[DISCUSSION DRAFT]

TITLE II—ZERO-EMISSION ELECTRICITY STANDARD

Subtitle A—Zero-Emission Electricity Standard

SEC. 201. DEFINITIONS.

In this subtitle:

(1) ADMINISTRATOR.—The term ''Administrator'' means the Administrator of the Environmental Protection Agency.

(2) AFFILIATE.—The term ''affiliate'' has the meaning given such term in section 1262 of the Energy Policy Act of 2005 (42 U.S.C. 16451).

(3) ASSOCIATE COMPANY.—The term ''associate company'' has the meaning given such term in section 1262 of the Energy Policy Act of 2005 (42 U.S.C. 16451).

(4) BEHIND-THE-METER GENERATION SYSTEM.—The term ''behind-the-meter generation system'' means a system of generation of electric energy that operates on the electric consumer side of the applicable utility meter.

(5) BENEFICIAL ELECTRIFICATION-RELATED REDUCTION.—The term ''beneficial electrification-related reduction'' means the net reduction of the aggregate greenhouse gas emissions attributable to a retail electricity supplier and an electric consumer as the result of the replacement of a nonelectric energy source used by the electric consumer with electric energy provided by the retail electricity supplier, including for the purpose of transportation, space heating, water heating, or industrial processes.

(6) CARBON DIOXIDE EQUIVALENT.—The term ''carbon dioxide equivalent'' means the number of metric tons of carbon dioxide emissions with the same global warming potential over a 20-year period as 1 metric ton of another greenhouse gas, including, in determining such global warming potential—

(A) the effects of climate-carbon feedbacks for both carbon dioxide and the other greenhouse gas, as determined in accordance with the Fifth Assessment Report of the Intergovernmental Panel on Climate Change; and

(B) for methane, the effect of carbon dioxide resulting from methane oxidation in the atmosphere.

(7) CARBON INTENSITY.—The term ''carbon intensity'' means the carbon dioxide equivalent emissions associated with the generation of 1 megawatt-hour of electric energy, as determined by the Administrator under section 204.

(8) ELECTRIC CONSUMER.—The term ''electric consumer'' has the meaning given such term in section 3 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2602).

(9) FEDERAL POWER MARKETING ADMINISTRATION.—The term ''Federal Power Marketing Administration'' means the Bonneville Power Administration, the Southeastern Power Administration, the Southwestern Power Administration, or the Western Area Power Administration.

(10) GENERATING UNIT.—The term ''generating unit'' means a unit or system of units that—

(A) generates electric energy that is consumed in the United States;

(B) generates not fewer than 20 megawatt-hours of electric energy per calendar year; and

(C)(i) delivers electric energy to the electric grid; or

(ii) in the case of a behind-the-meter generation system—

(I) delivers electric energy to the electric grid; or

(II) generates electric energy that is consumed onsite for a useful purpose other than for generating electric energy.

(11) GENERATOR.—The term ''generator'' means the owner or operator of a generating unit.

(12) GREENHOUSE GAS.—The term ''greenhouse gas'' includes each of the following:

(A) Carbon dioxide.

(B) Methane.

(C) Nitrous oxide.

(D) Sulfur hexafluoride.

(E) Any hydrofluorocarbon.

(F) Any perfluorocarbon.

(G) Nitrogen trifluoride.

(H) Any fully fluorinated linear, branched, or cyclic—

(i) alkane;

(ii) ether;

(iii) tertiary amine; or

(iv) aminoether.

(I) Any perfluoropolyether.

(J) Any hydrofluoropolyether.

(K) Any other fluorocarbon, except for a fluorocarbon with a vapor pressure of less than 1 mm of Hg absolute at 25 degrees Celsius.

(13) QUALIFIED COMBINED HEAT AND POWER SYSTEM.—The term ''qualified combined heat and power system'' means a system that—

(A) uses the same energy source for the simultaneous or sequential generation of electric energy and thermal energy;

(B) produces at least—

(i) 20 percent of the useful energy of the system in the form of electric energy; and

(ii) 20 percent of the useful energy of the system in the form of useful thermal energy;

(C) to the extent that the system uses biomass, uses only qualified renewable biomass; and

(D) operates with an energy efficiency percentage, as determined in accordance with section 48(c)(3)(C)(i) of the Internal Revenue Code of 1986, of greater than 60 percent on a year-round basis.

(14) QUALIFIED ELECTRICITY GENERATION.—

(A) IN GENERAL.—The term ''qualified electricity generation'' means the number of megawatt-hours of electric energy that a generator generates using a generating unit and—

(i) sells directly or indirectly for use by electric consumers for purposes other than resale; or

(ii) that is consumed onsite for a useful purpose other than for generating electric energy.

(B) AFFILIATE SALES.—For purposes of calculating the quantity of electric energy sold by a retail electricity supplier under this paragraph, the quantity of electric energy sold—

(i) by an affiliate of the retail electricity supplier, or an associate company of the retail electricity supplier, to an electric consumer (other than to a lessee or tenant of the affiliate or associate company) shall be treated as sold by the retail electricity supplier; and

(ii) by such retail electricity supplier to an affiliate, lessee, or tenant of the retail electricity supplier shall not be considered to be a sale to an electric consumer.

(15) QUALIFIED LOW-CARBON FUEL.—

(A) IN GENERAL.—The term ''qualified low-carbon fuel'' means a fuel that—

(i) is produced through any process that significantly limits or avoids greenhouse gas emissions; and

(ii) does not release greenhouse gas emissions during combustion.

(B) INCLUSION.—The term ''qualified low-carbon fuel'' includes, subject to subparagraph (A)—

(i) ammonia; and

(ii) hydrogen.

(16) QUALIFIED RENEWABLE BIOMASS.—

(A) IN GENERAL.—The term ''qualified renewable biomass'' means—

(i) any crop byproduct, or crop residue, harvested from actively managed, or fallow, agricultural nonforested land that was cleared before January 1, 2021, if the harvesting of the byproduct or residue does not lead to a net decline in soil organic matter for the applicable land;

(ii) any cellulose, hemicellulose, or lignin that is derived from a woody or

nonwoody plant that is planted for ''closed-loop biomass'', as defined in section 45(c)(2) of the Internal Revenue Code of 1986, on land that was, as of January 1, 2021—

(I) actively managed cropland or fallow and nonforested cropland, as defined by the Department of Agriculture;

(II) a brownfield site (as defined in section 101(39) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601(39))); or

(III) an abandoned mine site;

(iii) nonhazardous algal or other micro-crop matter;

(iv) waste—

(I) that is burned in a qualified combined heat and power system; and

(II) that is—

(aa) a gas that is primarily composed of methane, and that has been generated entirely from the decomposition of organic

matter, including sewage, food waste, animal waste, and agricultural waste;

(bb) nonhazardous landscape or right-of-way trimmings;

(cc) vegetative matter removed from an area located not more than 200 yards from a building, residence, or campground for the purpose of protecting structures from wildfire;

(dd) any byproduct of a wood mill or paper mill operation, including lignin in spent pulping liquors, that is demonstrated to otherwise be burned for energy onsite;

(ee) plant material removed for the purposes of invasive or noxious plant species control; or

(ff) downed wood from extreme weather events; and

(v) food waste.

