<th>Cumulative Natural Gas Savings Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>1.00</td>
<td>0.50</td>
</tr>
<tr>
<td>2016</td>
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<td>8.00</td>
</tr>
<tr>
<td>2024</td>
<td>13.25</td>
<td>9.00</td>
</tr>
</tbody>
</table>
“(3) **SUBSEQUENT YEARS.**—

“(A) **CALENDAR YEARS 2026 THROUGH 2040.**—Not later than December 31, 2023, the Secretary shall promulgate regulations establishing performance standards (expressed as applicable percentages of base quantity for both cumulative electricity savings and cumulative natural gas savings) for each of calendar years 2026 through 2040.

“(B) **SUBSEQUENT EXTENSIONS.**—Except as provided in subparagraph (A), not later than December 31 of the penultimate reporting period for which performance standards have been established under this paragraph, the Secretary shall promulgate regulations establishing performance standards (expressed as applicable percentages of base quantity for both cumulative electricity savings and cumulative natural gas savings) for the 10-calendar-year period following the last calendar year for which performance standards previously were established.

“(C) **REQUIREMENTS.**—The Secretary shall establish standards under this paragraph
at levels reflecting the maximum achievable level of cost-effective energy efficiency potential, taking into account—

“(i) cost-effective energy savings achieved by leading retail electricity suppliers and retail natural gas suppliers;

“(ii) opportunities for new codes and standard savings;

“(iii) technology improvements; and

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

“(D) MINIMUM PERCENTAGE.—In no case shall the applicable percentages for any calendar year be less than the applicable percentages for calendar year 2025 (including any increase in the standard for calendar year 2025 established pursuant to paragraph (4)).

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

“(A) IN GENERAL.—Not later than December 31, 2020, and at 10-year intervals thereafter, the Secretary shall—

“(i) review the most recent standards established under paragraph (2) or (3); and
“(ii) increase the standards by regulation if the Secretary determines that additional cost-effective energy efficiency potential is achievable, taking into account the requirements described in paragraph (3)(C).

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

“(5) DELAY OF SUBMISSION FOR FIRST REPORTING PERIOD.—

“(A) IN GENERAL.—Notwithstanding paragraphs (1) and (2), for the 2015 reporting period, the Secretary may accept a request from a retail electricity supplier or a retail natural gas supplier to delay the required submission of documentation of all or part of the required savings for up to 2 years.

“(B) PLAN FOR COMPLIANCE.—The request for delay under subparagraph (A) shall include a plan for coming into full compliance by the end of the 2016–2017 reporting period.
“(6) Applying unused savings to future years.—If savings achieved in a year exceed the performance standards specified in this subsection, any savings in excess of the performance standards may be applied toward performance standards specified for future years.

“(e) Transfers of electricity or natural gas savings.—

“(1) Bilateral contracts for savings transfers.—Subject to the limitations of this subsection, a retail electricity supplier or retail natural gas supplier may use electricity savings or natural gas savings purchased pursuant to a bilateral contract from another retail electricity supplier or retail natural gas supplier, a State, or a third-party efficiency provider to meet the applicable performance standard under subsection (d).

“(2) Requirements.—Electricity savings or natural gas savings purchased and used for compliance under this subsection shall be—

“(A) measured and verified in accordance with subsection (f);

“(B) reported in accordance with subsection (d); and
“(C) achieved within the same State as is served by the retail electricity supplier or retail natural gas supplier.

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

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

“(B) the State regulatory authority that regulates the purchaser oversees the measurement and verification of the savings pursuant to the procedures and standards applicable in the State in which the purchaser is located.

“(4) REGULATORY APPROVAL.—Nothing in this subsection limits or affects the authority of a State regulatory authority to require a retail electricity supplier or retail natural gas supplier that is regulated by the State regulatory authority to obtain the authorization or approval of the State regulatory authority of a contract for transfer of electricity savings or natural gas savings under this paragraph.

“(5) LIMITATIONS.—To optimize the achievement of cost-effective efficiency potential, the Sec-
retary may prescribe such limitations as the Sec-
retary determines appropriate with respect to the
proportion of the compliance obligation of a retail
electricity or natural gas supplier under the applica-
ble performance standards under subsection (d) that
may be met using electricity savings or natural gas
savings that are purchased under this subsection.

