(Original Signature of Member)

116th CONGRESS 1st Session

To rebuild and modernize the Nation's infrastructure to expand access to broadband and Next Generation 9–1–1, rehabilitate drinking water infrastructure, modernize the electric grid and energy supply infrastructure, redevelop brownfields, strengthen health care infrastructure, create jobs, and protect public health and the environment, and for other purposes.

H.R. 2741

IN THE HOUSE OF REPRESENTATIVES

May 15, 2019

M<u>r.</u>. <u>Pallone</u> introduced the following bill; which was referred to the Committee on ______

A BILL

- To rebuild and modernize the Nation's infrastructure to expand access to broadband and Next Generation 9–1– 1, rehabilitate drinking water infrastructure, modernize the electric grid and energy supply infrastructure, redevelop brownfields, strengthen health care infrastructure, create jobs, and protect public health and the environment, 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,

1 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

- 2 (a) SHORT TITLE.—This Act may be cited as the
- 3 "Leading Infrastructure for Tomorrow's America Act".
- 4 (b) TABLE OF CONTENTS.—The table of contents for
- 5 this Act is as follows:
 - Sec. 1. Short title; table of contents.

TITLE I—BROADBAND AND NEXT GENERATION 9–1–1 INFRASTRUCTURE

Subtitle A—Broadband Internet Access Service Program

Sec. 11001. Expansion of broadband access.

Subtitle B—Next Generation 9–1–1

- Sec. 12001. Short title.
- Sec. 12002. Findings.
- Sec. 12003. Sense of Congress.
- Sec. 12004. Statement of policy.
- Sec. 12005. Coordination of Next Generation 9-1-1 Implementation.
- Sec. 12006. Savings provision.

Subtitle C—Broadband Infrastructure Finance and Innovation

- Sec. 13001. Short title.
- Sec. 13002. Definitions.
- Sec. 13003. Determination of eligibility and project selection.
- Sec. 13004. Secured loans.
- Sec. 13005. Lines of credit.
- Sec. 13006. Alternative prudential lending standards for small projects.
- Sec. 13007. Program administration.
- Sec. 13008. State and local permits.
- Sec. 13009. Regulations.
- Sec. 13010. Funding.
- Sec. 13011. Reports to Congress.

TITLE II—DRINKING WATER INFRASTRUCTURE

Subtitle A—PFAS Infrastructure Grant Program

- Sec. 21001. Short title.
- Sec. 21002. Establishment of PFAS Infrastructure Grant Program.
- Sec. 21003. Definition.

Subtitle B—Extensions

Sec. 22001. Funding. Sec. 22002. American iron and steel products.

TITLE III—CLEAN ENERGY INFRASTRUCTURE

Subtitle A—Grid Security and Modernization

PART 1—ENHANCING ELECTRIC INFRASTRUCTURE RESILIENCE, RELIABILITY, AND ENERGY SECURITY

Sec. 31101. Program to enhance electric infrastructure resilience, reliability, and energy security.

PART 2-21ST CENTURY POWER GRID

- Sec. 31201. Grant program for grid modernization projects.
- Sec. 31202. Interregional transmission planning report.

PART 3—ENERGY EFFICIENT TRANSFORMER REBATE PROGRAM

Sec. 31301. Energy Efficient Transformer Rebate Program.

PART 4—STRATEGIC TRANSFORMER RESERVE PROGRAM

Sec. 31401. Strategic Transformer Reserve Program.

Subtitle B—Energy Efficient Infrastructure

PART 1-EFFICIENCY GRANTS FOR STATE AND LOCAL GOVERNMENTS

- Sec. 32101. Energy efficient public buildings.
- Sec. 32102. Energy efficiency and conservation block grant program.

PART 2-SMART BUILDING ACCELERATION

- Sec. 32201. Short title.
- Sec. 32202. Findings.
- Sec. 32203. Definitions.
- Sec. 32204. Federal smart building program.
- Sec. 32205. Survey of private sector smart buildings.
- Sec. 32206. Leveraging existing programs.
- Sec. 32207. Report.

PART 3—WEATHERIZATION ASSISTANCE PROGRAM

- Sec. 32301. Short title.
- Sec. 32302. Weatherization assistance program.
- Sec. 32303. Report on waivers.

PART 4-SMART ENERGY AND WATER EFFICIENCY

- Sec. 32401. Short title.
- Sec. 32402. Smart energy and water efficiency program.
 - Part 5—Accelerated Adoption of Energy Efficient Engines and Vehicles
- Sec. 32501. Reauthorization of diesel emissions reduction program.
- Sec. 32502. Reauthorization of clean school buses program.

PART 6—ENERGY IMPROVEMENTS AT PUBLIC SCHOOL FACILITIES

- Sec. 32601. Grants for energy efficiency improvements and renewable energy improvements at public school facilities.
 - PART 7-HOMEOWNER MANAGING ENERGY SAVINGS

- Sec. 32701. Short title.
- Sec. 32702. Definitions.
- Sec. 32703. Home Energy Savings Retrofit Rebate Program.
- Sec. 32704. Contractors.
- Sec. 32705. Rebate aggregators.
- Sec. 32706. Quality assurance providers.
- Sec. 32707. Transferability of home energy savings rebate.
- Sec. 32708. Home Energy Savings Retrofit Rebate Program.
- Sec. 32709. Grants to States and Indian Tribes.
- Sec. 32710. Quality assurance program.
- Sec. 32711. Evaluation report to Congress.
- Sec. 32712. Administration.
- Sec. 32713. Treatment of rebates.
- Sec. 32714. Penalties.
- Sec. 32715. Funding.
- Sec. 32716. Pilot program.

Subtitle C—Energy Supply Infrastructure

PART 1—LOW-INCOME SOLAR

- Sec. 33101. Short title.
- Sec. 33102. Loan and grant program for solar installations in low-income and underserved areas.

Part 2—Safe, Affordable, and Environmentally Sound Natural Gas Distribution

Sec. 33201. Improving the natural gas distribution system.

PART 3—CLEAN DISTRIBUTED ENERGY PROGRAM

- Sec. 33301. Short title.
- Sec. 33302. Definitions.
- Sec. 33303. Distributed energy loan program.
- Sec. 33304. Technical assistance and grant program.

PART 4-STRATEGIC PETROLEUM RESERVE IMPROVEMENTS

Sec. 33401. Strategic Petroleum Reserve improvements.

PART 5—REFINED PRODUCT RESERVES

Sec. 33501. Refined product reserves.

PART 6-DEPARTMENT OF ENERGY OFFICE OF INDIAN ENERGY

Sec. 33601. Amendment to reauthorize programs to assist Indian Tribes.

Subtitle D—Smart Communities Infrastructure

Part 1—Smart Communities

- Sec. 34101. 3C Energy Program.
- Sec. 34102. Federal technology assistance.
- Sec. 34103. Technology demonstration grant program.
- Sec. 34104. Smart city or community.

PART 2—CLEAN CITIES COALITION PROGRAM

Sec. 34201. Clean Cities Coalition Network program.

Part 3—Electric Vehicle Infrastructure

- Sec. 34301. Statement of national policy.
- Sec. 34302. Definitions.
- Sec. 34303. Model building code for electric vehicle supply equipment.
- Sec. 34304. Utility electric vehicle charging programs.
- Sec. 34305. State transportation electrification planning grants.
- Sec. 34306. Electric vehicle supply equipment coordination.
- Sec. 34307. Authorization of appropriations.

TITLE IV—HEALTH CARE INFRASTRUCTURE

Subtitle A—Hospital Infrastructure

Sec. 41001. Hospital infrastructure.

Subtitle B—Indian Health Program Health Care Infrastructure

Sec. 42001. 21st century Indian health program hospitals and outpatient health care facilities.

Subtitle C—Laboratory Infrastructure

Sec. 43001. Pilot program to improve laboratory infrastructure.

Subtitle D—Community-Based Care Infrastructure

Sec. 44001. Pilot program to improve community-based care infrastructure.

Subtitle E—Public Health Infrastructure

- Sec. 45001. Public health data system transformation.
- Sec. 45002. Core public health infrastructure for State, local, and Tribal health departments.
- Sec. 45003. Core public health infrastructure and activities for CDC.

TITLE V—BROWNFIELDS REDEVELOPMENT

- Sec. 50001. Authorization of appropriations.
- Sec. 50002. State response programs.

1 TITLE I—BROADBAND AND NEXT

2 GENERATION 9–1–1 INFRA-3 STRUCTURE

- 4 Subtitle A—Broadband Internet
- 5 Access Service Program

6 SEC. 11001. EXPANSION OF BROADBAND ACCESS.

7 Title I of the Communications Act of 1934 (47
8 U.S.C. 151 et seq.) is amended by adding at the end the
9 following new section:

10 "SEC. 14. EXPANSION OF BROADBAND ACCESS.

11 "(a) PROGRAM ESTABLISHED.—Not later than 180
12 days after the date of the enactment of this section, the
13 Commission, in consultation with the Assistant Secretary,
14 shall establish a program to expand access to broadband
15 for unserved areas, underserved areas, and unserved an16 chor institutions in accordance with the requirements of
17 this section that—

18 "(1) is separate from any universal service pro-19 gram established pursuant to section 254; and

20 "(2) does not require funding recipients to be
21 designated as eligible telecommunications carriers
22 under section 214(e).

23 "(b) USE OF PROGRAM FUNDS.—

24 "(1) EXPANDING ACCESS TO BROADBAND
25 THROUGH NATIONAL REVERSE AUCTION.—Not later

1 than 18 months after the date of the enactment of 2 this section, the Commission shall award 75 percent 3 of the amounts appropriated under subsection (h) 4 through a national reverse auction to funding recipi-5 ents only to expand access to broadband in unserved 6 areas. 7 (2)EXPANDING ACCESS TO BROADBAND 8 THROUGH STATES.— DISTRIBUTION 9 "(A) OF FUNDS TO 10 STATES.—Not later than 255 days after the 11 date of the enactment of this section, the Com-12 mission shall distribute 25 percent of the 13 amounts appropriated under subsection (h) 14 among the States, in direct proportion to the 15 population of each State. "(B) PUBLIC NOTICE.—Not later than 195 16 17 days after the date of the enactment of this sec-18 tion, the Commission shall issue a public notice 19 informing each State and the public of the 20 amounts to be distributed under this para-21 graph. The notice shall include— 22 "(i) the manner in which a State shall 23 inform the Commission of that State's ac-24 ceptance or acceptance in part of the

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1	amounts to be distributed under this para-
2	graph;
3	"(ii) the date (which is 30 days after
4	the date on which the public notice is
5	issued) by which such acceptance or ac-
6	ceptance in part is due; and
7	"(iii) the requirements as set forth
8	under this section and as may be further
9	prescribed by the Commission.
10	"(C) Acceptance by states.—Not later
11	than 30 days after the date on which the public
12	notice is issued under subparagraph (B), each
13	State accepting amounts to be distributed
1 /	under this nervorent shall inform the Commis

under this paragraph shall inform the Commission of the acceptance or acceptance in part by
the State of the amounts to be distributed
under this paragraph in the manner described
by the Commission in the public notice.

19 "(D) REQUIREMENTS FOR STATE RECEIPT
20 OF AMOUNTS DISTRIBUTED.—Each State ac21 cepting amounts distributed under this para22 graph—

23 "(i) shall only award such amounts
24 through a statewide reverse auction or auc25 tions, in the manner prescribed by the

1	State but subject to the requirements as
2	set forth under this section and as may be
3	further prescribed by the Commission;
4	"(ii) shall make such awards only—
5	"(I) to funding recipients to ex-
6	pand access to broadband in unserved
7	areas;
8	"(II) to funding recipients to ex-
9	pand access to broadband to unserved
10	anchor institutions; or
11	"(III) to funding recipients to ex-
12	pand access to broadband in under-
13	served areas, but only if a State does
14	not have, or no longer has, any
15	unserved areas;
16	"(iii) shall conduct separate reverse
17	auctions for awards made to unserved an-
18	chor institutions under clause (ii)(II), if a
19	State awards any funding provided by this
20	section to unserved anchor institutions;
21	"(iv) shall return any unused portion
22	of such amounts to the Commission within
23	10 years after the date of the enactment of
24	this section and shall submit a certification
25	to the Commission before receiving such

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1	amounts that the State will return such
2	amounts; and
3	"(v) may not use more than 5 percent
4	of the amounts distributed under this
5	paragraph to administer a reverse auction
6	or auctions authorized by this paragraph.
7	"(E) DISTRIBUTION OF REMAINING
8	FUNDS.—In the case of any amounts remaining
9	after the amounts appropriated are distributed
10	as described in subparagraph (A), the Commis-
11	sion shall transfer such amounts to the grant

program established under section 159 of the

National Telecommunications and Information

"(3) Coordination of federal and state

"(A) enable States to conduct statewide re-

"(B) assist States in conducting statewide

"(C) coordinate with States to ensure that

program funds awarded by the Commission and

verse auctions as part of, or in coordination

FUNDING.—The Commission shall establish proc-

esses through the rulemaking under subsection (e)

Administration Organization Act.

with, the national reverse auction;

reverse auctions;

	11
1	program funds awarded by the States are not
2	used to expand access to broadband in the same
3	unserved areas; and
4	"(D) coordinate with other Federal pro-
5	grams that expand access to broadband, such
6	as the Connect America Fund or the
7	Broadband e-Connectivity Pilot Program, to en-
8	sure the efficient use of program funds.
9	"(c) Program Requirements.—
10	"(1) TECHNOLOGY NEUTRALITY REQUIRED.—
11	Any entity administering a reverse auction (either
12	the State or the Commission) in making awards may
13	not favor a project using any particular technology.
14	"(2) FUNDS PREFERENCE.—There shall be a
15	preference, as determined by the entity admin-
16	istering the reverse auction (either the State or the
17	Commission), for bidders in a reverse auction pro-
18	posing projects—

"(A) with at least 20 percent matching 19 funds from private sources; 20

"(B) 21 that would expand access to broadband on tribal lands, as defined by the 22 23 Commission;

"(C) that would provide higher speeds than 24 those specified in subsection (d)(2); 25

"(D) that would expand access to
 broadband in advance of the time specified in
 subsection (e)(5); or

4 "(E) that would expand access to
5 broadband to areas where the median household
6 income is below 150 percent of the poverty
7 threshold as defined by the Bureau of the Census.

9 "(3) UNSERVED AND UNDERSERVED AREAS.— 10 In determining whether an area is an unserved area 11 or an underserved area or whether an anchor insti-12 tution is an unserved anchor institution for any re-13 verse auction authorized under this section, the 14 Commission shall implement the following require-15 ments through the rulemaking described in sub-16 section (e):

17 "(A) DATA FOR INITIAL DETERMINA18 TION.—To make an initial determination as to
19 whether an area is an unserved area or an un20 derserved area or whether an anchor institution
21 is an unserved anchor institution, the Commis22 sion shall—

23 "(i) to the extent practicable, use the24 National Broadband Availability Map, up-

1	dated pursuant to the Consolidated Appro-
2	priations Act, 2018 (Public Law 115–141);
3	"(ii) consider other data on access to
4	broadband obtained or purchased by the
5	Commission;
6	"(iii) consider other publicly available
7	data or information on access to
8	broadband;
9	"(iv) consider other publicly available
10	data or information on State broadband
11	deployment programs; and
12	"(v) not determine an area is not an
13	unserved area or an underserved area on
14	the basis that one location within such
15	area does not meet the definition of an
16	unserved area or an underserved area.
17	"(B) INITIAL DETERMINATION.—The
18	Commission shall make an initial determination
19	of the areas that are unserved areas or under-
20	served areas and which anchor institutions are
21	unserved anchor institutions not later than 270
22	days after the date of the enactment of this sec-
23	tion.
24	"(C) CHALLENGE OF DETERMINATION.—

1	"(i) IN GENERAL.—The Commission
2	shall provide for a process for challenging
3	any initial determination regarding wheth-
4	er an area is an unserved area or an un-
5	derserved area or whether an anchor insti-
6	tution is an unserved anchor institution
7	that, at a minimum, provides not less than
8	45 days for a person to voluntarily submit
9	information concerning—
10	"(I) the broadband offered in the
11	area; or
12	"(II) the broadband offered to
13	the anchor institution.
14	"(ii) Streamlined process.—The
15	Commission shall ensure that such process
16	is sufficiently streamlined such that a rea-
17	sonably prudent person may easily partici-
18	pate to challenge such initial determination
19	with little burden on such person.
20	"(E) FINAL DETERMINATION.—The Com-
21	mission shall make a final determination of the
22	areas that are unserved areas or underserved
23	areas and which anchor institutions are
24	unserved anchor institutions within 1 year after
25	the date of the enactment of this section.