(B) LIMIT OF INCLUSION OF INVASIVE SPECIES.—Except as provided in subparagraph

(A)(iv)(II)(ee), the term ''qualified renewable biomass'' does not include any matter that the Secretary of Agriculture, in consultation with other Federal or State departments and agencies the Secretary determines appropriate, determines is derived from—

(i) a plant that is invasive or noxious; or

(ii) a species or varieties of plants that are potentially invasive.

(C) OVERSIGHT.—The Administrator shall consult with the Chiefs of the United States Forest Service, the Fish and Wildlife Service, and the Natural Resources Conservation Service in implementing subparagraphs (A) and (B).

(D) EMISSIONS.—The term ''qualified renewable biomass'' does not include any biomass the processing or combustion of which results in emissions of—

(i) an air pollutant for which air quality criteria has been issued under section 108 of the Clean Air Act (42 U.S.C. 7408); or

(ii) a hazardous air pollutant (as defined in section 112 of the Clean Air Act (42 U.S.C. 7412(b))).

(17) QUALIFIED WASTE-TO-ENERGY.—The term ''qualified waste-to-energy'' means electric energy generated—

(A) from the combustion of—

(i) post-recycled municipal solid waste, provided such combustion does not result in emissions of—

(I) an air pollutant for which air quality criteria has been issued under section 108 of the Clean Air Act (42 U.S.C. 7408); or

(II) a hazardous air pollutant (as defined in section 112 of the Clean Air Act (42 U.S.C. 7412));

(ii) gas produced from the gasification or pyrolization of post-recycled municipal solid waste;

(iii) waste described in paragraph (16)(A)(iv)(II);

(iv) other animal waste or animal by-products;

(v) food waste;

(vi) a gas that is primarily composed of methane, and that has been generated entirely from the decomposition of organic matter, including sewage, food waste, animal waste, and agricultural waste; or

(vii) if diverted from or separated from other waste out of a municipal waste stream—

(I) paper products that are not commonly recyclable;

(II) solid-wood yard waste, pallets, or crates; or

(III) manufacturing and construction debris; and

(B) at a facility that the Administrator has certified, within the past 3 years, is in compliance with all applicable Federal and State environmental permits.

(18) RETAIL ELECTRICITY SUPPLIER.—The term ''retail electricity supplier'', as determined for each calendar year, means an entity in the United States that sold not fewer than 20 megawatt-hours of electric energy to electric consumers for purposes other than resale during the preceding calendar year.

(19) SALE.—The term ''sale'', when used with respect to electric energy, has the meaning given such term in section 3(13) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2602(13)).

(20) STATE.—Except as otherwise provided in this title, the term ''State'' means a State of the United States and any district, commonwealth, territory, or possession of the United States.

(21) ZERO-EMISSION ELECTRICITY.—The term ''zero-emission electricity'' means the amount, in megawatt-hours, of electric energy generated by a generating unit that is not associated with the release of greenhouse gases into the atmosphere, as calculated by multiplying—

(A) the qualified electricity generation of the generating unit; by

(B) the number that equals—

(i) 1.0; less

(ii) the quotient obtained by dividing—

(I) the carbon intensity of the generating unit; by

(II) 0.82.

(22) ZERO-EMISSION ELECTRICITY CREDIT.—The term ''zero-emission electricity credit'' means a credit issued pursuant to section 204.

SEC. 202. ZERO-EMISSION ELECTRICITY REQUIREMENT.

(a) ZERO-EMISSION ELECTRICITY REQUIREMENT.—

(1) CREDIT SUBMISSION REQUIREMENT.—

(A) IN GENERAL.—Except as otherwise provided in this section, effective beginning with calendar year 2023, for each calendar year, not later than June 1 of the following calendar year, each retail electricity supplier shall submit to the Administrator a quantity of zero-emission electricity credits that is equal to—

(i) for each of calendar years 2023 and 2024, the quantity of zero-emission electricity credits determined under paragraph (3) for the retail electricity supplier for such calendar year; and

(ii) for calendar year 2025 and each calendar year thereafter, the average of the quantity of zero-emission electricity credits determined under paragraph (3) for the retail electricity supplier for such calendar year and the two prior calendar years.

(B) ACCOUNTING FOR UNDERCOMPLIANCE DUE TO ENERGY LOSS.—Notwithstanding subparagraph (A)(ii), beginning in 2035, and for each calendar year thereafter, if the percentage of national undercompliance due to energy loss is greater than 1 for the calendar year, a retail electricity supplier that has a percentage of individual undercompliance due to energy loss that is greater than 1 for the calendar year shall submit to the Administrator a quantity of zero-emission electricity credits that is equal to the number obtained by dividing—

(i) the quantity of zero-emission electricity credits described in subparagraph (A)(ii); by

(ii) the number that equals 1 minus—

(I) the percentage of national undercompliance due to energy loss for the calendar year; divided by

(II) 100.

(2) VOLUNTARY ASSIGNMENT OF COMPLIANCE OBLIGATION BY PUBLIC POWER UTILITIES AND ELECTRIC COOPERATIVES.—Any retail electricity supplier that is an electric cooperative, a State, or any political subdivision of a State, may elect to

enter into an agreement with a political subdivision of a State, an electric cooperative that has an obligation to serve such retail electricity supplier, or a generator, to assign any reporting or compliance obligation under this title to such other political subdivision of a State, electric cooperative, or generator. An assignment made under this paragraph shall be established through a binding agreement executed among the relevant parties.

(3) QUANTITY OF ZERO-EMISSION ELECTRICITY CREDITS.—

(A) IN GENERAL.—For each calendar year, the Administrator shall determine a quantity of zero-emission electricity credits for a retail electricity supplier that is equal to the product obtained by multiplying—

(i) the total quantity of electric energy, in megawatt-hours, consumed by electric consumers of the retail electricity supplier during the calendar year, that is provided by the retail electricity supplier or by a behind-the-meter generation system, as reported under subsection (b); by

(ii) the minimum percentage of zero-emission electricity for the calendar year.

(B) DEDUCTION FOR BENEFICIAL ELECTRIFICATION.—

(i) DEDUCTION.—To account for beneficial electrification, in calculating the total quantity of electric energy consumed by electric consumers of a retail electricity supplier under subparagraph (A)(i), the Administrator shall deduct a quantity, in megawatt-hours, determined in accordance with clause (ii).