“(f) Measurement and Verification of Sav-
ings.—The regulations promulgated pursuant to sub-
section (c) shall include—

“(1) procedures and standards for defining and
measuring electricity savings and natural gas sav-
ings that can be counted towards the performance
standards established under subsection (d), that
shall—

“(A) specify the types of energy efficiency
and energy conservation measures that can be
counted;

“(B) require that energy consumption esti-
mates for customer facilities or portions of fa-
cilities in the applicable base and current years
be adjusted, as appropriate, to account for
changes in weather, level of production, and
building area;
“(C) account for the useful life of measures;

“(D) include assigned savings values for specific, commonly used measures;

“(E) allow for savings from a program to be estimated based on extrapolation from a representative sample of participating customers;

“(F) include procedures for calculating and documenting CHP savings, fuel-switching energy savings, and waste heat energy savings;

“(G) establish methods for calculating codes and standards energy savings, including the use of verified compliance rates;

“(H) include procedures for calculating and documenting—

“(i) customer facility savings and reductions in distribution system losses of electricity and natural gas that are achieved as a result of smart grid deployment, as described in section 1301 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17381); and

“(ii) reductions in natural gas distribution system losses attributable to pipeline repair and replacement programs;
“(I) count only measures and savings that are additional to business-as-usual customer purchase practices;

“(J) ensure that the retail electricity supplier or retail natural gas supplier claiming the electricity savings or natural gas savings, including codes and standards savings, played a significant role in achieving the savings (including through the activities of a designated agent of the supplier or through the purchase of transferred electricity savings or natural gas savings);

“(K) avoid double-counting of savings used for compliance with this section, including transferred savings;

“(L) include electricity savings or natural gas savings from programs administered by the retail electric supplier or natural gas supplier that are funded by Federal, State, or other sources;

“(M) credit large customer self-directed electricity savings or natural gas savings to the retail electricity supplier or the retail natural gas supplier if the large customers receive incentives or rate reductions from the retail sup-
plier for self-directed energy efficiency improve-
ments;

“(N) include procedures for counting electric-
tricity savings and natural gas savings achieved by solar water heating, solar light pipe tech-
nology, geothermal heat pumps, and other tech-
nologies utilizing renewable resources that re-
duce on-site energy use;

“(O) in any State in which the State regu-
latory authority has designated one or more en-
tities to administer electric ratepayer-funded ef-
iciency programs approved by the State regu-
latory authority, provide that electricity savings and natural gas savings achieved through the programs shall be distributed proportionally among retail electric suppliers and retail nat-\nural gas suppliers; and

“(P) include guidance for utilities to cal-
culate and document business-as-usual con-
sumption projections; and

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

“(g) ENFORCEMENT AND JUDICIAL REVIEW.—

“(1) REVIEW OF RETAIL SUPPLIER REPORTS.—
“(A) IN GENERAL.—The Secretary shall review each report submitted to the Secretary by a retail electricity supplier or retail natural gas supplier under subsection (d) to verify that the applicable performance standards under subsection (d) have been met.

“(B) EXCLUSION.—In determining compliance with the applicable performance standards under subsection (d), the Secretary shall exclude reported electricity savings or natural gas savings that are not adequately demonstrated and documented, in accordance with the regulations promulgated under subsections (d), (e), and (f).

“(2) PENALTY FOR FAILURE TO DOCUMENT ADEQUATE SAVINGS.—If a retail electricity supplier or a retail natural gas supplier fails to demonstrate compliance with an applicable performance standard under subsection (d), or to pay to the State an applicable alternative compliance payment under subsection (h)(4), the Secretary shall assess against the retail electricity supplier or retail natural gas supplier a civil penalty for each failure in an amount equal to, as adjusted for inflation in accordance with such regulations as the Secretary may promulgate—
“(A) $100 per megawatt hour of electricity savings or alternative compliance payment that the retail electricity supplier failed to achieve or make, respectively; or

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

“(3) OFFSETTING STATE PENALTIES.—The Secretary shall reduce the amount of any penalty under paragraph (2) by the amount paid by the relevant retail electricity supplier or retail natural gas supplier to a State for failure to comply with the requirements of a State energy efficiency resource standard during the same compliance period, if the State standard—

“(A) is comparable in type to the Federal standard established under this section; and

“(B) is more stringent than the applicable performance standards under subsection (d).