((4) 1 NOTICE, TRANSPARENCY, ACCOUNT-2 ABILITY, AND OVERSIGHT REQUIRED.—The program 3 shall contain sufficient notice, transparency, ac-4 countability, and oversight measures to provide the 5 public with notice of the assistance provided under 6 this section, and to deter waste, fraud, and abuse of 7 program funds.

8 "(5) COMPETENCE.—The program shall contain 9 sufficient processes and requirements, as established 10 by the entity administering the reverse auction (ei-11 ther the State or the Commission), to ensure fund-12 ing recipients participating in such a reverse auc-13 tion—

"(A) are capable of carrying out the
project in a competent manner in compliance
with all applicable Federal, State, and local
laws; and

18 "(B) have the financial capacity to meet
19 the buildout obligations of the project and re20 quirements as set forth under this section and
21 as may be further prescribed by the Commis22 sion.

23 "(6) CONTRACTING REQUIREMENTS.—Any la24 borer or mechanic employed by any contractor or
25 subcontractor in the performance of work on any

project under this section shall be paid wages at
 rates not less than those prevailing on similar con struction in the locality as determined by the Sec retary of Labor under subchapter IV of chapter 31
 of title 40, United States Code (commonly referred
 to as the Davis-Bacon Act).

7 "(d) PROJECT REQUIREMENTS.—Any project funded
8 through the program shall meet the following require9 ments:

10 "(1) The project shall adhere to quality-of-serv-11 ice standards as established by the Commission.

"(2) The project shall offer broadband with a
download speed of at least 100 megabits per second,
an upload speed of at least 20 megabits per second,
and a latency that is sufficiently low to allow realtime, interactive applications.

17 "(3) For any project that involves laying fiber18 optic cables along a roadway, the project shall in19 clude interspersed conduit access points at regular
20 and short intervals.

"(4) The project may not offer broadband that
does not, at a minimum, provide a download speed
of at least 25 megabits per second, an upload speed
of at least 3 megabits per second, and a latency that

is sufficiently low to allow real-time, interactive ap plications.

"(5) The project shall incorporate prudent
cybersecurity and supply chain risk management
practices, as specified by the Commission, through
the rulemaking described in subsection (e), in consultation with the Director of the National Institute
of Standards and Technology and the Assistant Secretary.

"(6) The project shall incorporate best practices, as defined by the Commission, for ensuring reliability and resiliency of the network during disasters.

"(7) Any funding recipient must agree to have
the project meet the requirements established under
section 224, as if the project were classified as a
"utility' under such section.

18 "(e) RULEMAKING AND DISTRIBUTION AND AWARD 19 OF FUNDS.—Not later than 180 days after the date of 20 the enactment of this section, the Commission, in con-21 sultation with the Assistant Secretary, shall promulgate 22 rules—

23 "(1) that implement the requirements of this24 section, as appropriate, including the program re-

1	quirements of subsections (a), (b), and (c) and the
2	project requirements of subsection (d);
3	((2)) that establish the design of and rules for
4	the nationwide reverse auction;
5	((3) that establish notice requirements for all
6	reverse auctions authorized under this section that,
7	at a minimum, provide the public with notice of—
8	"(A) the initial determination of which
9	areas are unserved areas or underserved areas;
10	"(B) the final determination of which
11	areas are unserved areas or underserved areas
12	after the process for challenging the initial de-
13	termination has concluded;
14	"(C) which entities have applied to bid for
15	funding; and
16	"(D) the results of any reverse auctions,
17	including identifying the funding recipients,
18	which areas each project will serve, the nature
19	of the service that will be provided by the
20	project in each of those areas, and how much
21	funding the funding recipients will receive in
22	each of those areas;
23	"(4) that establish broadband buildout mile-
24	stones and periodic certification by funding recipi-
25	ents to ensure compliance with the broadband build-

out milestones for all reverse auctions authorized
 under this section;

"(5) that establish a maximum buildout timeframe of four years beginning on the date on which
funding is provided under this section for any
project by a funding recipient for a project under
this section;

8 "(6) that establish periodic reporting require-9 ments for funding recipients of projects and that 10 identify, at a minimum, the nature of the service 11 provided in each area for any reverse auction au-12 thorized under this section;

13 "(7) that establish standard penalties for the 14 noncompliance of funding recipients or projects with 15 the requirements as set forth under this section and 16 as may be further prescribed by the Commission for 17 any reverse auction authorized under this section;

18 "(8) that establish procedures for recovery of 19 funds, in whole or in part, from funding recipients 20 in the event of the default or noncompliance of the 21 funding recipient or project with the requirements 22 established under this section for any reverse auc-23 tion authorized under this section; and

"(9) that establish mechanisms to reduce waste,
 fraud, and abuse within the program for any reverse
 auction authorized under this section.

4 "(f) Reports Required.—

5 "(1) INSPECTOR GENERAL AND COMPTROLLER 6 GENERAL REPORT.—Not later than June 30 and 7 December 31 of each year following the awarding of 8 the first funds under the program, the Inspector 9 General of the Commission and the Comptroller 10 General of the United States shall submit to the 11 Committees on Energy and Commerce of the House 12 of Representatives and Commerce, Science, and 13 Transportation of the Senate a report for the pre-14 vious 6 months that reviews the program. Such re-15 port shall include any recommendations to address 16 waste, fraud, and abuse.

17 "(2) STATE REPORTS.—Any State that receives 18 funds under the program shall submit an annual re-19 port to the Commission on how such funds were 20 spent, along with a certification of compliance with 21 the requirements as set forth under this section and 22 as may be further prescribed by the Commission, in-23 cluding a description of each service provided and 24 the number of individuals to whom the service was 25 provided.

1 "(g) DEFINITIONS.—In this section:

2 "(1) ANCHOR INSTITUTION.—The term 'anchor
3 institution' means a public or private school, a li4 brary, a medical or healthcare provider, a museum,
5 a public safety entity, public housing, a community
6 college, an institution of higher education, or any
7 other community support organization or agency.

8 "(2) AREA.—The term 'area' means the geo-9 graphic unit of measurement with the greatest level 10 of granularity reasonably feasible for the Commis-11 sion to use in making eligibility determinations 12 under this section and in meeting the requirements 13 and deadlines of this section.

14 "(3) ASSISTANT SECRETARY.—The term 'As15 sistant Secretary' means the Assistant Secretary of
16 Commerce for Communications and Information.

17 "(4) BROADBAND.—The term 'broadband'—

18 "(A) means broadband internet access 19 service that is a mass-market retail service, or 20 a service provided to an anchor institution, by 21 wire or radio that provides the capability to 22 transmit data to and receive data from all or 23 substantially all internet endpoints, including 24 any capabilities that are incidental to and en-

1	able the operation of the communications serv-
2	ice;
3	"(B) includes any service that is a func-
4	tional equivalent of the service described in sub-
5	paragraph (A); and
6	"(C) does not include dial-up internet ac-
7	cess service.
8	"(5) FUNDING RECIPIENT.—The term 'funding
9	recipient' means an entity that receives funding for
10	a project under this section.
11	"(6) Program.—Unless otherwise indicated,
12	the term 'program' means the program established
13	under subsection (a).
14	"(7) PROJECT.—The term 'project' means an
15	undertaking by a funding recipient under this sec-
16	tion to construct and deploy infrastructure for the
17	provision of broadband.
18	"(8) REVERSE AUCTION.—The term 'reverse
19	auction' means an auction in which bids are sub-
20	mitted for a particular project and the bids serving
21	the most locations for the lowest cost to the entity
22	administering the reverse auction (either the State
23	or the Commission), taking into consideration the
24	funding preferences in subsection $(c)(2)$ are selected
25	for funding.

1	"(9) UNDERSERVED AREA.—The term 'under-
2	served area' means an area that has access to
3	broadband offered—
4	"(A) with a download speed of at least 25
5	megabits per second and not more than 99
6	megabits per second;
7	"(B) with an upload speed of at least 10
8	megabits per second; and
9	"(C) with latency that is sufficiently low to
10	allow real-time, interactive applications.
11	"(10) Unserved anchor institution.—The
12	term 'unserved anchor institution' means an anchor
13	institution that has no access to broadband or does
14	not have access to broadband offered—
15	"(A) with a download speed of at least 1
16	gigabit per second;
17	"(B) with an upload speed of at least 1
18	gigabit per second; and
19	"(C) with latency that is sufficiently low to
20	allow multiple, simultaneous, real-time, inter-
21	active applications.
22	"(11) UNSERVED AREA.—The term 'unserved
23	area' means an area that has no access to
24	broadband or does not have access to broadband of-
25	fered—

1	"(A) with a download speed of at least 25
2	megabits per second;
3	"(B) with an upload speed of at least 3
4	megabits per second; and
5	"(C) with latency that is sufficiently low to
6	allow real-time, interactive applications.
7	"(h) Authorization of Appropriations.—There
8	is authorized to be appropriated to the Commission
9	\$40,000,000,000 for fiscal year 2020 to carry out the pro-
10	gram and such amount is authorized to remain available
11	for 10 years.".
12	Subtitle B—Next Generation 9–1–1
13	SEC. 12001. SHORT TITLE.
14	This subtitle may be cited as the "Next Generation
	This subtitle may be cited as the "Next Generation 9–1–1 Act of 2019".
15	
15	9–1–1 Act of 2019".
15 16	9–1–1 Act of 2019". SEC. 12002. FINDINGS.
15 16 17	9–1–1 Act of 2019".SEC. 12002. FINDINGS.Congress makes the following findings:
15 16 17 18	 9–1–1 Act of 2019". SEC. 12002. FINDINGS. Congress makes the following findings: (1) The 9–1–1 systems of the United States,
15 16 17 18 19	 9–1–1 Act of 2019". SEC. 12002. FINDINGS. Congress makes the following findings: (1) The 9–1–1 systems of the United States, while a model for the entire world, lack the advanced
15 16 17 18 19 20	 9–1–1 Act of 2019". SEC. 12002. FINDINGS. Congress makes the following findings: (1) The 9–1–1 systems of the United States, while a model for the entire world, lack the advanced functionality, interoperability, and capabilities that
 15 16 17 18 19 20 21 	 9-1-1 Act of 2019". SEC. 12002. FINDINGS. Congress makes the following findings: (1) The 9-1-1 systems of the United States, while a model for the entire world, lack the advanced functionality, interoperability, and capabilities that come with the adoption of new digital communica-
 15 16 17 18 19 20 21 22 	 9–1–1 Act of 2019". SEC. 12002. FINDINGS. Congress makes the following findings: (1) The 9–1–1 systems of the United States, while a model for the entire world, lack the advanced functionality, interoperability, and capabilities that come with the adoption of new digital communications technologies.

outpaced the legacy communications technologies
 still used by most emergency communications cen ters in the 9–1–1 systems of the United States.

4 (3) This lack of modern technology, when cou5 pled with other challenges, is impacting the ability of
6 the 9–1–1 systems of the United States to efficiently
7 and effectively provide responses to emergencies.

8 (4) Modernizing the 9–1–1 systems of the 9 United States to incorporate the new and evolving 10 capabilities of broadband voice and data communica-11 tions is essential for the safety and security of the 12 public, including first responders and other public 13 safety personnel.

14 (5) Efforts to modernize the 9–1–1 systems of
15 the United States to date, while laudable and impor16 tant, have been limited due to a lack of funding and
17 inconsistent or unclear policies related to the govern18 ance, deployment, and operations of Next Genera19 tion 9–1–1.

20 (6) A nationwide strategy for Next Generation
21 9-1-1 has become essential to help guide the transi22 tion and create a common framework for implemen23 tation of Next Generation 9-1-1 while preserving
24 State, regional, and local control over the governance

1	and technology choices of the $9-1-1$ systems of the
2	United States.
3	(7) Accelerated implementation of Next Genera-
4	tion $9-1-1$ will—
5	(A) increase compatibility with emerging
6	communications trends;
7	(B) enhance the flexibility, reliability, and
8	survivability of the 9–1–1 systems of the United
9	States during major incidents;
10	(C) improve emergency response for the
11	public, including first responders and other
12	public safety personnel;
13	(D) promote the interoperability of the 9–
14	1–1 systems of the United States with emer-
15	gency response providers including users of the
16	Nationwide Public Safety Broadband Network
17	being deployed by the First Responder Network
18	Authority; and
19	(E) increase the cost effectiveness of oper-
20	ating the 9–1–1 systems of the United States.
21	SEC. 12003. SENSE OF CONGRESS.
22	It is the sense of Congress that—
23	(1) the $9-1-1$ professionals in the United
24	States perform important and lifesaving work every
25	day, and need the tools and communications tech-
23	day, and need the tools and communications tech-

1	nologies to perform the work effectively in a world
2	with digital communications technologies;
3	(2) the transition from the legacy communica-
4	tions technologies used in the $9-1-1$ systems of the
5	United States to Next Generation 9–1–1 is a na-
6	tional priority and a national imperative;
7	(3) the United States should complete the tran-
8	sition described in paragraph (2) as soon as prac-
9	ticable;
10	(4) the United States should develop a nation-
11	wide framework that facilitates cooperation among
12	Federal, State, and local officials on deployment of
13	Next Generation $9-1-1$ in order to meet that goal;
14	(5) the term "Public Safety Answering Point"
15	becomes outdated in a broadband environment and
16	9–1–1 centers are increasingly and appropriately
17	being referred to as emergency communications cen-
18	ters; and
19	(6) $9-1-1$ authorities and emergency commu-
20	nications centers should have sufficient resources to
21	implement Next Generation 9–1–1, including re-
22	sources to support associated geographic information
23	systems (commonly known as "GIS"), and
24	cybersecurity measures.