(ii) DETERMINATION.—The Administrator shall make a determination of the quantity of electric energy, in megawatt-hours, associated with beneficial electrification-related reductions for a retail electricity supplier for a calendar year. Such determination shall be made on the basis of—

(I) the carbon intensity of the electric energy sold by the retail electricity supplier that results in such beneficial electrification-related reductions; and

(II) the greenhouse gas emissions of nonelectric energy sources that

were replaced with electric energy provided by the retail electricity supplier which results in such beneficial electrification-related reductions.

(iii) PHASE-OUT OF DEDUCTION.—In determining the quantity of electric energy to deduct under clause (ii), the Administrator shall ensure that the deduction is reduced to zero at the same rate that the minimum percentage of zero-emission electricity increases to 100 percent.

(C) SYSTEM SUPPORT RESOURCE.—For any calendar year in which a generating unit that is owned by a retail electricity supplier has been designated a System Support Resource by the Federal Energy Regulatory Commission and is thereby required, by an Independent System Operator or Regional Transmission Organization, or under a State-regulated resource planning process, to remain in operation because retirement of the generating unit would harm the reliability of the electric energy transmission system, in calculating the total quantity of electric energy consumed by electric consumers of the retail electricity supplier under

subparagraph (A)(i), the Administrator shall deduct the quantity of megawatt-hours of electricity generated by such generating unit during such calendar year.

(4) AVERAGE CREDIT PRICES.—For each calendar year, the Administrator shall—

(A) analyze the market for zero-emission electricity credits in order to determine the average annual price of zero-emission electricity credits for the calendar year;

(B) determine whether the average annual price of a zero-emission electricity credit determined under subparagraph (A) is less than the breakthrough credit price under paragraph (6) for the calendar year; and

(C) publish the determinations made under subparagraphs (A) and (B) by not later than January 31 of the year following the calendar year.

(5) DEFINITIONS.—In this subsection:

(A) ANNUAL PERCENTAGE INCREASE.—

(i) IN GENERAL.—Except as provided in clause (ii), the term ''annual percentage increase'' means, with respect to a retail

electricity supplier, the product obtained by multiplying—

(I) the difference between 100 percent and the baseline zero-emission electricity percentage; by—

(II) 1/27.

(ii) ACCELERATED ANNUAL PERCENTAGE INCREASE.—Notwithstanding clause (i), beginning with calendar year 2026, if the Administrator determines under paragraph (4) that the average annual price of a zero-emission electricity credit for each of the 3 or more calendar years prior to a calendar year (in this clause referred to as ''the applicable calendar year'') is less than the breakthrough credit price for the applicable calendar year, the term ''annual percentage increase'' means, for the 1 calendar year that begins 4 years after the end of the applicable calendar year, the percentage that is—

(I) twice the percentage described in clause (i) if the period of breakthrough credit prices is 3 consecutive calendar years;

(II) three times the percentage described in clause (i) if the period of breakthrough credit prices is 4 consecutive calendar years;

(III) four times the percentage described in clause (i) if the period of breakthrough credit prices is 5 consecutive calendar years;

(IV) five times the percentage described in clause (i) if the period of breakthrough credit prices is 6 consecutive calendar years; and

(V) six times the percentage described in clause (i) if the period of breakthrough credit prices is 7 consecutive calendar years.

(B) BASELINE ZERO-EMISSION ELECTRICITY PERCENTAGE.—

(i) IN GENERAL.—The term ''baseline zero-emission electricity percentage'' means, with respect to a retail electricity supplier, the average percentage of the electric energy consumed by all electric consumers of the retail electricity supplier

that is zero-emission electricity during calendar years 2017, 2018, and 2019.

(ii) ELECTION.—For any retail electricity supplier served by an Independent System Operator or a Regional Transmission Organization, or participating in a joint unit commitment and centralized economic dispatch system regulated by the Federal Energy Regulatory Commission, the retail electricity supplier may elect to set its baseline zero-emission electricity percentage under clause (i) on the basis of the zero-emission electricity and electric energy consumed by either—

(I) all electric consumers of the retail electricity supplier; or

(II) all electric consumers served by the Independent System Operator, Regional Transmission Organization, or the applicable joint unit commitment and centralized economic dispatch system that serves the retail electricity supplier.

(iii) NOTIFICATION OF ELECTION.—A retail electricity supplier shall inform the

Administrator of its election under clause (ii) not later than 180 days after the date of enactment of this Act.

(C) BREAKTHROUGH CREDIT PRICE.—The term ''breakthrough credit price'' means, for a calendar year, the price listed in the table under paragraph (6) labeled ''breakthrough credit price''.

(D) MINIMUM PERCENTAGE OF ZERO-EMISSION ELECTRICITY.—The term ''minimum percentage of zero-emission electricity'' means, with respect to a retail electricity supplier—

(i) for each of calendar years 2023 and 2024, the baseline zero-emission electricity percentage;

(ii) for each of calendar years 2025 through 2050, the amount, not to exceed 100 percent, obtained by adding—

(I) the minimum percentage of zero-emission electricity for the previous calendar year; and

(II) the annual percentage increase; and

(iii) for each calendar year after 2050, 100 percent.

(E) PERCENTAGE OF INDIVIDUAL UNDERCOMPLIANCE DUE TO ENERGY LOSS.—The term ''percentage of individual undercompliance due to energy loss'' means, with respect to a calendar year, for a retail electricity supplier, the number that is equal to—

(i) 100; multiplied by

(ii) the number that is equal to—

(I) the number that is obtained by dividing—

(aa) the number of zero-emission electricity credits that the retail electricity supplier would be required to submit to the Administrator but for paragraph (1)(B); by

(bb) the number of megawatt-hours of electric energy sold by the retail electricity supplier to electric consumers; less

(II) the number that is obtained by dividing—

(aa) the number of zero-emission electricity credits awarded by the Administrator to gen-

erators for the electric energy that is sold by the retail electricity supplier to electric consumers; by

(bb) the number of megawatt-hours of electric energy generated by the generators that is provided to the retail electricity supplier for sale to electric consumers.

(F) PERCENTAGE OF NATIONAL UNDERCOMPLIANCE DUE TO ENERGY LOSS.—The term ''percentage of national undercompliance due to energy loss'' means, with respect to a calendar year, the number that is equal to—

(i) 100; multiplied by

(ii) the number that is equal to—

(I) the number that is obtained by dividing—

(aa) the total number of zero-emission electricity credits that all retail electricity suppliers would be required to submit but for paragraph (1)(B); by

(bb) the total number of megawatt-hours of electric energy sold by retail electricity suppliers to electric consumers; less

(II) the number that is obtained by dividing—

(aa) the total number of zero-emission electricity credits awarded by the Administrator to all generators; by

(bb) the total number of megawatt-hours of electric energy generated by all generators.