“(4) ENFORCEMENT PROCEDURES.—The Secretary shall assess a civil penalty, as provided under paragraph (2), in accordance with the procedures described in section 333(d) of the Energy Policy and Conservation Act (42 U.S.C. 6303(d)).
“(5) **JUDICIAL REVIEW.**—

“(A) **IN GENERAL.**—Any person adversely affected by a final action taken by the Secretary under this section, other than the assessment of a civil penalty, may use the procedures for review described in section 336(b) of the Energy Policy and Conservation Act (42 U.S.C. 6306(b)).

“(B) **REFERENCE.**—In this paragraph, references to a rule in section 336(b) of the Energy Policy and Conservation Act (42 U.S.C. 6306(b)) shall be considered to refer also to all other final actions of the Secretary under this section other than the assessment of a civil penalty.

“(h) **STATE ADMINISTRATION.**—

“(1) **IN GENERAL.**—Upon receipt of an application from the Governor of a State (including the Mayor of the District of Columbia), the Secretary may delegate to the State responsibility for administering this section within the territory of the State if the Secretary determines that the State will implement an energy efficiency program that meets or exceeds the requirements of this section, including—
“(A) achieving electricity savings and natural gas savings that are at least as great as those required under the applicable performance standards established under subsection (d);

“(B) reviewing reports and verifying electricity savings and natural gas savings achieved in the State (including savings transferred from outside the State); and

“(C) collecting any alternative compliance payments under paragraph (4) and using the payments to implement cost-effective efficiency programs.

“(2) Secretarial Determination.—Not later than 180 days after the date on which a complete application is received by the Secretary, the Secretary shall make a substantive determination approving or disapproving a State application, after public notice and comment.

“(3) Alternative Measurement and Verification Procedures and Standards.—As part of an application submitted under paragraph (1), a State may request to use alternative measurement and verification procedures and standards from the procedures and standards described in subsection (f), if the State demonstrates that the alter-
native procedures and standards provide a level of accuracy of measurement and verification that are at least equivalent to the Federal procedures and standards under subsection (f).

“(4) ALTERNATIVE COMPLIANCE PAYMENTS.—

“(A) IN GENERAL.—As part of an application submitted under paragraph (1), a State may permit retail electricity suppliers or retail natural gas suppliers to pay to the State, by not later than April 1 of the calendar year immediately following the applicable reporting period, an alternative compliance payment in an amount equal to, as adjusted for inflation in accordance with such regulations as the Secretary may promulgate, not less than—

“(i) $50 per megawatt hour of electricity savings needed to make up any deficit with regard to a compliance obligation under the applicable performance standard; or

“(ii) $5 per million Btu of natural gas savings needed to make up any deficit with regard to a compliance obligation under the applicable performance standard.
“(B) USE OF PAYMENTS.—Alternative compliance payments collected by a State under subparagraph (A) shall be used by the State to administer the delegated authority of the State under this section and to implement cost-effective energy efficiency programs that—

“(i) to the maximum extent practicable, achieve electricity savings and natural gas savings in the State sufficient to make up the deficit associated with the alternative compliance payments; and

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

“(5) REVIEW OF STATE IMPLEMENTATION.—

“(A) PERIODIC REVIEW.—Every 2 years, the Secretary shall review State implementation of this section for conformance with the requirements of this section in approximately 1/2 of the States that have received approval under this subsection to administer the program, so that each State shall be reviewed at least every 4 years.
“(B) REPORT.—To facilitate the review under subparagraph (A), the Secretary may require the State to submit a report demonstrating the conformance of the State with the requirements of this section, including—

“(i) reports submitted by retail electricity suppliers and retail natural gas suppliers to the State demonstrating compliance with applicable performance standards;

“(ii) the impact of the standards on projected electricity and natural gas demand within the State;

“(iii) an accounting of the use of alternative compliance payments by the State and the resulting electricity savings and natural gas savings achieved; and

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

“(C) REVIEW UPON PETITION.—Notwithstanding subparagraph (A), upon receipt of a public petition containing credible allegation of substantial deficiencies, the Secretary shall promptly review the State implementation of delegated authority under this section.
“(D) DEFICIENCIES.—

“(i) IN GENERAL.—In completing a review under this paragraph, if the Secretary finds deficiencies, the Secretary shall—

“(I) notify the State of the deficiencies;

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

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

“(ii) SUBSTANTIAL DEFICIENCIES.—If the deficiencies are substantial, the Secretary shall—

“(I) disallow the reported electricity savings or natural gas savings that the Secretary determines are not credible due to deficiencies;

“(II) re-review the State not later than 2 years after the date on which the original review was completed; and
“(III) if substantial deficiencies
remain uncorrected after the review
provided for under subclause (II), re-
voke the authority of the State to ad-
minister the program established
under this section.