1	28 SEC. 12004. STATEMENT OF POLICY.
2	It is the policy of the United States that—
3	(1) Next Generation $9-1-1$ should be techno-
4	logically and competitively neutral;
5	(2) Next Generation $9-1-1$ should be interoper-
6	able;
7	(3) the governance and control of the $9-1-1$
8	systems of the United States, including Next Gen-
9	eration 9–1–1, should remain at the State, regional,
10	and local level; and
11	(4) individuals in the United States should re-
12	ceive information on how to best utilize Next Gen-
13	eration 9–1–1 and on its capabilities and usefulness.
14	SEC. 12005. COORDINATION OF NEXT GENERATION 9-1-1 IM-
14 15	SEC. 12005. COORDINATION OF NEXT GENERATION 9–1–1 IM- PLEMENTATION.
15	PLEMENTATION.
15 16 17	PLEMENTATION. Part C of title I of the National Telecommunications
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15 16 17 18	PLEMENTATION. Part C of title I of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 901 et seq.) is amended by adding at the end the
15 16 17 18 19	PLEMENTATION. Part C of title I of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 901 et seq.) is amended by adding at the end the following:
15 16 17 18 19 20	PLEMENTATION. Part C of title I of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 901 et seq.) is amended by adding at the end the following: "SEC. 159. COORDINATION OF NEXT GENERATION 9-1-1 IM-
 15 16 17 18 19 20 21 	PLEMENTATION. Part C of title I of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 901 et seq.) is amended by adding at the end the following: *SEC. 159. COORDINATION OF NEXT GENERATION 9-1-1 IM- PLEMENTATION.
 15 16 17 18 19 20 21 22 	PLEMENTATION.Part C of title I of the National Telecommunicationsand Information Administration Organization Act (47U.S.C. 901 et seq.) is amended by adding at the end thefollowing:SEC. 159. COORDINATION OF NEXT GENERATION 9-1-1 IM-HEMENTATION.(a) ADDITIONAL FUNCTIONS OF 9-1-1 IMPLEMEN-
 15 16 17 18 19 20 21 22 23 	PLEMENTATION. Part C of title I of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 901 et seq.) is amended by adding at the end the following: *SEC. 159. COORDINATION OF NEXT GENERATION 9–1–1 IM PLEMENTATION. *(a) ADDITIONAL FUNCTIONS OF 9–1–1 IMPLEMEN- TATION COORDINATION OFFICE.—

1	"(A) DEVELOPMENT.—The Assistant Sec-
2	retary and the Administrator shall develop and
3	may modify a management plan for the grant
4	program established under this section, includ-
5	ing by developing—
6	"(i) plans related to the organiza-
7	tional structure of such program; and
8	"(ii) funding profiles for each fiscal
9	year of the duration of such program.
10	"(B) SUBMISSION TO CONGRESS.—Not
11	later than 90 days after the date of the enact-
12	ment of this section or 90 days after the date
13	on which the plan is modified, as applicable, the
14	Assistant Secretary and the Administrator shall
15	submit the management plan developed under
16	subparagraph (A) to—
17	"(i) the Committees on Commerce,
18	Science, and Transportation and Appro-
19	priations of the Senate; and
20	"(ii) the Committees on Energy and
21	Commerce and Appropriations of the
22	House of Representatives.
23	"(3) Purpose of office.—The Office shall—
24	"(A) take actions, in concert with coordi-
25	nators designated in accordance with subsection

1	(b)(3)(A)(ii), to improve coordination and com-
2	munication with respect to the implementation
3	of Next Generation 9–1–1;
4	"(B) develop, collect, and disseminate in-
5	formation concerning practices, procedures, and
6	technology used in the implementation of Next
7	Generation 9–1–1;
8	"(C) advise and assist eligible entities in
9	the preparation of implementation plans re-
10	quired under subsection (b)(3)(A)(iii);
11	"(D) receive, review, and recommend the
12	approval or disapproval of applications for
13	grants under subsection (b); and
14	"(E) oversee the use of funds provided by
15	such grants in fulfilling such implementation
16	plans.
17	"(4) REPORTS.—The Assistant Secretary and
18	the Administrator shall provide an annual report to
19	Congress by the first day of October of each year on
20	the activities of the Office to improve coordination
21	and communication with respect to the implementa-
22	tion of Next Generation 9–1–1.
23	"(b) Next Generation 9–1–1 Implementation
24	GRANTS.—

1	"(1) MATCHING GRANTS.—The Assistant Sec-
2	retary and the Administrator, acting through the Of-
3	fice, shall provide grants to eligible entities for—
4	"(A) the implementation of Next Genera-
5	tion 9–1–1;
6	"(B) establishing and maintaining Next
7	Generation 9–1–1;
8	"(C) training directly related to Next Gen-
9	eration 9–1–1;
10	"(D) public outreach and education on how
11	best to use Next Generation $9-1-1$ and on its
12	capabilities and usefulness; and
13	"(E) administrative costs associated with
14	planning and implementation of Next Genera-
15	tion $9-1-1$, including costs related to planning
16	for and preparing an application and related
17	materials as required by this section, if—
18	"(i) such costs are fully documented
19	in materials submitted to the Office; and
20	"(ii) such costs are reasonable and
21	necessary and do not exceed 5 percent of
22	the total grant award.
23	"(2) MATCHING REQUIREMENT.—The Federal
24	share of the cost of a project eligible for a grant
25	under this section shall not exceed 80 percent.

1	"(3) COORDINATION REQUIRED.—In providing
2	grants under paragraph (1), the Assistant Secretary
3	and the Administrator shall require an eligible entity
4	to certify in its application that—
5	"(A) in the case of an eligible entity that
6	is a State, the entity—
7	"(i) has coordinated the application
8	with the emergency communications cen-
9	ters located within the jurisdiction of such
10	entity;
11	"(ii) has designated a single officer or
12	governmental body to serve as the State
13	point of contact to coordinate the imple-
14	mentation of Next Generation $9-1-1$ for
15	that State, except that such designation
16	need not vest such coordinator with direct
17	legal authority to implement Next Genera-
18	tion 9–1–1 or to manage emergency com-
19	munications operations; and
20	"(iii) has developed and submitted a
21	State plan for the coordination and imple-
22	mentation of Next Generation 9–1–1
23	that—

1	"(I) ensures interoperability by
2	requiring the use of commonly accept-
3	ed standards;
4	"(II) enables emergency commu-
5	nications centers to process, analyze,
6	and store multimedia, data, and other
7	information;
8	"(III) incorporates the use of ef-
9	fective cybersecurity resources;
10	"(IV) uses open and competitive
11	request for proposal processes, or the
12	applicable State equivalent, for de-
13	ployment of Next Generation 9–1–1;
14	"(V) includes input from relevant
15	emergency communications centers,
16	regional authorities, local authorities,
17	and Tribal authorities; and
18	"(VI) includes a governance body
19	or bodies, either by creation of new or
20	use of existing body or bodies, for the
21	development and deployment of Next
22	Generation 9–1–1 that—
23	"(aa) includes relevant
24	stakeholders; and

1	"(bb) consults and coordi-
2	nates with the State point of con-
3	tact required by clause (ii); or
4	"(B) in the case of an eligible entity that
5	is not a State, the entity has complied with
6	clauses (i) and (iii) of subparagraph (A), and
7	the State in which the entity is located has
8	complied with clause (ii) of such subparagraph.
9	"(4) CRITERIA.—
10	"(A) IN GENERAL.—Not later than 9
11	months after the date of enactment of this sec-
12	tion, the Assistant Secretary and the Adminis-
13	trator shall issue regulations, after providing
14	the public with notice and an opportunity to
15	comment, prescribing the criteria for selection
16	for grants under this section.
17	"(B) REQUIREMENTS.—The criteria
18	shall—
19	"(i) include performance requirements
20	and a schedule for completion of any
21	project to be financed by a grant under
22	this section; and
23	"(ii) specifically permit regional or
24	multi-State applications for funds.

"(C) UPDATES.—The Assistant Secretary
 and the Administrator shall update such regula tions as necessary.

4 "(5) GRANT CERTIFICATIONS.—Each applicant 5 for a grant under this section shall certify to the As-6 sistant Secretary and the Administrator at the time 7 of application, and each applicant that receives such 8 a grant shall certify to the Assistant Secretary and 9 the Administrator annually thereafter during any pe-10 riod of time the funds from the grant are available 11 to the applicant, that—

12 "(A) no portion of any designated 9–1–1 13 charges imposed by a State or other taxing ju-14 risdiction within which the applicant is located 15 are being obligated or expended for any purpose 16 other than the purposes for which such charges 17 are designated or presented during the period 18 beginning 180 days immediately preceding the 19 date on which the application was filed and con-20 tinuing through the period of time during which 21 the funds from the grant are available to the 22 applicant;

23 "(B) any funds received by the applicant
24 will be used to support deployment of Next
25 Generation 9–1–1 that ensures interoperability

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by requiring the use of commonly accepted standards;

"(C) the State in which the applicant resides has established, or has committed to establish no later than 3 years following the date on which the funds are distributed to the applicant, a sustainable funding mechanism for Next Generation 9–1–1 to be deployed pursuant to the grant;

"(D) the applicant will promote interoperability between Next Generation 9–1–1 emergency communications centers and emergency
response providers including users of the nationwide public safety broadband network implemented by the First Responder Network Authority;

17 "(E) the applicant has or will take steps to
18 coordinate with adjoining States to establish
19 and maintain Next Generation 9–1–1; and

20 "(F) the applicant has developed a plan for
21 public outreach and education on how to best
22 use Next Generation 9–1–1 and on its capabili23 ties and usefulness.

24 "(6) CONDITION OF GRANT.—Each applicant
25 for a grant under this section shall agree, as a con-
1	dition of receipt of the grant, that if the State or
2	other taxing jurisdiction within which the applicant
3	is located, during any period of time during which
4	the funds from the grant are available to the appli-
5	cant, fails to comply with the certifications required
6	under paragraph (5), all of the funds from such
7	grant shall be returned to the Office.
8	"(7) PENALTY FOR PROVIDING FALSE INFOR-
9	MATION.—Any applicant that provides a certification
10	under paragraph (5) knowing that the information
11	provided in the certification was false shall—
12	"(A) not be eligible to receive the grant
13	under this subsection;
14	"(B) return any grant awarded under this
15	subsection during the time that the certification
16	was not valid; and
17	"(C) not be eligible to receive any subse-
18	quent grants under this subsection.
19	"(8) PROHIBITION.—No grant funds under this
20	subsection may be used—
21	"(A) for any component of the Nationwide
22	Public Safety Broadband Network; or
23	"(B) to make any payments to a person
24	who has been, for reasons of national security,
25	prohibited by any entity of the Federal Govern-

1	ment from bidding on a contract, participating
2	in an auction, or receiving a grant.
3	"(c) Funding and Termination.—
4	"(1) IN GENERAL.—In addition to any funds
5	authorized for grants under section 158, there is au-
6	thorized to be appropriated \$12,000,000,000 for fis-
7	cal years 2020 through 2024.
8	"(2) Administrative costs.—The Office may
9	use up to 5 percent of the funds authorized under
10	this subsection for reasonable and necessary admin-
11	istrative costs associated with the grant program.
12	"(d) DEFINITIONS.—In this section:
13	"(1) $9-1-1$ request for emergency assist-
14	ANCE.—The term '9–1–1 request for emergency as-
15	sistance' means a communication, such as voice,
16	text, picture, multimedia, or any other type of data
17	that is sent to an emergency communications center
18	for the purpose of requesting emergency assistance.
19	"(2) Commonly accepted standards.—The
20	term 'commonly accepted standards' means—
21	"(A) the technical standards followed by
22	the communications industry for network, de-
23	vice, and Internet Protocol connectivity, includ-
24	ing but not limited to, standards developed by
25	the Third Generation Partnership Project

1	(3GPP), the Institute of Electrical and Elec-
2	tronics Engineers (IEEE), the Alliance for
3	Telecommunications Industry Solutions (ATIS),
4	the Internet Engineering Taskforce (IETF),
5	and the International Telecommunications
6	Union (ITU); and
7	"(B) standards that are accredited by a
8	recognized authority such as the American Na-
9	tional Standards Institute (ANSI).
10	"(3) Designated 9–1–1 Charges.—The term
11	'designated 9–1–1 charges' means any taxes, fees, or
12	other charges imposed by a State or other taxing ju-
13	risdiction that are designated or presented as dedi-
14	cated to deliver or improve $9-1-1$ services, $E9-1-1$
15	services, or Next Generation 9–1–1.
16	"(4) ELIGIBLE ENTITY.—The term 'eligible en-
17	tity'—
18	"(A) means a State, local government, or
19	a tribal organization (as defined in section 4(l)
20	of the Indian Self-Determination and Education
21	Assistance Act (25 U.S.C. 450b(l)));
22	"(B) includes public authorities, boards,
23	commissions, and similar bodies created by one
24	or more eligible entities described in subpara-

1	graph (A) to coordinate or provide Next Gen-
2	eration 9–1–1; and
3	"(C) does not include any entity that has
4	failed to submit—
5	"(i) the certifications required under
6	subsection $(b)(5)$; and
7	"(ii) the most recently required cer-
8	tification under subsection (c) within 30
9	days after the date on which such certifi-
10	cation is due.
11	"(5) Emergency communications center.—
12	The term 'emergency communications center' means
13	a facility that is designated to receive a $9-1-1$ re-
14	quest for emergency assistance and perform one or
15	more of the following functions:
16	"(A) Process and analyze 9–1–1 requests
17	for emergency assistance and other gathered in-
18	formation.
19	"(B) Dispatch appropriate emergency re-
20	sponse providers.
21	"(C) Transfer or exchange 9–1–1 requests
22	for emergency assistance and other gathered in-
23	formation with other emergency communica-
24	tions centers and emergency response providers.

"(D) Analyze any communications received
 from emergency response providers.

3 "(E) Support incident command functions. "(6) Emergency response provider.—The 4 5 term 'emergency response provider' has the meaning 6 given that term under section 2 of the Homeland Se-7 curity Act (47 U.S.C. 101(6)), emergency response 8 providers includes Federal, State, and local govern-9 mental and nongovernmental emergency public safe-10 ty, fire, law enforcement, emergency response, emer-11 gency medical (including hospital emergency facili-12 ties), and related personnel, agencies, and authori-13 ties).

14 "(7) INTEROPERABLE.—The term 'interoper-15 able' or 'interoperability' means the capability of 16 emergency communications centers to receive 9–1–1 17 requests for emergency assistance and related data 18 such as location information and callback numbers 19 from the public, then process and share the 9-1-120 requests for emergency assistance and related data 21 with other emergency communications centers and 22 emergency response providers, regardless of jurisdic-23 tion, equipment, device, software, service provider, or 24 other relevant factors, and without the need for pro-25 prietary interfaces.

1	"(8) NATIONWIDE.—The term 'nationwide'
2	means all States of the United States, the District
3	of Columbia, Puerto Rico, American Samoa, Guam,
4	the United States Virgin Islands, the Northern Mar-
5	iana Islands, any other territory or possession of the
6	United States, and each federally recognized Indian
7	tribe.
8	"(9) NATIONWIDE PUBLIC SAFETY BROADBAND
9	NETWORK.—The term 'nationwide public safety
10	broadband network' has the meaning given the term
11	in section 6001 of the Middle Class Tax Relief and
12	Job Creation Act of 2012 (47 U.S.C. 1401).
13	"(10) NEXT GENERATION 9-1-1.—The term
14	Next Generation 9–1–1 means an interoperable, se-
15	cure, Internet Protocol-based system that—
16	"(A) employs commonly accepted stand-
17	ards;
18	"(B) enables the appropriate emergency
19	communications centers to receive, process, and
20	analyze all types of $9-1-1$ requests for emer-
21	gency assistance;
22	"(C) acquires and integrates additional in-
23	formation useful to handling $9-1-1$ requests for
24	emergency assistance; and

1	"(D) supports sharing information related
2	to 9–1–1 requests for emergency assistance
3	among emergency communications centers and
4	emergency response providers.
5	"(11) Office.—The term 'Office' means the
6	Next Generation 9–1–1 Implementation Coordina-
7	tion Office established under section 158 of this
8	title.
9	"(12) STATE.—The term 'State' means any
10	State of the United States, the District of Columbia,
11	Puerto Rico, American Samoa, Guam, the United
12	States Virgin Islands, the Northern Mariana Is-
13	lands, and any other territory or possession of the
14	United States.
15	"(13) SUSTAINABLE FUNDING MECHANISM.—
16	The term 'sustainable funding mechanism' means a
17	funding mechanism that provides adequate revenues
18	to cover ongoing expenses, including operations,
19	maintenance, and upgrades.".
20	SEC. 12006. SAVINGS PROVISION.
21	Nothing in this subtitle or any amendment made by
22	this subtitle shall affect any application pending or grant
23	awarded under section 158 of the National Telecommuni-
24	

(47 U.S.C. 942) prior to date of the enactment of this
 Act.