(G) PERIOD OF BREAKTHROUGH CREDIT PRICES.—The term ''period of breakthrough credit prices'' means the number of consecutive calendar years for which the average annual price of a zero-emission electricity credit is less than the breakthrough credit price for each such year, as determined by the Administrator under paragraph (4).

(6) ALTERNATIVE COMPLIANCE PAYMENTS; BREAKTHROUGH CREDIT PRICES.—For a calendar year, amounts of alternative compliance payments and breakthrough credit prices are as follows:

Calendar year	Breakthrough Credit Price	Alternative compliance payment
2023	$10.75	$21.50
2024	$11.50	$23.00
2025	$12.25	$24.50
2026	$13.00	$26.00
2027	$13.75	$27.50
2028	$14.50	$29.00
2029	$15.25	$30.50
2030	$16.00	$32.00
2031	$16.75	$33.50
2032	$17.50	$35.00
2033	$18.25	$36.50
2034	$19.00	$38.00
2035	$19.75	$39.50
2036	$20.50	$41.00
2037	$21.25	$42.50
2038	$22.00	$44.00
2039	$22.75	$45.50
2040	$23.50	$47.00
2041	$24.25	$48.50
2042	$25.00	$50.00
2043	$25.75	$51.50
2044	$26.50	$53.00
2045	$27.25	$54.50
2046	$28.00	$56.00
2047	$28.75	$57.50
2048	$29.50	$59.00
2049	$30.25	$60.50
2050 and each calendar year thereafter	$31.00	$62.00.

(b) REPORTING ON BEHIND-THE-METER GENERATION SYSTEMS.—Effective beginning in calendar year 2023, each retail electricity supplier serving one or more behind-the-meter generation systems may, not later than January 1 of each calendar year, submit to the Administrator—

(1) verification of the carbon intensity of behind-the-meter generation systems connected to the retail electricity supplier; and

(2) the quantity of electric energy generated by each such behind-the-meter generation system that is consumed for a useful purpose by electric consumers served by the retail electricity supplier.

(c) ALTERNATIVE COMPLIANCE PAYMENTS.—A retail electricity supplier may satisfy the requirements of subsection (a) with respect to a calendar year, in whole or in part, by submitting to the Administrator, in lieu of each zero-emission electricity credit that would otherwise be due, an alternative compliance payment equal to the amount determined for such calendar year in accordance with the table in subsection (a)(6), adjusted for inflation.

(d) DETERMINATION OF INADEQUATE AVAILABILITY OF ZERO-EMISSION ELECTRICITY TECHNOLOGY.—

(1) PETITION FOR DETERMINATION.—A retail electricity supplier (referred to in this subsection as the ''petitioner'') may submit to the Administrator a petition for the Administrator to make a determination of inadequate availability of technology relating to zero-emission electricity with respect to a calendar year.

(2) CONDITIONS.—The Administrator shall make an affirmative determination under paragraph (1) (referred to in this title as a ''determination of

inadequate availability of technology'') for a calendar year only if—

(A) a petition is submitted to the Administrator by January 31 of the following calendar year;

(B) the average annual price of zero-emission electricity credits is equal to or greater than the alternative compliance payment under subsection (a)(6) for such calendar year;

(C) the Administrator determines the number of megawatt-hours of zero-emission electricity that could have been generated or purchased by the petitioner using technology that was available during such calendar year—

(i) at or below the cost per megawatt-hour of the technology used to generate the electricity sold by the petitioner in the previous calendar year; and

(ii) while enabling the petitioner to operate its system at an adequate level of reliability; and

(D) the number of megawatt-hours determined under subparagraph (C) is less than the number of zero-emission electricity credits the

petitioner would be required to submit under subsection (a).

(3) CREDIT SUBMISSION.—Notwithstanding subsection (a)(1), if the Administrator makes a determination of inadequate availability of technology for a petitioner for a calendar year, as described under this subsection, the petitioner shall not be required to submit for such calendar year more than the number of zero-emission electricity credits equal to the number of megawatt-hours determined under paragraph (2)(C).

(4) CARBON MITIGATION AWARDS.—For the calendar year identified under paragraph (3), if the Administrator makes one or more determinations of inadequate availability of technology under this subsection, the Administrator shall award under section 205(b) an amount of money equal to the sum of—

(A) the total amount paid by retail electricity suppliers as alternative compliance payments; and

(B) the total amount of the alternative compliance payments that would have been made by the petitioner or petitioners but for the determination of inadequate availability of technology made under paragraph (2).

(e) EXEMPTIONS.—

(1) RECIPIENTS OF ACCELERATION INVESTMENT CREDITS.—A qualified zero-emission electricity taxpayer that receives a zero-emission electricity acceleration investment credit for a calendar year under section 45V of the Internal Revenue Code of 1986, as added by section 301 of this Act, shall not be subject to the requirements to submit zero-emission electricity credits under this section for such calendar year and each calendar year thereafter.

(2) RECIPIENTS OF ACCELERATION GRANTS.—An eligible electricity provider that is awarded a grant under section 302 of this Act for a calendar year shall not be subject to the requirements to submit zero-emission electricity credits under this section for such calendar year and each calendar year thereafter, as long as the condition described under section 302(a)(1) continues to be met.

SEC. 203. ZERO-EMISSION ELECTRICITY CREDIT TRADING PROGRAM.

(a) ESTABLISHMENT.—Not later than 1 year after the date of enactment of this Act, the Administrator shall establish a zero-emission electricity credit trading program under which—

(1) the Administrator shall record, track, auction, and transfer zero-emission electricity credits; and

(2) a generator to whom such zero-emission electricity credits are issued may sell or otherwise transfer those credits, as provided or allowed by applicable contracts, through—

(A) any auction established under the zero-emission electricity credit trading program;

(B) direct sales; or

(C) other transactional arrangements that sell electric energy or generating capacity either separately or combined with the transfer of zero-emission electricity credits, including transactions that pair zero-emission electricity credits with the demand of the retail electricity supplier.

(b) ADMINISTRATION.—In carrying out the program under this section, the Administrator shall ensure that a zero-emission electricity credit may be—

(1) submitted only once under section 202(a); and

(2) only purchased by, transferred to, or otherwise secured by a retail electricity supplier.

(c) DELEGATION OF MARKET FUNCTION.—

(1) IN GENERAL.—In carrying out the program under this section, the Administrator may delegate, to one or more appropriate entities—

(A) the administration of a transparent national market for the sale or trade of zero-emission electricity credits; and

(B) the tracking of dispatch of zero-emission electricity generation.

(2) ADMINISTRATION.—In making a delegation under paragraph (1), the Administrator shall ensure that the tracking and reporting of information concerning zero-emission electricity generation is transparent, verifiable, and independent of any entities subject to an obligation under this title.