“(6) CALLS FOR REVISION OF STATE APPLICA-
TIONS.—As a condition of maintaining the delegated
authority of a State to administer this section, the
Secretary may require a State to submit a revised
application under paragraph (1) if the Secretary
has—

“(A) promulgated new or revised perform-
ance standards under subsection (d);

“(B) promulgated new or substantially re-
vised measurement and verification procedures
and standards under subsection (f); or

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

“(7) COST RECOVERY, FIXED COST RECOVERY
AND SHAREHOLDER INCENTIVES.—State utility reg-
ulatory commissions are encouraged to review the
rules and regulations of the commission to ensure
that utilities under the jurisdiction of the commis-
sion can—
“(A) recover the direct costs of energy efficiency programs;

“(B) fully recover authorized fixed costs, including lost margins from lower annual sales due to energy efficiency programs; and

“(C) earn an incentive for shareholders if the energy efficiency standards are achieved.

“(i) INFORMATION AND REPORTS.—In accordance with section 13 of the Federal Energy Administration Act of 1974 (15 U.S.C. 772), the Secretary may require any retail electricity supplier, retail natural gas supplier, third-party efficiency provider, or any other entity that the Secretary determines appropriate, to provide any information the Secretary determines appropriate to carry out this section.

“(j) STATE LAW.—Nothing in this section diminishes or qualifies any authority of a State or political subdivision of a State to adopt or enforce any law or regulation respecting electricity savings or natural gas savings, including any law or regulation establishing energy efficiency requirements that are more stringent than those under this section, except that no State law or regulation shall relieve any person of any requirement otherwise applicable under this section.”.
SEC. 6. PROGRAM REVIEW.

(a) NATIONAL ACADEMY OF SCIENCES REVIEW.—
The Secretary of Energy shall enter into a contract with
the National Academy of Sciences under which the Acad-
emy shall, not later than July 1, 2019, and every 10 years
thereafter, submit to Congress, the Federal Energy Regu-
latory Commission, and the Secretary of Energy a com-
prehensive evaluation of all aspects of the programs estab-
lished under this Act and under sections 610 and 611 of
the Public Utility Regulatory Policies Act of 1978 (as
added by this Act), including—

(1) an evaluation of the effectiveness of the pro-
grams, including the specific design elements of the
programs, in increasing the efficiency of retail nat-
ural gas and electricity distribution and consumption
and increasing the deployment of renewable elec-
tricity capacity;

(2) the opportunities for additional technologies
and sources of efficiency and renewable electricity
that have emerged since the date of enactment of
this Act;

(3) the impact of the programs on the reli-
ability of electricity and natural gas supply;

(4) the net benefits or costs of the programs to
the United States and the States, including—
(A) the effects on electricity and natural
gas demand and prices;

(B) the economic development benefits of
investment;

(C) environmental costs and benefits;

(D) the impacts on public health and
health care costs; and

(E) avoided costs related to environmental
and congestion mitigation investments that oth-
otherwise would have been required;

(5) an assessment of the benefits and costs of
increasing the performance standards established
under section 611(d) of the Public Utility Regu-
laratory Policies Act of 1978 (as added by this Act);

(6) the feasibility, advantages, and disadvan-
tages of alternative models for demonstrating com-
pliance with a Federal energy efficiency resource
standard, including—

(A) establishing a national trading system
for energy efficiency credits; or

(B) demonstrating compliance through ac-
tual reductions in delivery or sales of electricity
and natural gas, rather than on program sav-
ings; and
(7) recommendations regarding potential changes to this section, to regulations and procedures for implementing this section, or to related public policies.

(b) RECOMMENDATIONS TO CONGRESS.—Not later than January 1, 2020, and every 10 years thereafter, the Secretary of Energy shall submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report making recommendations for modifications and improvements to the programs established under this Act and under sections 610 and 611 of the Public Utility Regulatory Policies Act of 1978 (as added by this Act), including an explanation of the inconsistencies, if any, between the recommendations of the Secretary of Energy and the recommendations included in the evaluation of the National Academy of Sciences under paragraph (1).

SEC. 7. CONFORMING AMENDMENT.

The table of contents of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. prece. 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 renewable electricity standard.
"Sec. 611. Federal energy efficiency resource standard for retail electricity and natural gas suppliers.".