3 Subtitle C—Broadband Infrastruc 4 ture Finance and Innovation

5 SEC. 13001. SHORT TITLE.

6 This subtitle may be cited as the "Broadband Infra-7 structure Finance and Innovation Act of 2019".

8 SEC. 13002. DEFINITIONS.

9 In this subtitle:

10 (1) ASSISTANT SECRETARY.—The term "Assist11 ant Secretary" means the Assistant Secretary of
12 Commerce for Communications and Information.

(2) BIFIA PROGRAM.—The term "BIFIA program" means the broadband infrastructure finance
and innovation program established under this subtitle.

17 (3) BROADBAND SERVICE.—The term
18 "broadband service"—

(A) means broadband internet access service that is a mass-market retail service, or a
service provided to an entity described in paragraph (12)(B)(ii), by wire or radio that provides the capability to transmit data to and receive data from all or substantially all internet
endpoints, including any capabilities that are

1	incidental to and enable the operation of the
2	communications service;
3	(B) includes any service that is a func-
4	tional equivalent of the service described in sub-
5	paragraph (A); and
6	(C) does not include dial-up internet access
7	service.
8	(4) ELIGIBLE PROJECT COSTS.—The term "eli-
9	gible project costs" means amounts substantially all
10	of which are paid by, or for the account of, an obli-
11	gor in connection with a project, including the cost
12	of—
13	(A) development phase activities, including
14	planning, feasibility analysis, revenue fore-
15	casting, environmental review, historic preserva-
16	tion review, permitting, preliminary engineering
17	and design work, and other preconstruction ac-
18	tivities;
19	(B) construction and deployment phase ac-
20	tivities, including—
21	(i) construction, reconstruction, reha-
22	bilitation, replacement, and acquisition of
23	real property (including land relating to
24	the project and improvements to land),
25	equipment, instrumentation, networking

1	capability, hardware and software, and dig-
2	ital network technology;
3	(ii) environmental mitigation; and
4	(iii) construction contingencies; and
5	(C) capitalized interest necessary to meet
6	market requirements, reasonably required re-
7	serve funds, capital issuance expenses, and
8	other carrying costs during construction and
9	deployment.
10	(5) Federal credit instrument.—The term
11	"Federal credit instrument" means a secured loan,
12	loan guarantee, or line of credit authorized to be
13	made available under the BIFIA program with re-
14	spect to a project.
15	(6) INVESTMENT-GRADE RATING.—The term
16	"investment-grade rating" means a rating of BBB
17	minus, Baa3, bbb minus, BBB (low), or higher as-
18	signed by a rating agency to project obligations.
19	(7) LENDER.—The term "lender" means any
20	non-Federal qualified institutional buyer (as defined
21	in section 230.144A(a) of title 17, Code of Federal
22	Regulations (or any successor regulation), known as
23	Rule 144A(a) of the Securities and Exchange Com-
24	mission and issued under the Securities Act of 1933
25	(15 U.S.C. 77a et seq.)), including—

1	(A) a qualified retirement plan (as defined
2	in section 4974(c) of the Internal Revenue Code
3	of 1986) that is a qualified institutional buyer;
4	and
5	(B) a governmental plan (as defined in
6	section 414(d) of the Internal Revenue Code of
7	1986) that is a qualified institutional buyer.
8	(8) Letter of interest.—The term "letter
9	of interest" means a letter submitted by a potential
10	applicant prior to an application for credit assistance
11	in a format prescribed by the Assistant Secretary on
12	the website of the BIFIA program that—
13	(A) describes the project and the location,
14	purpose, and cost of the project;
15	(B) outlines the proposed financial plan,
16	including the requested credit assistance and
17	the proposed obligor;
18	(C) provides a status of environmental re-
19	view; and
20	(D) provides information regarding satis-
21	faction of other eligibility requirements of the
22	BIFIA program.
23	(9) LINE OF CREDIT.—The term "line of cred-
24	it" means an agreement entered into by the Assist-
25	ant Secretary with an obligor under section 13005

1	to provide a direct loan at a future date upon the
2	occurrence of certain events.
3	(10) LOAN GUARANTEE.—The term "loan guar-
4	antee" means any guarantee or other pledge by the
5	Assistant Secretary to pay all or part of the prin-
6	cipal of and interest on a loan or other debt obliga-
7	tion issued by an obligor and funded by a lender.
8	(11) Obligor.—The term "obligor" means a
9	party that—
10	(A) is primarily liable for payment of the
11	principal of or interest on a Federal credit in-
12	strument; and
13	(B) may be a corporation, company, part-
14	nership, joint venture, trust, or governmental
15	entity, agency, or instrumentality.
16	(12) PROJECT.—The term "project" means a
17	project—
18	(A) to construct and deploy infrastructure
19	for the provision of broadband service; and
20	(B) that the Assistant Secretary deter-
21	mines will—
22	(i) provide access or improved access
23	to broadband service to consumers residing
24	in areas of the United States that have no

1	access to broadband service or do not have
2	access to broadband service offered—
3	(I) with a download speed of at
4	least 25 megabits per second;
5	(II) with an upload speed of at
6	least 3 megabits per second; and
7	(III) with latency that is suffi-
8	ciently low to allow real-time, inter-
9	active applications; or
10	(ii) provide access or improved access
11	to broadband service to—
12	(I) schools, libraries, medical and
13	healthcare providers, community col-
14	leges and other institutions of higher
15	education, and other community sup-
16	port organizations and entities to fa-
17	cilitate greater use of broadband serv-
18	ice by or through such organizations;
19	(II) organizations and agencies
20	that provide outreach, access, equip-
21	ment, and support services to facili-
22	tate greater use of broadband service
23	by low-income, unemployed, aged, and
24	otherwise vulnerable populations;

(III) job-creating strategic facili-
ties located within a State-designated
economic zone, Economic Develop-
ment District designated by the De-
partment of Commerce, Renewal
Community or Empowerment Zone
designated by the Department of
Housing and Urban Development, or
Enterprise Community designated by
the Department of Agriculture; or
(IV) public safety agencies.
(13) PROJECT OBLIGATION.—The term
"project obligation" means any note, bond, deben-
ture, or other debt obligation issued by an obligor in
connection with the financing of a project, other
than a Federal credit instrument.
(14) PUBLIC AUTHORITY.—The term "public
authority" means a Federal, State, county, town, or
township, Indian Tribe, municipal or other local gov-
ernment or instrumentality with authority to fi-
nance, build, operate, or maintain infrastructure for
the provision of broadband service.
(15) RATING AGENCY.—The term "rating agen-
cy" means a credit rating agency registered with the
Securities and Exchange Commission as a nationally

recognized statistical rating organization (as defined
 in section 3(a) of the Securities Exchange Act of
 1934 (15 U.S.C. 78c(a))).

4 (16) SECURED LOAN.—The term "secured 5 loan" means a direct loan or other debt obligation 6 issued by an obligor and funded by the Assistant 7 Secretary in connection with the financing of a 8 project under section 13004.

9 (17) SMALL PROJECT.—The term "small 10 project" means a project having eligible project costs 11 that are reasonably anticipated not to equal or ex-12 ceed \$20,000,000.

(18) STATE.—The term "State" has the meaning given such term in section 3 of the Communications Act of 1934 (47 U.S.C. 153).

16 (19) SUBSIDY AMOUNT.—The term "subsidy
17 amount" means the amount of budget authority suf18 ficient to cover the estimated long-term cost to the
19 Federal Government of a Federal credit instru20 ment—

21 (A) calculated on a net present value basis;22 and

23 (B) excluding administrative costs and any
24 incidental effects on governmental receipts or

1	outlays in accordance with the Federal Credit
2	Reform Act of 1990 (2 U.S.C. 661 et seq.).
3	(20) SUBSTANTIAL COMPLETION.—The term
4	"substantial completion" means, with respect to a
5	project receiving credit assistance under the BIFIA
6	program—
7	(A) the commencement of the provision of
8	broadband service using the infrastructure
9	being financed; or
10	(B) a comparable event, as determined by
11	the Assistant Secretary and specified in the
12	credit agreement.
13	SEC. 13003. DETERMINATION OF ELIGIBILITY AND
13 14	SEC. 13003. DETERMINATION OF ELIGIBILITY AND PROJECT SELECTION.
14	PROJECT SELECTION.
14 15	PROJECT SELECTION. (a) ELIGIBILITY.—
14 15 16	PROJECT SELECTION. (a) ELIGIBILITY.— (1) IN GENERAL.—A project shall be eligible to
14 15 16 17	PROJECT SELECTION. (a) ELIGIBILITY.— (1) IN GENERAL.—A project shall be eligible to receive credit assistance under the BIFIA program
14 15 16 17 18	PROJECT SELECTION. (a) ELIGIBILITY.— (1) IN GENERAL.—A project shall be eligible to receive credit assistance under the BIFIA program if—
14 15 16 17 18 19	PROJECT SELECTION. (a) ELIGIBILITY.— (1) IN GENERAL.—A project shall be eligible to receive credit assistance under the BIFIA program if— (A) the entity proposing to carry out the
 14 15 16 17 18 19 20 	PROJECT SELECTION. (a) ELIGIBILITY.— (1) IN GENERAL.—A project shall be eligible to receive credit assistance under the BIFIA program if— (A) the entity proposing to carry out the project submits a letter of interest prior to sub-
 14 15 16 17 18 19 20 21 	PROJECT SELECTION. (a) ELIGIBILITY.— (1) IN GENERAL.—A project shall be eligible to receive credit assistance under the BIFIA program if— (A) the entity proposing to carry out the project submits a letter of interest prior to sub- mission of a formal application for the project;
 14 15 16 17 18 19 20 21 22 	PROJECT SELECTION. (a) ELIGIBILITY.— (1) IN GENERAL.—A project shall be eligible to receive credit assistance under the BIFIA program if— (A) the entity proposing to carry out the project submits a letter of interest prior to sub- mission of a formal application for the project; and

1	(A) IN GENERAL.—Except as provided in
2	subparagraph (B), to be eligible for assistance
3	under the BIFIA program, a project shall sat-
4	isfy applicable creditworthiness standards,
5	which, at a minimum, shall include—
6	(i) adequate coverage requirements to
7	ensure repayment;
8	(ii) an investment-grade rating from
9	at least 2 rating agencies on debt senior to
10	the Federal credit instrument; and
11	(iii) a rating from at least 2 rating
12	agencies on the Federal credit instrument.
13	(B) SMALL PROJECTS.—In order for a
14	small project to be eligible for assistance under
15	the BIFIA program, such project shall satisfy
16	alternative creditworthiness standards that shall
17	be established by the Assistant Secretary under
18	section 13006 for purposes of this paragraph.
19	(3) Application.—A State, local government,
20	agency or instrumentality of a State or local govern-
21	ment, public authority, public-private partnership, or
22	any other legal entity undertaking the project and
23	authorized by the Assistant Secretary shall submit a
24	project application that is acceptable to the Assist-
25	ant Secretary.

1	(4) ELIGIBLE PROJECT COST PARAMETERS FOR
2	INFRASTRUCTURE PROJECTS.—Eligible project costs
3	shall be reasonably anticipated to equal or exceed
4	\$2,000,000 in the case of a project or program of
5	projects—
6	(A) in which the applicant is a local gov-
7	ernment, instrumentality of local government,
8	or public authority (other than a public author-
9	ity that is a Federal or State government or in-
10	strumentality);
11	(B) located on a facility owned by a local
12	government; or
13	(C) for which the Assistant Secretary de-
14	termines that a local government is substan-
15	tially involved in the development of the project.
16	(5) Dedicated revenue sources.—The ap-
17	plicable Federal credit instrument shall be repayable,
18	in whole or in part, from—
19	(A) amounts charged to—
20	(i) subscribers of broadband service
21	for such service; or
22	(ii) subscribers of any related service
23	provided over the same infrastructure for
24	such related service;
25	(B) user fees;

1	(C) payments owing to the obligor under a
2	public-private partnership; or
3	(D) other dedicated revenue sources that
4	also secure or fund the project obligations.
5	(6) Applications where obligor will be
6	IDENTIFIED LATER.—A State, local government,
7	agency or instrumentality of a State or local govern-
8	ment, or public authority may submit to the Assist-
9	ant Secretary an application under paragraph (3),
10	under which a private party to a public-private part-
11	nership will be—
12	(A) the obligor; and
13	(B) identified later through completion of
14	a procurement and selection of the private
15	party.
16	(7) BENEFICIAL EFFECTS.—The Assistant Sec-
17	retary shall determine that financial assistance for
18	the project under the BIFIA program will—
19	(A) foster, if appropriate, partnerships
20	that attract public and private investment for
21	the project;
22	(B) enable the project to proceed at an
23	earlier date than the project would otherwise be
24	able to proceed or reduce the lifecycle costs (in-
25	cluding debt service costs) of the project; and

(C) reduce the contribution of Federal
 grant assistance for the project.

3 (8) PROJECT READINESS.—To be eligible for 4 assistance under the BIFIA program, the applicant 5 shall demonstrate a reasonable expectation that the 6 contracting process for the construction and deploy-7 ment of infrastructure for the provision of 8 broadband service through the project can commence 9 by no later than 90 days after the date on which a 10 Federal credit instrument is obligated for the project 11 under the BIFIA program.

12 (b) Selection Among Eligible Projects.—

13 (1) ESTABLISHMENT OF APPLICATION PROC-14 ESS.—The Assistant Secretary shall establish a roll-15 ing application process under which projects that are 16 eligible to receive credit assistance under subsection 17 (a) shall receive credit assistance on terms accept-18 able to the Assistant Secretary, if adequate funds 19 are available to cover the subsidy costs associated 20 with the Federal credit instrument.

21 (2) PRELIMINARY RATING OPINION LETTER.—
22 The Assistant Secretary shall require each project
23 applicant to provide—

24 (A) a preliminary rating opinion letter
25 from at least 1 rating agency—

1	(i) indicating that the senior obliga-
2	tions of the project, which may be the Fed-
3	eral credit instrument, have the potential
4	to achieve an investment-grade rating; and
5	(ii) including a preliminary rating
6	opinion on the Federal credit instrument;
7	01
8	(B) in the case of a small project, alter-
9	native documentation that the Assistant Sec-
10	retary shall require in the standards established
11	under section 13006 for purposes of this para-
12	graph.
13	(3) Technology neutrality required.—In
14	selecting projects to receive credit assistance under
15	the BIFIA program, the Assistant Secretary may
16	not favor a project using any particular technology.
17	(c) Federal Requirements.—
18	(1) IN GENERAL.—The following provisions of
19	law shall apply to funds made available under the
20	BIFIA program and projects assisted with those
21	funds:
22	(A) Title VI of the Civil Rights Act of
23	1964 (42 U.S.C. 2000d et seq.).
24	(B) The National Environmental Policy
25	Act of 1969 (42 U.S.C. 4321 et seq.).