(d) BANKING OF ZERO-EMISSION ELECTRICITY CREDITS.—A zero-emission electricity credit may be used for compliance with the requirements of section 202 for—

(1) the calendar year for which the zero-emission electricity credit is issued (in this subsection referred to as ''the applicable calendar year''); and

(2)(A) any of the 5 calendar years following the applicable calendar year, if the Administrator determines under section 202(a)(4) that the average annual price of a zero-emission electricity credit is equal to or less than the breakthrough credit price

for each of the 3 calendar years prior to the applicable calendar year; or

(B) if the Administrator has not made the determination under subparagraph (A)—

(i) any of the 5 calendar years following the applicable calendar year, if the applicable calendar year is any of calendar years 2023 through 2029;

(ii) any of the 4 calendar years following the applicable calendar year, if the applicable calendar year is any of calendar years 2030 through 2034;

(iii) any of the 3 calendar years following the applicable calendar year, if the applicable calendar year is any of calendar years 2035 through 2039; and

(iv) any of the 2 calendar years following the applicable calendar year, if the applicable calendar year is 2040 or any calendar year thereafter.

SEC. 204. DETERMINATION AND ISSUANCE OF QUANTITY OF ZERO-EMISSION ELECTRICITY CREDITS.

(a) ISSUANCE OF ZERO-EMISSION ELECTRICITY CREDITS.—The Administrator shall issue to each generator a quantity of zero-emission electricity credits deter-

mined in accordance with this section not later than March 1 of the calendar year after the calendar year for which the zero-emission electricity credits are issued.

(b) GENERAL RULES ON CREDIT ISSUANCE.—Except as otherwise provided in this section, the Administrator shall issue to a generator generating zero-emission electricity during a calendar year a quantity of zero-emission electricity credits for such generation that is equal to the amount of zero-emission electricity of the generator for the calendar year.

(c) GENERAL RULES ON DETERMINING CARBON INTENSITY.—The Administrator shall determine the carbon intensity of each generating unit of a generator. Such determination shall be made—

(1) using data and methods from the Air Emission Measurement Center of the Environmental Protection Agency for emission testing and monitoring, including—

(A) continuous emission monitoring systems; and

(B) predictive emission monitoring systems; and

(2) with respect to a determination of the carbon intensity of any generating unit using qualified renewable biomass or qualified low-carbon fuel, or

generating qualified waste-to-energy, in consultation with—

(A) the Secretary of Agriculture; and

(B) the Secretary of the Interior.

(d) CARBON INTENSITY FOR CERTAIN CATEGORIES OF GENERATING UNITS.—

(1) GENERATING UNITS UTILIZING TECHNOLOGIES WITHOUT DIRECT EMISSIONS.—The Administrator shall assign a carbon intensity of zero for any generating unit of a generator that does not produce direct emissions of any greenhouse gas in generating electric energy, including any generating unit that generates electric energy only through the use of solar, wind, ocean, current, wave, tidal, geothermal, nuclear energy, or hydropower technology, except as provided under paragraphs (2) and (3).

(2) GENERATING UNITS UTILIZING TECHNOLOGIES UTILIZING FOSSIL FUELS.—

(A) ACCOUNTING FOR UPSTREAM GREENHOUSE GAS EMISSIONS.—In determining the carbon intensity of each generating unit using coal, natural gas, or oil, the Administrator shall account for—

(i) the direct emissions of any greenhouse gas of the generating unit, which

shall not include the qualified carbon oxide that is captured and safely and permanently stored or utilized; and

(ii)(I) the average amounts of carbon dioxide and methane emissions, in terms of carbon dioxide equivalent, that occur during extraction, flaring, processing, transmission, and transportation of coal, natural gas, or oil that is utilized for the generation of electricity in the United States; or

(II) with respect to a generator that the Administrator determines under subparagraph (B) has demonstrated that the coal, natural gas, or oil consumed by such generator is associated with the release of smaller amounts of carbon dioxide and methane emissions than the amounts described in subclause (I), such smaller amounts.

(B) DETERMINATION.—

(i) BEST AVAILABLE SCIENCE.—In making a determination under this paragraph, the Administrator shall utilize the best available science, including with re-

spect to the measurement of low-frequency high-emission events, including by using data from the detection of natural gas flaring from the satellite observations of the National Oceanic and Atmospheric Administration.

(ii) ACCOUNTING FOR UPSTREAM METHANE WASTE PREVENTION.—The Administrator may determine that a generator has demonstrated that the fossil fuel consumed by such generator is associated with the release of smaller amounts of carbon dioxide and methane emissions than the amounts described in subparagraph (A)(ii)(I) if the generator—

(I) submits a petition for such determination to the Administrator by January 31 after the calendar year for which such determination is sought;

(II) accounts in the petition for low-frequency, high-emission events; and

(III) uses in the petition direct measurements of the applicable facili-

ties, which may include measurements made in the course of participation in a voluntary program or public disclosure of the quantified methane emission intensity of the applicable facilities.

(iii) PUBLIC AVAILABILITY.—The information provided to the Administrator by a generator to make a determination under this subparagraph shall be available to the public upon such determination.

(C) DEFINITION.—In this paragraph, the term ''qualified carbon oxide'' has the meaning given the term in section 45Q of the Internal Revenue Code of 1986.

(D) STANDARDS.—The Administrator shall promulgate the standards for measurement necessary to implement this paragraph not later than 2 years after the date of enactment of this Act, and shall update such standards every 5 years thereafter, based on the best available science and technology.

(3) HYDROPOWER UTILIZING A NEW RESERVOIR.—In determining the carbon intensity of each generating unit using hydropower associated

with a reservoir constructed after the date of enactment of this Act, the Administrator shall account for the greenhouse gas emissions that can be attributed to the hydropower facility, including the applicable new reservoir.

(e) QUANTITY OF CREDITS ISSUED FOR CERTAIN CATEGORIES OF GENERATING UNITS.—

(1) QUALIFIED COMBINED HEAT AND POWER SYSTEMS.—

(A) IN GENERAL.—The Administrator shall issue to a generator generating zero-emission electricity during a calendar year using a generating unit that is a qualified combined heat and power system a quantity of zero-emission electricity credits for such generation that is equal to—

(i) the number that represents the amount of zero-emission electricity generated by such generating unit during such calendar year; less

(ii) the product obtained by multiplying—

(I) the number of megawatt-hours of electric energy generated by the qualified combined heat and power

system that are consumed onsite during such calendar year; by

(II) the average of the minimum percentage of zero-emission electricity (as defined in section 202(a)(5)) for the calendar year for retail electricity suppliers in the region of the generator, as determined by the Administrator.

(B) ADDITIONAL CREDITS.—In addition to zero-emission electricity credits issued under subparagraph (A), the Administrator shall issue to a generator described in subparagraph (A) zero-emission electricity credits for greenhouse gas emissions avoided as a result of the use of the applicable qualified combined heat and power system, rather than a separate thermal source, to meet the thermal needs of the generator or one or more additional entities.

(C) APPLICABILITY.—This paragraph shall not apply with respect to a qualified combined heat and power system using qualified renewable biomass.

(2) QUALIFIED RENEWABLE BIOMASS.—The Administrator shall issue to a generator generating

zero-emission electricity during a calendar year using qualified renewable biomass a quantity of zero-emission electricity credits for such generation that is equal to the product obtained by multiplying—

(A) the qualified electricity generation of the generator that was generated using qualified renewable biomass during such calendar year; by

(B) the average carbon intensity of the generating units of the generator that use qualified renewable biomass.

(3) QUALIFIED WASTE-TO-ENERGY.—

(A) IN GENERAL.—Except as provided in subparagraph (B), the Administrator shall issue to a generator generating zero-emission electricity during a calendar year that is qualified waste-to-energy a quantity of zero-emission electricity credits for such generation that is equal to the product obtained by multiplying—

(i) the qualified waste-to-energy of the generator that is qualified electricity generation during such calendar year; by

(ii) the average carbon intensity of the generating units of the generator used to generate qualified waste-to-energy.

(B) EXCEPTION.—Zero-emission electricity credits for zero-emission electricity that is qualified waste-to-energy generated using qualified renewable biomass shall be issued in accordance with paragraph (2).

(4) QUALIFIED LOW-CARBON FUELS.—

(A) IN GENERAL.—Except as provided in subparagraph (C), the Administrator shall issue to a generator generating zero-emission electricity during a calendar year using qualified low-carbon fuels a quantity of zero-emission electricity credits for such generation that is equal to the product obtained by multiplying—

(i) the qualified electricity generation of the generator that was generated using qualified low-carbon-fuels during such calendar year; by

(ii) the average carbon intensity of the generating units of the generator that use qualified low-carbon fuels.

(B) ADJUSTMENT FOR PRODUCTION.—In determining the carbon intensity of each gener-

ating unit using a qualified low-carbon fuel, the Administrator shall account for the greenhouse gas emissions associated with the production of such qualified low-carbon fuel.

(C) NO DOUBLE-COUNTING.—The Administrator shall not issue zero-emission electricity credits for electric energy generated using a qualified low-carbon fuel that is generated using electric energy for which a generator is issued a zero-emission electricity credit under this title.

(5) DIRECT AIR CAPTURE OF CARBON DIOXIDE.—The Administrator shall issue to an entity that captures carbon dioxide from the atmosphere, and safely and permanently stores or utilizes such carbon dioxide, 1 zero-emission electricity credit for every 0.82 metric tons of carbon dioxide equivalent that is captured and safely and permanently stored or utilized.

(6) SPECIAL RULES.—

(A) REGULATIONS.—Subject to subparagraph (B), not later than 1 year after the date of enactment of this Act, for purposes of issuing zero-emission electricity credits under

this section, the Administrator shall promulgate regulations establishing—

(i) the conditions under which carbon dioxide may be safely and permanently stored;

(ii) the methods and processes by which carbon dioxide may be utilized in a manner that ensures the removal of the carbon dioxide safely and permanently from the atmosphere, including utilization in the production of substances, such as plastics and chemicals; and

(iii) requirements to account for the risk that some fraction of the carbon dioxide intended to be permanently stored or utilized may nevertheless be emitted into the atmosphere.

(B) EXISTING REQUIREMENTS.—In promulgating regulations pursuant to this paragraph, the Administrator shall incorporate any existing requirements for the permanent geologic storage of carbon dioxide, including any requirements promulgated under section 45Q of the Internal Revenue Code of 1986.

(f) MAXIMUM QUANTITY OF CREDITS.—Except as provided under subsection (e)(1), the total quantity of zero-emission electricity credits issued under this section to a generator for a calendar year shall not exceed the number of megawatt-hours of the qualified electricity generation of the generator for the calendar year.

(g) NO NEGATIVE CREDITS.—Notwithstanding any other provision of this title, the Administrator shall not issue a negative quantity of zero-emission electricity credits to any generator.

(h) FACILITIES OUTSIDE THE UNITED STATES.—With respect to electricity generated by a facility or generating unit that is located outside of the United States, a zero-emission electricity credit may be issued only with respect to electricity that is sold for resale in the United States.

(i) CONTRACTS.—A zero-emission electricity credit issued for electricity that is—

(1) sold for resale under a contract in effect on the date of enactment of this title shall be issued to the purchasing retail electricity supplier in proportion to the zero-emission electricity purchased by such retail electricity supplier under the contract, unless otherwise provided by the contract; and

(2) sold for resale under a contract in which a generating unit is not specified, shall be issued to the purchasing retail electricity supplier in proportion to the ratio of zero-emission electricity generation from the generator making such sale for resale.

(j) FEDERAL POWER MARKETING ADMINISTRATION.—A zero-emission electricity credit issued for electricity that is generated by a Federal Power Marketing Administration shall be transferred to the retail electricity supplier that is purchasing the electricity.

(k) RECIPIENTS OF ACCELERATION INVESTMENT CREDITS.—A qualified zero-emission electricity taxpayer that receives a zero-emission electricity acceleration investment credit for a calendar year under section 45V of the Internal Revenue Code of 1986, as added by section 301 of this Act, shall not be issued any zero-emission electricity credits under this section for such calendar year or any calendar year thereafter.

(l) RECIPIENTS OF ACCELERATION GRANTS.—An eligible electricity provider that receives a grant during a calendar year under section 302 of this Act shall not be issued any zero-emission electricity credits under this section for such calendar year or any calendar year thereafter.

SEC. 205. CARBON MITIGATION FUND.

(a) CARBON MITIGATION FUND.—

(1) CREATION OF FUND.—There is hereby established a trust fund, to be known as the ''Carbon Mitigation Fund'', consisting of such amounts as may be appropriated to such fund as provided in this section.

(2) ADMINISTRATION.—The Carbon Mitigation Fund shall be administered by the Administrator.

(3) TRANSFERS TO TRUST FUND.—There are hereby appropriated to the Carbon Mitigation Fund each year amounts equal to the sum of the amounts that are—

(A) attributable to alternative compliance payments made pursuant to section 202;

(B) equal to the alternative compliance payments that would have been made by any petitioners under section 202 but for a determination of inadequate availability of technology made by the Administrator under section 202(d); and

(C) collected as a civil penalty under section 209.

(4) EXPENDITURES.—Amounts in the Carbon Mitigation Fund shall be available without further

appropriation or fiscal year limitation to carry out the program under subsection (b).