1 (C) 54 U.S.C. 300101 et seq. (commonly 2 referred to as the "National Historic Preserva-3 tion Act"). 4 (D) The Uniform Relocation Assistance 5 and Real Property Acquisition Policies Act of 6 1970 (42 U.S.C. 4601 et seq.). 7 (2) NEPA.—No funding shall be obligated for 8 a project that has not received an environmental cat-9 egorical exclusion, a finding of no significant impact, 10 or a record of decision under the National Environ-11 mental Policy Act of 1969 (42 U.S.C. 4321 et seq.). 12 (3) TITLE VI OF THE CIVIL RIGHTS ACT OF 13 1964.—For purposes of title VI of the Civil Rights 14 Act of 1964 (42 U.S.C. 2000d et seq.), any project 15 that receives credit assistance under the BIFIA pro-16 gram shall be considered a program or activity with-17 in the meaning of section 606 of such title (42) 18 U.S.C. 2000d–4a). 19 (d) Application Processing Procedures.— 20 (1) NOTICE OF COMPLETE APPLICATION.—Not 21 later than 30 days after the date of receipt of an ap-22 plication under this section, the Assistant Secretary 23 shall provide to the applicant a written notice to in-24 form the applicant whether—

25 (A) the application is complete; or

(B) additional information or materials are
 needed to complete the application.

3 (2) APPROVAL OR DENIAL OF APPLICATION.—
4 Not later than 60 days after the date of issuance of
5 the written notice under paragraph (1), the Assist6 ant Secretary shall provide to the applicant a writ7 ten notice informing the applicant whether the Assistant Secretary has approved or disapproved the
9 application.

10 (3) APPROVAL BEFORE NEPA REVIEW.—Subject
11 to subsection (c)(2), an application for a project may
12 be approved before the project receives an environ13 mental categorical exclusion, a finding of no signifi14 cant impact, or a record of decision under the Na15 tional Environmental Policy Act of 1969 (42 U.S.C.
16 4321 et seq.).

(e) DEVELOPMENT PHASE ACTIVITIES.—Any credit
instrument secured under the BIFIA program may be
used to finance up to 100 percent of the cost of development phase activities as described in section 13002(4)(A).

21 SEC. 13004. SECURED LOANS.

22 (a) IN GENERAL.—

23 (1) AGREEMENTS.—Subject to paragraphs (2)
24 and (3), the Assistant Secretary may enter into

1	agreements with one or more obligors to make se-
2	cured loans, the proceeds of which shall be used—
3	(A) to finance eligible project costs of any
4	project selected under section 13003;
5	(B) to refinance interim construction fi-
6	nancing of eligible project costs of any project
7	selected under section 13003; or
8	(C) to refinance long-term project obliga-
9	tions or Federal credit instruments, if the refi-
10	nancing provides additional funding capacity for
11	the completion, enhancement, or expansion of
12	any project that—
13	(i) is selected under section 13003; or
14	(ii) otherwise meets the requirements
15	of section 13003.
16	(2) Limitation on refinancing of interim
17	CONSTRUCTION FINANCING.—A loan under para-
18	graph (1) shall not refinance interim construction fi-
19	nancing under paragraph (1)(B)—
20	(A) if the maturity of such interim con-
21	struction financing is later than 1 year after
22	the substantial completion of the project; and
23	(B) later than 1 year after the date of sub-
24	stantial completion of the project.

1 (3) RISK ASSESSMENT.—Before entering into 2 an agreement under this subsection, the Assistant 3 Secretary, in consultation with the Director of the 4 Office of Management and Budget, shall determine 5 an appropriate capital reserve subsidy amount for 6 each secured loan, taking into account each rating 7 letter provided by a rating agency under section 8 13003(b)(2)(A)(ii) or, in the case of a small project, 9 the alternative documentation provided under section 10 13003(b)(2)(B).

11 (b) TERMS AND LIMITATIONS.—

(1) IN GENERAL.—A secured loan under this
section with respect to a project shall be on such
terms and conditions and contain such covenants,
representations, warranties, and requirements (including requirements for audits) as the Assistant
Secretary determines to be appropriate.

(2) MAXIMUM AMOUNT.—The amount of a secured loan under this section shall not exceed the
lesser of 49 percent of the reasonably anticipated eligible project costs or, if the secured loan is not for
a small project and does not receive an investmentgrade rating, the amount of the senior project obligations.

1	(3) PAYMENT.—A secured loan under this sec-
2	tion—
3	(A) shall—
4	(i) be payable, in whole or in part,
5	from—
6	(I) amounts charged to—
7	(aa) subscribers of
8	broadband service for such serv-
9	ice; or
10	(bb) subscribers of any re-
11	lated service provided over the
12	same infrastructure for such re-
13	lated service;
14	(II) user fees;
15	(III) payments owing to the obli-
16	gor under a public-private partner-
17	ship; or
18	(IV) other dedicated revenue
19	sources that also secure the senior
20	project obligations; and
21	(ii) include a coverage requirement or
22	similar security feature supporting the
23	project obligations; and

1	(B) may have a lien on revenues described
2	in subparagraph (A), subject to any lien secur-
3	ing project obligations.
4	(4) INTEREST RATE.—The interest rate on a
5	secured loan under this section shall be not less than
6	the yield on United States Treasury securities of a
7	similar maturity to the maturity of the secured loan
8	on the date of execution of the loan agreement.
9	(5) MATURITY DATE.—The final maturity date
10	of the secured loan shall be the lesser of—
11	(A) 35 years after the date of substantial
12	completion of the project; and
13	(B) if the useful life of the infrastructure
14	for the provision of broadband service being fi-
15	nanced is of a lesser period, the useful life of
16	the infrastructure.
17	(6) Nonsubordination.—
18	(A) IN GENERAL.—Except as provided in
19	subparagraph (B), the secured loan shall not be
20	subordinated to the claims of any holder of
21	project obligations in the event of bankruptcy,
22	insolvency, or liquidation of the obligor.
23	(B) PREEXISTING INDENTURE.—
24	(i) IN GENERAL.—The Assistant Sec-
25	retary shall waive the requirement under

1	subparagraph (A) for a public agency bor-
2	rower that is financing ongoing capital
3	programs and has outstanding senior
4	bonds under a preexisting indenture, if—
5	(I) the secured loan—
6	(aa) is rated in the A cat-
7	egory or higher; or
8	(bb) in the case of a small
9	project, meets an alternative
10	standard that the Assistant Sec-
11	retary shall establish under sec-
12	tion 13006 for purposes of this
13	subclause;
14	(II) the secured loan is secured
15	and payable from pledged revenues
16	not affected by project performance,
17	such as a tax-backed revenue pledge
18	or a system-backed pledge of project
19	revenues; and
20	(III) the BIFIA program share
21	of eligible project costs is 33 percent
22	or less.
23	(ii) LIMITATION.—If the Assistant
24	Secretary waives the nonsubordination re-
25	quirement under this subparagraph—

1	(I) the maximum credit subsidy
2	to be paid by the Federal Government
3	shall be not more than 10 percent of
4	the principal amount of the secured
5	loan; and
6	(II) the obligor shall be respon-
7	sible for paying the remainder of the
8	subsidy cost, if any.
9	(7) FEES.—The Assistant Secretary may estab-
10	lish fees at a level sufficient to cover all or a portion
11	of the costs to the Federal Government of making
12	a secured loan under this section.
13	(8) Non-Federal share.—The proceeds of a
14	secured loan under the BIFIA program, if the loan
15	is repayable from non-Federal funds—
16	(A) may be used for any non-Federal share
17	of project costs required under this subtitle;
18	and
19	(B) shall not count toward the total Fed-
20	eral assistance provided for a project for pur-
21	poses of paragraph (9).
22	(9) MAXIMUM FEDERAL INVOLVEMENT.—The
23	total Federal assistance provided for a project re-
24	ceiving a loan under the BIFIA program shall not
25	exceed 80 percent of the total project cost.

1	(c) Repayment.—
2	(1) Schedule.—The Assistant Secretary shall
3	establish a repayment schedule for each secured loan
4	under this section based on—
5	(A) the projected cash flow from project
6	revenues and other repayment sources; and
7	(B) the useful life of the infrastructure for
8	the provision of broadband service being fi-
9	nanced.
10	(2) Commencement.—Scheduled loan repay-
11	ments of principal or interest on a secured loan
12	under this section shall commence not later than 5
13	years after the date of substantial completion of the
14	project.
15	(3) Deferred payments.—
16	(A) IN GENERAL.—If, at any time after
17	the date of substantial completion of the
18	project, the project is unable to generate suffi-
19	cient revenues to pay the scheduled loan repay-
20	ments of principal and interest on the secured
21	loan, the Assistant Secretary may, subject to
22	subparagraph (C), allow the obligor to add un-
23	paid principal and interest to the outstanding
24	balance of the secured loan.

1	(B) INTEREST.—Any payment deferred
2	under subparagraph (A) shall—
3	(i) continue to accrue interest in ac-
4	cordance with subsection $(b)(4)$ until fully
5	repaid; and
6	(ii) be scheduled to be amortized over
7	the remaining term of the loan.
8	(C) CRITERIA.—
9	(i) IN GENERAL.—Any payment defer-
10	ral under subparagraph (A) shall be con-
11	tingent on the project meeting criteria es-
12	tablished by the Assistant Secretary.
13	(ii) Repayment standards.—The
14	criteria established pursuant to clause (i)
15	shall include standards for reasonable as-
16	surance of repayment.
17	(4) Prepayment.—
18	(A) Use of excess revenues.—Any ex-
19	cess revenues that remain after satisfying
20	scheduled debt service requirements on the
21	project obligations and secured loan and all de-
22	posit requirements under the terms of any trust
23	agreement, bond resolution, or similar agree-
24	ment securing project obligations may be ap-

plied annually to prepay the secured loan with out penalty.

3 (B) USE OF PROCEEDS OF REFI4 NANCING.—The secured loan may be prepaid at
5 any time without penalty from the proceeds of
6 refinancing from non-Federal funding sources.

7 (d) SALE OF SECURED LOANS.—

8 (1) IN GENERAL.—Subject to paragraph (2), as 9 soon as practicable after substantial completion of a 10 project and after notifying the obligor, the Assistant 11 Secretary may sell to another entity or reoffer into 12 the capital markets a secured loan for the project if 13 the Assistant Secretary determines that the sale or 14 reoffering can be made on favorable terms.

(2) CONSENT OF OBLIGOR.—In making a sale
or reoffering under paragraph (1), the Assistant
Secretary may not change the original terms and
conditions of the secured loan without the written
consent of the obligor.

20 (e) LOAN GUARANTEES.—

(1) IN GENERAL.—The Assistant Secretary
may provide a loan guarantee to a lender in lieu of
making a secured loan under this section if the Assistant Secretary determines that the budgetary cost

of the loan guarantee is substantially the same as
 that of a secured loan.

- 3 (2) TERMS.—The terms of a loan guarantee
 4 under paragraph (1) shall be consistent with the
 5 terms required under this section for a secured loan,
 6 except that the rate on the guaranteed loan and any
 7 prepayment features shall be negotiated between the
 8 obligor and the lender, with the consent of the Assistant Secretary.
- 10 (f) STREAMLINED APPLICATION PROCESS.—

(1) IN GENERAL.—The Assistant Secretary
shall develop one or more expedited application processes, available at the request of entities seeking secured loans under the BIFIA program, that use a
set or sets of conventional terms established pursuant to this section.

17 (2) TERMS.—In establishing the streamlined
18 application process required by this subsection, the
19 Assistant Secretary may allow for an expedited ap20 plication period and include terms such as those that
21 require—

- (A) that the project be a small project;
 (B) the secured loan to be secured and
 payable from pledged revenues not affected by
- 25 project performance, such as a tax-backed rev-

1	enue pledge, tax increment financing, or a sys-
2	tem-backed pledge of project revenues; and
3	(C) repayment of the loan to commence
4	not later than 5 years after disbursement.
5	SEC. 13005. LINES OF CREDIT.
6	(a) IN GENERAL.—
7	(1) AGREEMENTS.—Subject to paragraphs (2)
8	through (4), the Assistant Secretary may enter into
9	agreements to make available to one or more obli-
10	gors lines of credit in the form of direct loans to be
11	made by the Assistant Secretary at future dates on
12	the occurrence of certain events for any project se-
13	lected under section 13003.
14	(2) Use of proceeds.—The proceeds of a line
15	of credit made available under this section shall be
16	available to pay debt service on project obligations
17	issued to finance eligible project costs, extraordinary
18	repair and replacement costs, operation and mainte-
19	nance expenses, and costs associated with unex-
20	pected Federal or State environmental restrictions.
21	(3) RISK ASSESSMENT.—
22	(A) IN GENERAL.—Except as provided in
23	subparagraph (B), before entering into an
24	agreement under this subsection, the Assistant
25	Secretary, in consultation with the Director of

the Office of Management and Budget and each
 rating agency providing a preliminary rating
 opinion letter under section 13003(b)(2)(A),
 shall determine an appropriate capital reserve
 subsidy amount for each line of credit, taking
 into account the rating opinion letter.

7 (B) SMALL PROJECTS.—Before entering 8 into an agreement under this subsection to 9 make available a line of credit for a small 10 project, the Assistant Secretary, in consultation 11 with the Director of the Office of Management 12 and Budget, shall determine an appropriate 13 capital reserve subsidy amount for each such 14 line of credit, taking into account the alter-15 native documentation provided under section 13003(b)(2)(B) instead of preliminary rating 16 17 opinion letters provided under section 18 13003(b)(2)(A).

19 (4) INVESTMENT-GRADE RATING REQUIRE20 MENT.—The funding of a line of credit under this
21 section shall be contingent on—

(A) the senior obligations of the project receiving an investment-grade rating from 2 rating agencies; or

1	(B) in the case of a small project, the
2	project meeting an alternative standard that the
3	Assistant Secretary shall establish under section
4	13006 for purposes of this paragraph.
5	(b) TERMS AND LIMITATIONS.—
6	(1) IN GENERAL.—A line of credit under this
7	section with respect to a project shall be on such
8	terms and conditions and contain such covenants,
9	representations, warranties, and requirements (in-
10	cluding requirements for audits) as the Assistant
11	Secretary determines to be appropriate.
12	(2) MAXIMUM AMOUNTS.—The total amount of
13	a line of credit under this section shall not exceed
14	33 percent of the reasonably anticipated eligible
15	project costs.
16	(3) DRAWS.—Any draw on a line of credit
17	under this section shall—
18	(A) represent a direct loan; and
19	(B) be made only if net revenues from the
20	project (including capitalized interest, but not
21	including reasonably required financing re-
22	serves) are insufficient to pay the costs speci-
23	fied in subsection $(a)(2)$.
24	(4) INTEREST RATE.—The interest rate on a
25	direct loan resulting from a draw on the line of cred-
1	it shall be not less than the yield on 30-year United
----	---
2	States Treasury securities, as of the date of execu-
3	tion of the line of credit agreement.
4	(5) SECURITY.—A line of credit issued under
5	this section—
6	(A) shall—
7	(i) be payable, in whole or in part,
8	from—
9	(I) amounts charged to—
10	(aa) subscribers of
11	broadband service for such serv-
12	ice; or
13	(bb) subscribers of any re-
14	lated service provided over the
15	same infrastructure for such re-
16	lated service;
17	(II) user fees;
18	(III) payments owing to the obli-
19	gor under a public-private partner-
20	ship; or
21	(IV) other dedicated revenue
22	sources that also secure the senior
23	project obligations; and

1	(ii) include a coverage requirement or
2	similar security feature supporting the
3	project obligations; and
4	(B) may have a lien on revenues described
5	in subparagraph (A), subject to any lien secur-
6	ing project obligations.
7	(6) PERIOD OF AVAILABILITY.—The full
8	amount of a line of credit under this section, to the
9	extent not drawn upon, shall be available during the
10	10-year period beginning on the date of substantial
11	completion of the project.
12	(7) Rights of third-party creditors.—
13	(A) Against federal government.—A
14	third-party creditor of the obligor shall not have
15	any right against the Federal Government with
16	respect to any draw on a line of credit under
17	this section.
18	(B) Assignment.—An obligor may assign
19	a line of credit under this section to—
20	(i) one or more lenders; or
21	(ii) a trustee on the behalf of such a
22	lender.
23	(8) Nonsubordination.—
24	(A) IN GENERAL.—Except as provided in
25	subparagraph (B), a direct loan under this sec-