(b) PROGRAM.—

(1) IN GENERAL.—The Administrator shall carry out a program to award funds to entities to carry out activities in States that avoid emissions of greenhouse gases or remove carbon dioxide from the atmosphere.

(2) ACTIVITIES.—Activities for which the Administrator may award funds under the program carried out pursuant to this subsection include—

(A) improvements to the energy efficiency of existing facilities and devices;

(B) improvements to the electrical grid;

(C) the replacement of natural gas space heaters, natural gas water heaters, and natural gas stoves, with electric appliances;

(D) the replacement of fossil fuel-powered vehicles owned by State and local agencies with electric vehicles or other low-carbon fuel vehicles;

(E) the replacement of fossil fuel-powered ground airport and seaport vehicles with electric vehicles or other low-carbon fuel vehicles;

(F) installation of fast charging stations for electric vehicles along highways and other public roads in urban areas and rural areas;

(G) beneficial electrification-related reductions not otherwise identified in this paragraph;

(H) activities that capture carbon dioxide from the atmosphere and safely and permanently store or utilize such carbon dioxide in accordance with section 204(e)(6); and

(I) any activity that is endorsed by a generator or a retail electricity supplier that results in a net reduction of emissions of greenhouse gases.

(3) EXCLUSIONS.—The Administrator may not award funds to an entity under the program carried out pursuant to this subsection for any activity for which the entity—

(A) has been issued a zero-emission electricity credit; or

(B) received a deduction of megawatt-hours under section 202(a)(3)(B) to account for beneficial electrification-related reductions.

(4) CRITERIA.—The Administrator may only award funds under the program carried out pursu-

ant to this subsection for an activity for which the Administrator determines that—

(A) the amount of carbon dioxide emissions avoided or removed from the atmosphere by the activity will be adequately confirmed through monitoring, reporting, and verification;

(B) the risk that some amount of the carbon dioxide that is removed from the atmosphere by the activity may reenter the atmosphere at a later date is adequately reflected through a discounting of the amount described in paragraph (5)(C)(ii);

(C) the risk that some amount of the greenhouse gases, the emission of which is avoided by the activity, may enter the atmosphere at a later date is adequately reflected through a discounting of the amount described in paragraph (5)(C)(i);

(D) the risk that the activity may directly or indirectly increase the release of greenhouse gases from another location has been adequately addressed;

(E) the activity is not required, or being fully supported financially by, a Federal, State, or local law, program, or activity; and

(F) if the activity involves land use, the activity—

(i) aligns with the Sustainable Development Goals of the United Nations, including being consistent with the conservation of biological diversity and natural ecosystems (including forests and grasslands); and

(ii) maintains ecosystem services and other social and environmental benefits.

(5) PROPOSALS.—In order to qualify for an award of funds under this subsection, an entity shall submit to the Administrator a proposal that—

(A) describes the activity to be carried out with the award of funds;

(B) identifies the amount of money for which the entity is applying;

(C) identifies the amount, to be measured in one-year increments, of—

(i) greenhouse gas emissions to be avoided by the activity, measured in terms of carbon dioxide equivalent; and

(ii) carbon dioxide to be removed from the atmosphere by the activity, measured in metric tons;

(D) identifies the bid amount, expressed as dollars per metric ton, which shall be the quotient obtained by dividing the amount identified under subparagraph (B) by the total amount identified under subparagraph (C);

(E) provides any information required by the Administrator in order to make a determination described in paragraph (4); and

(F) provides any other certifications the Administrator determines appropriate.

(6) DEADLINES.—

(A) PROMULGATION.—Not later than January 1, 2024, the Administrator shall promulgate regulations to implement this section, including specifying the information required to be included in proposals under paragraph (5).

(B) SOLICITATION.—Not later than February 1, 2024, and each February 1 thereafter, the Administrator shall solicit proposals for activities described in paragraph (1) for which the Administrator may award funds under the program carried out pursuant to this subsection.

(C) IDENTIFICATION.—Not later than June 1, 2024, and each June 1 thereafter, the Administrator shall identify proposals that have

been submitted by March 1 of such calendar year for activities described in paragraph (1) that qualify for an award of funds under the program carried out pursuant to this subsection.

(D) AWARD OF FUNDS.—Not later than August 1, 2024, and each August 1 thereafter, the Administrator shall award to entities funds available in the Carbon Mitigation Fund established subsection (a) for activities described in proposals identified under subparagraph (C).

(7) AWARDS TO MOST COST-EFFECTIVE ACTIVITIES.—The Administrator shall award funds to entities for activities described in proposals identified under paragraph (6)(C)—

(A) beginning by awarding funds to the entity submitting such a proposal with the lowest bid amount identified pursuant to paragraph (5)(D); and

(B) then awarding funds to entities sequentially by entity submitting such a proposal with the next lowest bid amount so identified until all funds are awarded.

(c) CONSULTATION.—The Administrator shall consult with the Secretary of the Interior and the Secretary

of Agriculture in promulgating regulations to measure, monitor, and verify any natural sequestration activities awarded under this section.

SEC. 206. STATE PROGRAMS.

(a) SAVINGS PROVISION.—

(1) IN GENERAL.—Except as provided in paragraph (2) and subject to subsection (b), nothing in this title affects the authority of a State or a political subdivision of a State to adopt or enforce any law or regulation relating to—

(A) clean energy or renewable energy;

(B) the regulation of a retail electricity supplier; or

(C) greenhouse gas emissions reduction.

(2) FEDERAL LAW.—Except as otherwise provided in this section, no law or regulation of a State or a political subdivision of a State may relieve a retail electricity supplier from compliance with an applicable requirement of this title.

(b) COORDINATION.—The Administrator, in consultation with States that have State clean energy programs in effect, shall facilitate, to the maximum extent practicable, coordination between the implementation of this title and the relevant State clean energy program.

(c) QUALIFIED STATES.—

(1) DETERMINATION.—

(A) IN GENERAL.—The Administrator, in consultation with States that have State clean energy programs in effect, shall determine whether each such State is a qualified State.

(B) DEADLINES.—The Administrator shall make a determination under subparagraph (A)—

(i) not later than January 1, 2022, with respect to a State that has a State clean energy program in effect on the date of enactment of this Act, and every 5 years thereafter; and

(ii) not later than 6 months after the date of the enactment by a State, after the date of enactment of this Act, of a new or modified existing State clean energy program, and every 5 years thereafter.

(C) PERIOD.—A determination under this paragraph shall be effective until the earlier of—

(i) the date that is 5 years after the date of the determination; or

(ii) the date on which the Administrator makes a subsequent determination

under this paragraph with respect to the applicable State.

(2) COMPLIANCE.—If the Administrator determines, under paragraph (1), that a State is a qualified State, a retail electricity supplier that is subject to and in compliance with the State clean energy program of such qualified State shall be deemed to be in compliance with the requirements of this title for the period during which the determination is effective.