1	tion shall not be subordinated to the claims of
2	any holder of project obligations in the event of
3	bankruptcy, insolvency, or liquidation of the ob-
4	ligor.
5	(B) Pre-existing indenture.—
6	(i) IN GENERAL.—The Assistant Sec-
7	retary shall waive the requirement of sub-
8	paragraph (A) for a public agency bor-
9	rower that is financing ongoing capital
10	programs and has outstanding senior
11	bonds under a preexisting indenture, if—
12	(I) the line of credit—
13	(aa) is rated in the A cat-
14	egory or higher; or
15	(bb) in the case of a small
16	project, meets an alternative
17	standard that the Assistant Sec-
18	retary shall establish under sec-
19	tion 13006 for purposes of this
20	subclause;
21	(II) the BIFIA program loan re-
22	sulting from a draw on the line of
23	credit is payable from pledged reve-
24	nues not affected by project perform-
25	ance, such as a tax-backed revenue

1	pledge or a system-backed pledge of
2	project revenues; and
3	(III) the BIFIA program share
4	of eligible project costs is 33 percent
5	or less.
6	(ii) LIMITATION.—If the Assistant
7	Secretary waives the nonsubordination re-
8	quirement under this subparagraph—
9	(I) the maximum credit subsidy
10	to be paid by the Federal Government
11	shall be not more than 10 percent of
12	the principal amount of the secured
13	loan; and
14	(II) the obligor shall be respon-
15	sible for paying the remainder of the
16	subsidy cost.
17	(9) FEES.—The Assistant Secretary may estab-
18	lish fees at a level sufficient to cover all or a portion
19	of the costs to the Federal Government of providing
20	a line of credit under this section.
21	(10) Relationship to other credit instru-
22	MENTS.—A project that receives a line of credit
23	under this section also shall not receive a secured
24	loan or loan guarantee under section 13004 in an

1	amount that, combined with the amount of the line
2	of credit, exceeds 49 percent of eligible project costs.
3	(c) Repayment.—
4	(1) TERMS AND CONDITIONS.—The Assistant
5	Secretary shall establish repayment terms and condi-
6	tions for each direct loan under this section based
7	on—
8	(A) the projected cash flow from project
9	revenues and other repayment sources; and
10	(B) the useful life of the infrastructure for
11	the provision of broadband service being fi-
12	nanced.
13	(2) TIMING.—All repayments of principal or in-
14	terest on a direct loan under this section shall be
15	scheduled—
16	(A) to commence not later than 5 years
17	after the end of the period of availability speci-
18	fied in subsection $(b)(6)$; and
19	(B) to conclude, with full repayment of
20	principal and interest, by the date that is 25
21	years after the end of the period of availability
22	specified in subsection (b)(6).

1SEC. 13006. ALTERNATIVE PRUDENTIAL LENDING STAND-2ARDS FOR SMALL PROJECTS.

3 Not later than 180 days after the date of the enact-4 ment of this Act, the Assistant Secretary shall establish 5 alternative, streamlined prudential lending standards for 6 small projects receiving credit assistance under the BIFIA 7 program to ensure that such projects pose no additional 8 risk to the Federal Government, as compared with 9 projects that are not small projects.

10 SEC. 13007. PROGRAM ADMINISTRATION.

(a) REQUIREMENT.—The Assistant Secretary shall
establish a uniform system to service the Federal credit
instruments made available under the BIFIA program.

(b) FEES.—The Assistant Secretary may collect and
spend fees, contingent on authority being provided in appropriations Acts, at a level that is sufficient to cover—

17 (1) the costs of services of expert firms retained18 pursuant to subsection (d); and

(2) all or a portion of the costs to the Federal
Government of servicing the Federal credit instruments.

22 (c) SERVICER.—

(1) IN GENERAL.—The Assistant Secretary
may appoint a financial entity to assist the Assistant
Secretary in servicing the Federal credit instruments.

(2) DUTIES.—A servicer appointed under para graph (1) shall act as the agent for the Assistant
 Secretary.

4 (3) FEE.—A servicer appointed under para5 graph (1) shall receive a servicing fee, subject to ap6 proval by the Assistant Secretary.

7 (d) ASSISTANCE FROM EXPERT FIRMS.—The Assist8 ant Secretary may retain the services of expert firms, in9 cluding counsel, in the field of municipal and project fi10 nance to assist in the underwriting and servicing of Fed11 eral credit instruments.

(e) EXPEDITED PROCESSING.—The Assistant Secretary shall implement procedures and measures to economize the time and cost involved in obtaining approval and
the issuance of credit assistance under the BIFIA program.

(f) ASSISTANCE TO SMALL PROJECTS.—Of the
amount appropriated under section 13010(a), and after
the set-aside for administrative expenses under section
13010(b), not less than 20 percent shall be made available
for the Assistant Secretary to use in lieu of fees collected
under subsection (b) for small projects.

23 SEC. 13008. STATE AND LOCAL PERMITS.

The provision of credit assistance under the BIFIA
program with respect to a project shall not—

1	(1) relieve any recipient of the assistance of any
2	obligation to obtain any required State or local per-
3	mit or approval with respect to the project;
4	(2) limit the right of any unit of State or local
5	government to approve or regulate any rate of re-
6	turn on private equity invested in the project; or
7	(3) otherwise supersede any State or local law
8	(including any regulation) applicable to the construc-
9	tion or operation of the project.
10	SEC. 13009. REGULATIONS.
11	The Assistant Secretary may promulgate such regula-
12	tions as the Assistant Secretary determines to be appro-
13	priate to carry out the BIFIA program.
14	SEC. 13010. FUNDING.
15	(a) Authorization of Appropriations.—There
16	are authorized to be appropriated to the Assistant Sec-
17	retary to carry out this subtitle \$5,000,000,000 for fiscal
18	year 2020, to remain available until expended.
19	(b) Administrative Expenses.—Of the amount
20	appropriated under subsection (a), the Assistant Secretary
21	may use not more than 5 percent for the administration
22	of the BIFIA program.
23	SEC. 13011. REPORTS TO CONGRESS.
24	(a) IN CENERAL Not later than 1 year often the

(a) IN GENERAL.—Not later than 1 year after thedate of the enactment of this Act, and every 2 years there-

after, the Assistant Secretary shall submit to Congress a
 report summarizing the financial performance of the
 projects that are receiving, or have received, assistance
 under the BIFIA program, including a recommendation
 as to whether the objectives of the BIFIA program are
 best served by—

- 7 (1) continuing the program under the authority8 of the Assistant Secretary; or
- 9 (2) establishing a Federal corporation or feder10 ally sponsored enterprise to administer the program.
 11 (b) APPLICATION PROCESS REPORT.—
- 12 (1) IN GENERAL.—Not later than 1 year after 13 the date of the enactment of this Act, and annually 14 thereafter, the Assistant Secretary shall submit to 15 the Committee on Energy and Commerce of the 16 House of Representatives and the Committee on 17 Commerce, Science, and Transportation of the Sen-18 ate a report that includes a list of all of the letters 19 of interest and applications received for assistance 20 under the BIFIA program during the preceding fis-21 cal year.
- 22 (2) INCLUSIONS.—
- 23 (A) IN GENERAL.—Each report under
 24 paragraph (1) shall include, at a minimum, a

1	description of, with respect to each letter of in-
2	terest and application included in the report—
3	(i) the date on which the letter of in-
4	terest or application was received;
5	(ii) the date on which a notification
6	was provided to the applicant regarding
7	whether the application was complete or
8	incomplete;
9	(iii) the date on which a revised and
10	completed application was submitted (if
11	applicable);
12	(iv) the date on which a notification
13	was provided to the applicant regarding
14	whether the project was approved or dis-
15	approved; and
16	(v) if the project was not approved,
17	the reason for the disapproval.
18	(B) CORRESPONDENCE.—Each report
19	under paragraph (1) shall include copies of any
20	correspondence provided to the applicant in ac-
21	cordance with section 13003(d).

TITLE II—DRINKING WATER INFRASTRUCTURE Subtitle A—PFAS Infrastructure Grant Program

5 SEC. 21001. SHORT TITLE.

6 This subtitle may be cited as the "Providing Finan-7 cial Assistance for Safe Drinking Water Act" or the8 "PFAS Drinking Water Act".

9 SEC. 21002. ESTABLISHMENT OF PFAS INFRASTRUCTURE 10 GRANT PROGRAM.

Part E of the Safe Drinking Water Act (42 U.S.C.
300j et seq.) is amended by adding at the end the following new section:

14 "SEC. 1459E. ASSISTANCE FOR COMMUNITY WATER SYS15 TEMS AFFECTED BY PFAS.

16 "(a) ESTABLISHMENT.—Not later than 180 days 17 after the date of enactment of this section, the Adminis-18 trator shall establish a program to award grants to af-19 fected community water systems to pay for capital costs 20 associated with the implementation of eligible treatment 21 technologies.

22 "(b) Applications.—

23 "(1) GUIDANCE.—Not later than 12 months
24 after the date of enactment of this section, the Ad25 ministrator shall publish guidance describing the

1	form and timing for community water systems to
2	apply for grants under this section.
3	"(2) Required information.—The Adminis-
4	trator shall require a community water system ap-
5	plying for a grant under this section to submit—
6	"(A) information showing the presence of
7	PFAS in water of the community water system;
8	and
9	"(B) a certification that the treatment
10	technology in use by the community water sys-
11	tem at the time of application is not sufficient
12	to remove all detectable amounts of PFAS.
13	"(c) LIST OF ELIGIBLE TREATMENT TECH-
14	NOLOGIES.—Not later than 150 days after the date of en-
15	actment of this section, and every two years thereafter,
16	the Administrator shall publish a list of treatment tech-
17	nologies that the Administrator determines are effective
18	at removing all detectable amounts of PFAS from drink-
19	ing water.
20	"(d) PRIORITY FOR FUNDING.—In awarding grants
21	under this section, the Administrator shall prioritize af-
22	fected community water systems that—
23	"(1) serve a disadvantaged community;

"(2) will provide at least a 10 percent cost
 share for the cost of implementing an eligible treat ment technology; or

4 "(3) demonstrate the capacity to maintain the
5 eligible treatment technology to be implemented
6 using the grant.

7 "(e) AUTHORIZATION OF APPROPRIATIONS.—There
8 is authorized to be appropriated to carry out this section
9 not more than \$500,000,000 for each of the fiscal years
10 2020 through 2024.

11 "(f) DEFINITIONS.—In this section:

12 "(1) AFFECTED COMMUNITY WATER SYSTEM.—
13 The term 'affected community water system' means
14 a community water system that is affected by the
15 presence of PFAS in the water in the community
16 water system.

17 "(2) DISADVANTAGED COMMUNITY.—The term
18 'disadvantaged community' has the meaning given
19 that term in section 1452.

20 "(3) ELIGIBLE TREATMENT TECHNOLOGY.—
21 The term 'eligible treatment technology' means a
22 treatment technology included on the list published
23 under subsection (c).".

1 SEC. 21003. DEFINITION.

2 Section 1401 of the Safe Drinking Water Act (42
3 U.S.C. 300f) is amended by adding at the end the fol4 lowing:

5 "(17) PFAS.—The term 'PFAS' means a
6 perfluoroalkyl or polyfluoroalkyl substance with at
7 least one fully fluorinated carbon atom.".

8 Subtitle B—Extensions

9 SEC. 22001. FUNDING.

10 (a) STATE REVOLVING LOAN FUNDS.—Section
11 1452(m)(1) of the Safe Drinking Water Act (42 U.S.C.
12 300j-12(m)(1)) is amended—

13 (1) in subparagraph (B), by striking "and"; 14 (2) in subparagraph (C), by striking "2021." and inserting "2021;"; and 15 16 (3) by adding at the end the following: 17 "(D) \$4,140,000,000 for fiscal year 2022; 18 "(E) \$4,800,000,000 for fiscal year 2023; 19 and 20 "(F) \$5,500,000,000 for fiscal year 21 2024.". 22 (b) INDIAN RESERVATION DRINKING WATER PRO-23 GRAM.—Section 2001(d) of America's Water Infrastructure Act of 2018 (Public Law 115–270) is amended by 24 striking "2022" and inserting "2024". 25

(c) VOLUNTARY SCHOOL AND CHILD CARE PROGRAM
 LEAD TESTING GRANT PROGRAM.—Section 1464(d)(8) of
 the Safe Drinking Water Act (42 U.S.C. 300j-24(d)(8))
 is amended by striking "2021" and inserting "2024".

5 (d) DRINKING WATER FOUNTAIN REPLACEMENT
6 FOR SCHOOLS.—Section 1465(d) of the Safe Drinking
7 Water Act (42 U.S.C. 300j-25(d)) is amended by striking
8 "2021" and inserting "2024".

9 (e) TECHNICAL ASSISTANCE AND GRANTS.—Section
10 1433(g)(6) of the Safe Drinking Water Act (42 U.S.C.
11 300i-2(g)(6)) is amended by striking "2021" and insert12 ing "2024".

(f) GRANTS FOR STATE PROGRAMS.—Section
14 1443(a)(7) of the Safe Drinking Water Act (42 U.S.C.
15 300j-2(a)(7)) is amended by striking "2021" and insert16 ing "2024".

17 SEC. 22002. AMERICAN IRON AND STEEL PRODUCTS.

18 Section 1452(a)(4)(A) of the Safe Drinking Water
19 Act (42 U.S.C. 300j-12(a)(4)(A)) is amended by striking
20 "2023" and inserting "2024".

1**TITLE III—CLEAN ENERGY**2**INFRASTRUCTURE**3**Subtitle A—Grid Security and**4**Modernization**

5 PART 1—ENHANCING ELECTRIC INFRASTRUC6 TURE RESILIENCE, RELIABILITY, AND EN7 ERGY SECURITY

8 SEC. 31101. PROGRAM TO ENHANCE ELECTRIC INFRA9 STRUCTURE RESILIENCE, RELIABILITY, AND
10 ENERGY SECURITY.

(a) PROGRAM.—The Secretary of Energy shall establish a competitive grant program to provide grants to
States, units of local government, and Indian tribe economic development entities to enhance energy security
through measures for electricity delivery infrastructure
hardening and enhanced resilience and reliability.

(b) PURPOSE OF GRANTS.—The Secretary of Energy
may make grants on a competitive basis to enable broader
use of resiliency-related technologies, upgrades, and institutional measures and practices designed to—

21 (1) improve the resilience, reliability, and secu22 rity of electricity delivery infrastructure;

(2) improve preparedness and restoration time
to mitigate power disturbances resulting from physical and cyber attacks, electromagnetic pulse attacks,

geomagnetic disturbances, seismic events, severe
 weather, and climate change;

3 (3) continue delivery of power to facilities crit4 ical to public health, safety, and welfare, including
5 hospitals, assisted living facilities, and schools;

6 (4) continue delivery of power to electricity-de-7 pendent essential services, including fueling stations 8 and pumps, wastewater and sewage treatment facili-9 ties, gas pipeline infrastructure, communications 10 systems, transportation services and systems, and 11 services provided by emergency first responders;

12 (5) enhance regional grid resilience and the re13 silience of electricity-dependent regional infrastruc14 ture; and

(6) facilitate greater incorporation of renewableenergy generation into the electric grid.