(3) PROHIBITION AGAINST DOUBLE-COUNTING.—The Administrator, in consultation with States, shall develop a protocol to ensure that a zero-emission electricity credit may not be issued under this title with respect to an amount of electric energy for which one or more State clean energy credits are issued under, and used for compliance with, a State clean energy program in a qualified State.

(d) QUALIFIED ELECTRICITY GENERATION ELIGIBLE IN BOTH STATE AND FEDERAL PROGRAMS.—

(1) ISSUANCE OF CREDIT.—In a State that is not a qualified State, 1 megawatt-hour of zero-emission electricity is eligible to be issued both a State

clean energy credit and a zero-emission electricity credit pursuant to this title.

(2) RETIREMENT OF STATE CREDITS.—Retirement of a State clean energy credit for compliance with a State law in a State that is not a qualified State shall not prevent a retail electricity supplier from submitting a zero-emission electricity credit issued for the same megawatt-hour of zero-emission electricity for compliance with this title.

(3) SUBMISSION OF FEDERAL CREDITS.—Submission of a zero-emission electricity credit for compliance with this title shall not prevent a retail electricity supplier from retiring a State clean energy credit issued for the same megawatt-hour of qualified electricity generation for compliance with a State law.

(e) DEFINITIONS.—In this section:

(1) QUALIFIED STATE.—The term ''qualified State'' means a State—

(A) that has a State clean energy program; and

(B) in which the retail electricity suppliers in the State, in the aggregate, sell—

(i) a quantity of zero-emission electricity that is greater than the quantity of

zero-emission electricity represented by the zero-emission electricity credits the retail electricity suppliers, in the aggregate, would otherwise be required to submit under section 202; or

(ii) of the total amount of electric energy sold in the State, a percentage of zero-emission electricity that is greater than the average minimum percentage of zero-emission electricity required for all retail electricity suppliers under section 202.

(2) STATE CLEAN ENERGY CREDIT.—The term ''State clean energy credit'' means a certificate corresponding to the electricity generated from renewable or other zero-emission electricity sources that is issued under a law enacted by a State.

(3) STATE CLEAN ENERGY PROGRAM.—The term ''State clean energy program'' means one or more State requirements, including laws and regulations—

(A) under which retail electricity suppliers in the State are required to sell—

(i) a quantity of zero-emission electricity; or

(ii) of the total amount of electric energy sold in the State, a percentage of zero-emission electricity; and

(B) for which there are compliance mechanisms, including the imposition of penalties, that are at least as effective in enforcing compliance with such requirements as the system of enforcement under this title.

SEC. 207. REPORT TO CONGRESS.

Not later than January 1, 2035, the Administrator shall submit to Congress a report with an evaluation and a forecast of the remaining barriers to achieving generation of electric energy with no emissions of greenhouse gases.

SEC. 208. INFORMATION COLLECTION.

The Administrator may require any retail electricity supplier, generator, or other entity that the Administrator determines appropriate, to submit to the Administrator any information the Administrator determines to be appropriate to carry out this title.

SEC. 209. CIVIL PENALTIES.

(a) IN GENERAL.—Subject to subsection (b)—

(1) a retail electricity supplier that fails to meet the requirements of section 202 shall be subject to

a civil penalty in an amount equal to the product obtained by multiplying—

(A) the aggregate quantity of zero-emission electricity credits that the retail electricity supplier failed to submit for the calendar year to comply with section 202; by

(B) 300 percent of the amount of alternative compliance payment for the calendar year, as determined under section 202(a)(6); and

(2) an entity required to submit information pursuant to section 208 that violates such section by failing to submit the information, or submitting false or misleading information, shall be subject to a civil penalty of $25,000 for each day during which such violation continues.

(b) WAIVERS AND MITIGATION.—

(1) FORCE MAJEURE.—The Administrator may mitigate or waive a civil penalty under subsection (a) if the applicable retail electricity supplier or other entity was unable to comply with an applicable requirement for reasons outside of the reasonable control of the retail electricity supplier or other entity.

(2) REDUCTION FOR STATE PENALTIES.—The Administrator shall reduce the amount of a penalty

determined under subsection (a) by the amount paid by the applicable retail electricity supplier to a State for failure to comply with the requirement of a State renewable energy program, if the Administrator determines that the State requirement is more stringent than the applicable requirement of this title.

SEC. 210. REGULATIONS.

(a) DEADLINE.—Except as otherwise provided in this title, not later than 2 years after the date of enactment of this title, the Administrator shall promulgate regulations to implement this title.

(b) CONSULTATION.—The Administrator shall consult with the Secretary of Energy in promulgating regulations under this title.

Subtitle B—Methane Regulation

SEC. 211. METHANE REGULATION.

(a) NATIONAL GOAL.—The goal of this section is to reduce steadily the quantity of United States methane emissions from the oil and natural gas sector such that the quantity of methane emissions in calendar year 2030 from the oil and natural gas sector is at least 90 percent below the quantity of methane emissions in calendar year 2012 from such sector.

(b) EXISTING AUTHORITY.—Using existing authority of the Environmental Protection Agency, the Adminis-

trator shall issue regulations pursuant to section 111 of the Clean Air Act (42 U.S.C. 7411) to control methane emissions from the oil and natural gas sector to achieve the national goal established in subsection (a).

(c) COVERED SOURCES.—The regulations promulgated pursuant to this section shall apply to sources of methane from every segment of oil and natural gas systems, including oil and natural gas production, processing, transmission, distribution, and storage.

(d) REGULATIONS TO MEET THE NATIONAL GOAL.—

(1) DEADLINE.—Not later than December 31, 2023, the Administrator shall promulgate final regulations under section 111 of the Clean Air Act (42 U.S.C. 7411) to achieve the national goal established in subsection (a).

(2) CONTENTS.—The regulations required by paragraph (1) shall provide for the establishment, implementation, and enforcement of standards of performance for new sources and existing sources, and guidelines for States, that include requirements for—

(A) new and existing natural gas transmission and distribution pipelines to reduce

methane emissions by application of the best system of venting and leakage reduction;

(B) new sources, and existing sources, with equipment that handles liquefied natural gas to reduce methane emissions from that equipment by application of the best system of emission reduction; and

(C) new and existing offshore petroleum and natural gas production facilities to reduce methane emissions by application of the best system of emission reduction.

(e) DEFINITIONS.—In this section:

(1) ADMINISTRATOR.—The term ''Administrator'' means the Administrator of the Environmental Protection Agency.

(2) EXISTING SOURCE; NEW SOURCE; STANDARD OF PERFORMANCE.—The terms ''existing source'', ''new source'', and ''standard of performance'', have the meaning given such terms in section 111(a) of the Clean Air Act (42 U.S.C. 7411(a)).