17 (c) EXAMPLES.—Resiliency-related technologies, up18 grades, and measures with respect to which grants may
19 be made under this section include—

20 (1) hardening or enhanced protection of utility
21 poles, wiring, cabling, and other distribution compo22 nents, facilities, or structures;

(2) advanced grid technologies capable of isolating or repairing problems remotely, such as advanced metering infrastructure, high-tech sensors,

1	grid monitoring and control systems, and remote re-
2	configuration and redundancy systems;
3	(3) cybersecurity products and components;
4	(4) distributed generation, including back-up
5	generation to power critical facilities and essential
6	services, and related integration components, such as
7	advanced inverter technology;
8	(5) microgrid systems, including hybrid
9	microgrid systems for isolated communities;
10	(6) combined heat and power;
11	(7) waste heat resources;
12	(8) non-grid-scale energy storage technologies;
13	(9) electronically controlled reclosers and simi-
14	lar technologies for power restoration;
15	(10) advanced energy analytics technology, such
16	as internet-based and cloud-based computing solu-
17	tions and subscription licensing models;
18	(11) efforts that enhance resilience through
19	planning, preparation, response, and recovery activi-
20	ties;
21	(12) operational capabilities to enhance resil-
22	ience through rapid response recovery; and
23	(13) efforts to ensure availability of key critical
24	components through contracts, cooperative agree-

ments, stockpiling and prepositioning, or other
 measures.

3 (d) IMPLEMENTATION.—Specific projects or pro4 grams established, or to be established, pursuant to grants
5 provided under this section shall be implemented through
6 grant recipients by public and publicly regulated entities
7 on a cost-shared basis.

8 (e) COOPERATION.—In carrying out projects or pro-9 grams established, or to be established, pursuant to grants 10 provided under this section, recipients shall cooperate, as 11 applicable, with—

12 (1) State public utility commissions;

13 (2) State energy offices;

14 (3) electric infrastructure owners and operators;15 and

16 (4) other entities responsible for maintaining17 electric reliability.

18 (f) DATA AND METRICS.—

19 (1) IN GENERAL.—To the extent practicable,
20 grant recipients shall utilize the most current data,
21 metrics, and frameworks related to—

(A) electricity delivery infrastructure hardening and enhancing resilience and reliability;
and

(B) current and future threats, including
 physical and cyber attacks, electromagnetic
 pulse, geomagnetic disturbances, seismic events,
 severe weather, and climate change.

5 METRICS.—Grant recipients shall dem-(2)6 onstrate to the Secretary of Energy, with measur-7 able and verifiable data, how the deployment of resil-8 iency-related technologies, upgrades, and measures 9 achieve improvements in the resiliency and recovery 10 of electricity delivery infrastructure and related serv-11 ices, including a comparison of data collected before 12 and after deployment. Metrics for demonstrating im-13 provements in resiliency and recovery may include— 14 (A) power quality during power disturb-

14 (A) power quarty during power disturbents
15 ances when delivered power does not meet
16 power quality requirements of the customer;
17 (B) duration of customer interruptions;

18 (C) number of customers impacted;

19 (D) cost impacts, including business and20 other economic losses;

(E) impacts on electricity-dependent essential services and critical facilities; and
(F) societal impacts.
(3) FURTHERING ENERGY ASSURANCE

25 PLANS.—Grant recipients shall demonstrate to the

Secretary of Energy how projects or programs estab lished, or to be established, pursuant to grants pro vided under this section further applicable State and
 local energy assurance plans.

5 (g) AUTHORIZATION OF APPROPRIATIONS.—There
6 are authorized to be appropriated to carry out this section
7 \$515,000,000 for each of fiscal years 2020 through 2024,
8 of which not more than \$15,000,000 per fiscal year may
9 be used for administrative expenses.

PART 2—21ST CENTURY POWER GRID SEC. 31201. GRANT PROGRAM FOR GRID MODERNIZATION PROJECTS.

(a) IN GENERAL.—The Secretary of Energy shall establish a program to provide financial assistance to eligible
partnerships to carry out projects related to the modernization of the electric grid, including—

(1) projects for the application of technologies
to improve monitoring of, advanced controls for, and
prediction of performance of, the distribution system; and

21 (2) projects related to transmission system22 interconnections.

23 (b) ELIGIBLE PROJECTS.—To be eligible for financial
24 assistance under subsection (a), a project shall—

25 (1) be designed to—

1	(A) improve the resiliency, performance,
2	and efficiency of the future electric grid, while
3	ensuring the continued provision of safe, secure,
4	reliable, and affordable power; or
5	(B) deploy a new product or technology
6	that could be used by customers of an electric
7	utility; and
8	(2) demonstrate—
9	(A) secure integration and management of
10	energy resources, including through distributed
11	energy generation, combined heat and power,
12	micro-grids, energy storage, electric vehicles,
13	energy efficiency, demand response, or intel-
14	ligent loads; or
15	(B) secure integration and interoperability
16	of communications and information technologies
17	related to the electric grid.
18	(c) Cybersecurity Plan.—Each project carried
19	out with assistance provided under subsection (a) shall in-
20	clude the development of a cybersecurity plan written in
21	accordance with guidelines developed by the Secretary.
22	(d) PRIVACY EFFECTS ANALYSIS.—Each project car-
23	ried out with assistance provided under subsection (a)
24	shall include a privacy effects analysis that evaluates the
25	project in accordance with the Voluntary Code of Conduct

of the Department of Energy, commonly known as the
 "DataGuard Energy Data Privacy Program", or the most
 recent revisions to the privacy program of the Depart ment.
 (e) DEFINITIONS.—In this section:
 (1) ELIGIBLE PARTNERSHIP.—The term "eligi-

ble partnership" means a partnership consisting of
two or more entities, which—

- 9 (A) may include—
- 10 (i) any institution of higher education;

(ii) a National Laboratory;

- 12 (iii) a State or a local government or
- 13 other public body created by or pursuant14 to State law;
- 15 (iv) an Indian Tribe;
- 16 (v) a Federal power marketing admin-17 istration; or
- 18 (vi) an entity that develops and pro-19 vides technology; and
- 20 (B) shall include at least one of any of—
 21 (i) an electric utility;
- 22 (ii) a regional transmission organiza-23 tion; or
- 24 (iii) an independent system operator.

(2) ELECTRIC UTILITY.—The term "electric
 utility" has the meaning given that term in section
 3(22) of the Federal Power Act (16 U.S.C.
 796(22)), except that such term does not include an
 entity described in subparagraph (B) of such sec tion.

7 (3) FEDERAL POWER MARKETING ADMINISTRA8 TION.—The term "Federal power marketing admin9 istration" means the Bonneville Power Administra10 tion, the Southeastern Power Administration, the
11 Southwestern Power Administration, or the Western
12 Area Power Administration.

(4) INDEPENDENT SYSTEM OPERATOR; REGIONAL TRANSMISSION ORGANIZATION.—The terms
"independent system operator" and "regional transmission organization" have the meanings given those
terms in section 3 of the Federal Power Act (16
U.S.C. 796).

(5) INSTITUTION OF HIGHER EDUCATION.—The
term "institution of higher education" has the
meaning given that term in section 101(a) of the
Higher Education Act of 1965 (20 U.S.C. 1001(a)).
(f) AUTHORIZATION OF APPROPRIATIONS.—There is
authorized to be appropriated to the Secretary to carry

1 out this section \$200,000,000 for each of fiscal years 2020

2 through 2024, to remain available until expended.

3 SEC. 31202. INTERREGIONAL TRANSMISSION PLANNING RE4 PORT.

5 Not later than 6 months after the date of enactment
6 of this Act, the Secretary of Energy shall submit to Con7 gress a report that—

8 (1) examines the effectiveness of interregional 9 transmission planning processes for identifying 10 transmission projects across regions that provide 11 economic, reliability, or operational benefits, taking 12 into consideration the public interest, the integrity of 13 markets, and the protection of consumers;

(2) evaluates the current architecture of regional electricity grids (including international transmission connections of such grids) that together
comprise the Nation's electricity grid, with respect
to—

19 (A) potential growth in renewable energy
20 generation, including energy generation from
21 offshore wind;

(B) potential growth in electricity demand;and

24 (C) retirement of existing electricity gen25 eration assets;

1	(3) analyzes—
2	(A) the range of benefits that interregional
3	transmission provides;
4	(B) the impact of basing transmission
5	project approvals on a comprehensive assess-
6	ment of the multiple benefits provided;
7	(C) synchronization of processes described
8	in paragraph (1) among neighboring regions;
9	(D) how often interregional transmission
10	planning should be completed;
11	(E) whether voltage, size, or cost require-
12	ments should be a factor in the approval of
13	interregional transmission projects;
14	(F) cost allocation methodologies for inter-
15	regional transmission projects; and
16	(G) current barriers and challenges to con-
17	struction of interregional transmission projects;
18	and
19	(4) identifies potential changes, based on the
20	analysis under paragraph (3), to the processes de-
21	scribed in paragraph (1) to ensure the most effi-
22	cient, cost effective, and broadly beneficial trans-
23	mission projects are selected for construction.

PART 3—ENERGY EFFICIENT TRANSFORMER REBATE PROGRAM SEC. 31301. ENERGY EFFICIENT TRANSFORMER REBATE PROGRAM.

5 (a) DEFINITIONS.—In this section:

6 (1) QUALIFIED ENERGY EFFICIENT TRANS-FORMER.—The term "qualified energy 7 efficient 8 transformer" means a transformer that meets or ex-9 ceeds the applicable energy conservation standards 10 described in the tables in subsection (b)(2) and 11 paragraphs (1) and (2) of subsection (c) of section 12 431.196 of title 10, Code of Federal Regulations (as 13 in effect on the date of enactment of this Act).

14 (2) QUALIFIED ENERGY INEFFICIENT TRANS-FORMER.—The term "qualified energy inefficient 15 16 transformer" means a transformer with an equal 17 number of phases and capacity to a transformer described in any of the tables in subsection (b)(2) and 18 19 paragraphs (1) and (2) of subsection (c) of section 20 431.196 of title 10. Code of Federal Regulations (as 21 in effect on the date of enactment of this Act) 22 that—

23 (A) does not meet or exceed the applicable
24 energy conservation standards described in
25 paragraph (1); and

	100
1	(B)(i) was manufactured between January
2	1, 1985, and December 31, 2006, for a trans-
3	former with an equal number of phases and ca-
4	pacity as a transformer described in the table
5	in subsection $(b)(2)$ of section 431.196 of title
6	10, Code of Federal Regulations (as in effect on
7	the date of enactment of this Act); or
8	(ii) was manufactured between January 1,
9	1990, and December 31, 2009, for a trans-
10	former with an equal number of phases and ca-
11	pacity as a transformer described in the table
12	in paragraph (1) or (2) of subsection (c) of that
13	section (as in effect on the date of enactment
14	of this Act).
15	(3) QUALIFIED ENTITY.—The term "qualified
16	entity" means an owner of industrial or manufac-
17	turing facilities, commercial buildings, or multifamily
18	residential buildings, a utility, or an energy service
19	company, that fulfills the requirements of subsection
20	(c).

(b) ESTABLISHMENT.—Not later than 90 days after
the date of enactment of this Act, the Secretary of Energy
shall establish a program to provide rebates to qualified
entities for expenditures made by the qualified entity for

1	the replacement of a qualified energy inefficient trans-
2	former with a qualified energy efficient transformer.
3	(c) REQUIREMENTS.—To be eligible to receive a re-
4	bate under this section, an entity shall submit to the Sec-
5	retary of Energy an application in such form, at such
6	time, and containing such information as the Secretary
7	may require, including demonstrated evidence—
8	(1) that the entity purchased a qualified energy
9	efficient transformer;
10	(2) of the core loss value of the qualified energy
11	efficient transformer;
12	(3) of the age of the qualified energy inefficient
13	transformer being replaced;
14	(4) of the core loss value of the qualified energy
15	inefficient transformer being replaced—
16	(A) as measured by a qualified professional
17	or verified by the equipment manufacturer, as
18	applicable; or
19	(B) for transformers described in sub-
20	section $(a)(2)(B)(i)$, as selected from a table of
21	default values as determined by the Secretary
22	in consultation with applicable industry; and
23	(5) that the qualified energy inefficient trans-
24	former has been permanently decommissioned and
25	scrapped.

1	(d) Authorized Amount of Rebate.—The
2	amount of a rebate provided under this section shall be—
3	(1) for a 3-phase or single-phase transformer
4	with a capacity of not less than 10 and not greater
5	than 2,500 kilovolt-amperes, twice the amount equal
6	to the difference in watts between the core loss value
7	(as measured in accordance with paragraphs (2) and
8	(4) of subsection (c)) of—
9	(A) the qualified energy inefficient trans-
10	former; and
11	(B) the qualified energy efficient trans-
12	former; or
13	(2) for a transformer described in subsection
14	(a)(2)(B)(i), the amount determined using a table of
15	default rebate values by rated transformer output,
16	as measured in kilovolt-amperes, as determined by
17	the Secretary in consultation with applicable indus-
18	try.
19	(e) Authorization of Appropriations.—There is
20	authorized to be appropriated to carry out this section
21	\$10,000,000 for each of fiscal years 2020 through 2024,
22	to remain available until expended.

 1
 PART 4—STRATEGIC TRANSFORMER RESERVE

 2
 PROGRAM

 3
 SEC. 31401. STRATEGIC TRANSFORMER RESERVE PRO

 4
 GRAM.

5 (a) ESTABLISHMENT.—The Secretary of Energy
6 shall establish a program to reduce the vulnerability of the
7 electric grid to physical attack, cyber attack, electro8 magnetic pulse, geomagnetic disturbances, severe weather,
9 climate change, and seismic events, including by—

10 (1) ensuring that large power transformers, 11 generator step-up transformers, and other critical 12 electric grid equipment are strategically located to 13 ensure timely replacement of such equipment as may 14 be necessary to restore electric grid function rapidly 15 in the event of severe damage to the electric grid 16 due to physical attack, cyber attack, electromagnetic 17 pulse, geomagnetic disturbances, severe weather, cli-18 mate change, or seismic events; and

(2) establishing a coordinated plan to facilitate
transportation of large power transformers and
other critical electric grid equipment.

(b) TRANSFORMER RESILIENCE AND ADVANCED
COMPONENTS PROGRAM.—The program established
under subsection (a) shall include implementation of the
Transformer Resilience and Advanced Components pro-

²⁶ gram to—

(1) improve large power transformers and other
 critical electric grid equipment by reducing their
 vulnerabilities; and

4 (2) develop, test, and deploy innovative equip5 ment designs that are more flexible and offer greater
6 resiliency of electric grid functions.

7 (c) Strategic Equipment Reserves.—

8 (1) AUTHORIZATION.—In carrying out the pro-9 gram established under subsection (a), the Secretary 10 may establish one or more federally owned strategic 11 equipment reserves, as appropriate, to ensure na-12 tionwide access to reserve equipment.

(2) CONSIDERATION.—In establishing any federally owned strategic equipment reserve, the Secretary may consider existing spare transformer and
equipment programs and requirements established
by the private sector, regional transmission operators, independent system operators, and State regulatory authorities.

(d) CONSULTATION.—The program established under
subsection (a) shall be carried out in consultation with the
Federal Energy Regulatory Commission, the Electricity
Subsector Coordinating Council, the Electric Reliability
Organization, and owners and operators of critical electric
infrastructure and defense and military installations.

1 (e) AUTHORIZATION OF APPROPRIATIONS.—There 2 are authorized to be appropriated to carry out this section 3 \$75,000,000 for each of fiscal years 2020 through 2024. Subtitle B—Energy Efficient 4 Infrastructure 5 PART 1-EFFICIENCY GRANTS FOR STATE AND 6 7 LOCAL GOVERNMENTS 8 SECTION 32101. ENERGY EFFICIENT PUBLIC BUILDINGS. 9 Section 125(c) of the Energy Policy Act of 2005 (42) U.S.C. 15822(c)) is amended by striking "\$30,000,000 10 11 for each of fiscal years 2006 through 2010" and inserting

12 "\$100,000,000 for each of fiscal years 2020 through13 2024".

14 SECTION 32102. ENERGY EFFICIENCY AND CONSERVATION 15 BLOCK GRANT PROGRAM.

16 (a) PURPOSE.—Section 542(b)(1) of the Energy
17 Independence and Security Act of 2007 (42 U.S.C.
18 17152(b)(1)) is amended—

- 19 (1) in subparagraph (A), by striking "; and"20 and inserting a semicolon;
- (2) in subparagraph (B), by striking the semi-colon and inserting "; and"; and
- 23 (3) by adding at the end the following:

1	"(C) diversifies energy supplies, including
2	by facilitating and promoting the use of alter-
3	native fuels;".
4	(b) Use of Funds.—Section 544(9) of the Energy
5	Independence and Security Act of 2007 (42 U.S.C.
6	17154(9)) is amended to read as follows:
7	"(9) deployment of energy distribution tech-
8	nologies that significantly increase energy efficiency
9	or expand access to alternative fuels, including—
10	"(A) distributed resources;
11	"(B) district heating and cooling systems;
12	and
13	"(C) infrastructure for delivering alter-
14	native fuels;".
15	(c) COMPETITIVE GRANTS.—Section $546(c)(2)$ of the
16	Energy Independence and Security Act of 2007 (42
17	U.S.C. $17156(c)(2)$) is amended by inserting ", including
18	projects to expand the use of alternative fuels" before the
19	period at the end.
20	(d) FUNDING.—Section 548(a) of the Energy Inde-
21	pendence and Security Act of 2007 (42 U.S.C. 17158(a))
22	is amended to read as follows:
23	"(a) Authorization of Appropriations.—
24	"(1) GRANTS.—There is authorized to be ap-
25	propriated to the Secretary for the provision of

1	grants under the program \$3,500,000,000 for each
2	of fiscal years 2020 through 2024.
3	"(2) Administrative costs.—There is au-
4	thorized to be appropriated to the Secretary for ad-
5	ministrative expenses of the program $$35,000,000$
6	for each of fiscal years 2020 through 2024.".
7	(e) Technical Amendments.—Section 543 of the
8	Energy Independence and Security Act of 2007 (42
9	U.S.C. 17153) is amended—
10	(1) in subsection (c), by striking "subsection
11	(a)(2)" and inserting "subsection (a)(3)"; and
12	(2) in subsection (d), by striking "subsection
13	(a)(3)" and inserting "subsection (a)(4)".
14	PART 2—SMART BUILDING ACCELERATION
15	SEC. 32201. SHORT TITLE.
16	This part may be cited as the "Smart Building Accel-
17	eration Act".
18	SEC. 32202. FINDINGS.
19	Congress finds that—
20	(1) the building sector uses more than 40 per-
21	cent of the energy of the United States;
22	(2) emerging building energy monitoring and
23	control technologies are enabling a transition of the
24	building sector to "smart" buildings that have dra-

1	matically reduced energy use and improved quality
2	of service to occupants;

3 (3) an analysis of select private-sector smart
4 buildings by the Department of Energy would docu5 ment the costs and benefits of the emerging tech6 nologies, promote the adoption of the technologies,
7 and accelerate the transition to the technologies;

8 (4) with over 400,000 buildings, the Federal
9 Government is the largest building owner in the
10 United States; and

(5) the Federal Government can also accelerate
the transition to smart building technologies by demonstrating and evaluating emerging smart building
technologies using existing programs and funding to
showcase selected Federal smart buildings.

16 SEC. 32203. DEFINITIONS.

17 In this part:

18 (1) DEPARTMENT.—The term "Department"19 means the Department of Energy.

20 (2) PROGRAM.—The term "program" means
21 the Federal Smart Building Program established
22 under section 32204(a).

23 (3) SECRETARY.—The term "Secretary" means
24 the Secretary of Energy.
1	(4) SMART BUILDING.—The term "smart build-
2	ing" means a building, or collection of buildings,
3	with an energy system that—
4	(A) is flexible and automated;
5	(B) has extensive operational monitoring
6	and communication connectivity, allowing re-
7	mote monitoring and analysis of all building
8	functions;
9	(C) takes a systems-based approach in in-
10	tegrating the overall building operations for
11	control of energy generation, consumption, and
12	storage;
13	(D) communicates with utilities and other
14	third-party commercial entities, if appropriate;
15	(E) protects the health and safety of occu-
16	pants and workers; and
17	(F) is cybersecure.
18	(5) Smart building accelerator.—The
19	term "smart building accelerator" means an initia-
20	tive that is designed to demonstrate specific innova-
21	tive policies and approaches—
22	(A) with clear goals and a clear timeline;
23	and

(B) that, on successful demonstration,
 would accelerate investment in energy effi ciency.

4 (6) INTERNET OF THINGS TECHNOLOGY SOLU5 TION.—The term "internet of things technology so6 lution" means a solution that improves energy effi7 ciency and predictive maintenance through cutting
8 edge technologies that utilize internet connected
9 technologies including sensors, intelligent gateways,
10 and security embedded hardware.

11 SEC. 32204. FEDERAL SMART BUILDING PROGRAM.

(a) ESTABLISHMENT.—Not later than 1 year after
the date of enactment of this Act, the Secretary shall, in
consultation with the Administrator of General Services,
establish a program to be known as the "Federal Smart
Building Program"—

17 (1) to implement smart building technology;18 and

19 (2) to demonstrate the costs and benefits of20 smart buildings.

21 (b) SELECTION.—

(1) IN GENERAL.—The Secretary shall coordinate the selection of not fewer than 1 building from
among each of several key Federal agencies, as described in subsection (d), to compose an appro-

- priately diverse set of smart buildings based on size,
 type, and geographic location.
- 3 (2) INCLUSION OF COMMERCIALLY OPERATED
 4 BUILDINGS.—In making selections under paragraph
 5 (1), the Secretary may include buildings that are
 6 owned by the Federal Government but are commer7 cially operated.

8 (c) TARGETS.—Not later than 18 months after the 9 date of enactment of this Act, the Secretary shall establish 10 targets for the number of smart buildings to be commis-11 sioned and evaluated by key Federal agencies by 3 years 12 and 6 years after the date of enactment of this Act.

13 (d) FEDERAL AGENCY DESCRIBED.—The key Fed14 eral agencies referred to subsection (b)(1) shall include
15 buildings operated by—

- 16 (1) the Department of the Army;
- 17 (2) the Department of the Navy;
- 18 (3) the Department of the Air Force;
- 19 (4) the Department;
- 20 (5) the Department of the Interior;
- 21 (6) the Department of Veterans Affairs; and
- 22 (7) the General Services Administration.
- 23 (e) REQUIREMENT.—In implementing the program,

24 the Secretary shall leverage existing financing mechanisms

1	including energy savings performance contracts, utility en-
2	ergy service contracts, and annual appropriations.
3	(f) EVALUATION.—Using the guidelines of the Fed-
4	eral Energy Management Program relating to whole-build-
5	ing evaluation, measurement, and verification, the Sec-
6	retary shall evaluate the costs and benefits of the buildings
7	selected under subsection (b), including an identification
8	of—
9	(1) which advanced building technologies—
10	(A) are most cost-effective; and
11	(B) show the most promise for—
12	(i) increasing building energy savings;
10	

13 (ii) increasing service performance to14 building occupants;

15 (iii) reducing environmental impacts;16 and

(iv) establishing cybersecurity; and
(2) any other information the Secretary determines to be appropriate.

(g) AWARDS.—The Secretary may expand awards
made under the Federal Energy Management Program
and the Better Building Challenge to recognize specific
agency achievements in accelerating the adoption of smart
building technologies.

1 SEC. 32205. SURVEY OF PRIVATE SECTOR SMART BUILD-2 INGS.

3 (a) SURVEY.—The Secretary shall conduct a survey
4 of privately owned smart buildings throughout the United
5 States, including commercial buildings, laboratory facili6 ties, hospitals, multifamily residential buildings, and build7 ings owned by nonprofit organizations and institutions of
8 higher education.

9 (b) SELECTION.—From among the smart buildings 10 surveyed under subsection (a), the Secretary shall select 11 not fewer than 1 building each from an appropriate range 12 of building sizes, types, and geographic locations.

(c) EVALUATION.—Using the guidelines of the Federal Energy Management Program relating to whole-building evaluation, measurement, and verification, the Secretary shall evaluate the costs and benefits of the buildings
selected under subsection (b), including an identification
of—

- 19 (1) which advanced building technologies and20 systems—
- 21 (A) are most cost-effective; and
 22 (B) show the most promise for—
 23 (i) increasing building energy savings;
- 24 (ii) increasing service performance to25 building occupants;

1	(iii) reducing environmental impacts;
2	and
3	(iv) establishing cybersecurity; and
4	(2) any other information the Secretary deter-

5 mines to be appropriate.

6 SEC. 32206. LEVERAGING EXISTING PROGRAMS.

7 (a) BETTER BUILDING CHALLENGE.—As part of the 8 Better Building Challenge of the Department, the Sec-9 retary, in consultation with major private sector property 10 owners, shall develop smart building accelerators to dem-11 onstrate innovative policies and approaches that will accel-12 erate the transition to smart buildings in the public, insti-13 tutional, and commercial buildings sectors.

14 (b) RESEARCH AND DEVELOPMENT.—

(1) IN GENERAL.—The Secretary shall conduct
research and development to address key barriers to
the integration of advanced building technologies
and to accelerate the transition to smart buildings.

19 (2) INCLUSION.—The research and development
20 conducted under paragraph (1) shall include re21 search and development on—

(A) achieving whole-building, systems-level
efficiency through smart system and component
integration;

1	(B) improving physical components, such
2	as sensors and controls, to be adaptive, antici-
3	patory, and networked;
4	(C) reducing the cost of key components to
5	accelerate the adoption of smart building tech-
6	nologies;
7	(D) data management, including the cap-
8	ture and analysis of data and the interoper-
9	ability of the energy systems;
10	(E) protecting against cybersecurity
11	threats and addressing security vulnerabilities
12	of building systems or equipment;
13	(F) business models, including how busi-
14	ness models may limit the adoption of smart
15	building technologies and how to support
16	transactive energy;
17	(G) integration and application of com-
18	bined heat and power systems and energy stor-
19	age for resiliency;
20	(H) characterization of buildings and com-
21	ponents;
22	(I) consumer and utility protections;
23	(J) continuous management, including the
24	challenges of managing multiple energy systems

and optimizing systems for disparate stake holders;

3 (K) integration of internet of things tech4 nology solutions, including measures to increase
5 water and energy efficiency, improve water
6 quality, support real-time utility management,
7 and enable actionable analytics and predictive
8 maintenance to improve building systems long9 term viability; and

10 (L) other areas of research and develop11 ment, as determined appropriate by the Sec12 retary.

13 SEC. 32207. REPORT.

14 Not later than 2 years after the date of enactment 15 of this Act, and every 2 years thereafter until a total of 16 3 reports have been made, the Secretary shall submit to 17 the Committee on Energy and Natural Resources of the 18 Senate and the Committee on Energy and Commerce and 19 the Committee on Science, Space, and Technology of the 20 House of Representatives a report on—

(1) the establishment of the Federal Smart
Building Program and the evaluation of Federal
smart buildings under section 32204;

24 (2) the survey and evaluation of private sector25 smart buildings under section 32205; and

1 (3) any recommendations of the Secretary to 2 further accelerate the transition to smart buildings. 3 **PART 3—WEATHERIZATION ASSISTANCE** 4 PROGRAM 5 SECTION 32301. SHORT TITLE. 6 This part may be cited as the "Weatherization En-7 hancement and Local Energy Efficiency Investment and 8 Accountability Act". 9 SEC. 32302. WEATHERIZATION ASSISTANCE PROGRAM. 10 (a) REAUTHORIZATION OF WEATHERIZATION AS-11 SISTANCE PROGRAM.—Section 422 of the Energy Conservation and Production Act (42 U.S.C. 6872) is amend-12 ed by striking "appropriated—" and all that follows 13 *"2012.."* 14 through and inserting "appropriated 15 \$350,000,000 for each of fiscal years 2020 through 2024.". 16 17 (b) MODERNIZING THE DEFINITION OF WEATHER-IZATION MATERIALS.—Section 412(9)(J) of the Energy 18 Conservation and Production Act (42 U.S.C. 6862(9)(J)) 19 20 is amended— (1) by inserting ", including renewable energy 21 22 technologies and other advanced technologies," after 23 "devices or technologies"; and 24 (2) by striking ", after consulting with the Sec-

25 retary of Housing and Urban Development, the Sec-

retary of Agriculture, and the Director of the Com munity Services Administration".

3 (c) CONSIDERATION OF HEALTH BENEFITS.—Sec4 tion 413(b) of the Energy Conservation and Production
5 Act (42 U.S.C. 6863(b)) is amended—

6 (1) by redesignating paragraphs (4) through
7 (6) as paragraphs (5) through (7), respectively; and
8 (2) by inserting after paragraph (3), the fol9 lowing:

10 "(4) The Secretary may amend the regulations pre-11 scribed under paragraph (1) to provide that the standards 12 described in paragraph (2)(A) take into consideration im-13 provements in the health and safety of occupants of dwell-14 ing units, and other non-energy benefits, from weatheriza-15 tion.".

16 (d) CONTRACTOR OPTIMIZATION.—

17 (1) IN GENERAL.—The Energy Conservation
18 and Production Act is amended by inserting after
19 section 414B (42 U.S.C. 6864b) the following:

20 "SEC. 414C. CONTRACTOR OPTIMIZATION.

21 "(a) IN GENERAL.—The Secretary may request that 22 entities receiving funding from the Federal Government 23 or from a State through a weatherization assistance pro-24 gram under section 413 or section 414 perform periodic 25 reviews of the use of private contractors in the provision of weatherization assistance, and encourage expanded use
 of contractors as appropriate.

3 "(b) USE OF TRAINING FUNDS.—Entities described 4 in subsection (a) may use funding described in such sub-5 section to train private, non-Federal entities that are con-6 tracted to provide weatherization assistance under a 7 weatherization program, in accordance with rules deter-8 mined by the Secretary.".

9 (2) TABLE OF CONTENTS AMENDMENT.—The 10 table of contents for the Energy Conservation and 11 Production Act is amended by inserting after the 12 item relating to section 414B the following:

"Sec. 414C. Contractor optimization.".

13 (e) FINANCIAL ASSISTANCE FOR WAP ENHANCE-14 MENT AND INNOVATION.—

(1) IN GENERAL.—The Energy Conservation
and Production Act is amended by inserting after
section 414C (as added by subsection (d) of this section) the following:

19"SEC. 414D. FINANCIAL ASSISTANCE FOR WAP ENHANCE-20MENT AND INNOVATION.

"(a) PURPOSES.—The purposes of this section are—
"(1) to expand the number of dwelling units
that are occupied by low-income persons that receive
weatherization assistance by making such dwelling
units weatherization-ready;

"(2) to promote the deployment of renewable
 energy in dwelling units that are occupied by low-in come persons;

4 "(3) to ensure healthy indoor environments by
5 enhancing or expanding health and safety measures
6 and resources available to dwellings that are occu7 pied by low-income persons; and

8 "(4) to disseminate new methods and best prac9 tices among entities providing weatherization assist10 ance.

11 "(b) FINANCIAL ASSISTANCE.—The Secretary shall, 12 to the extent funds are made available, award financial 13 assistance through a competitive process to entities receiv-14 ing funding from the Federal Government or from a State 15 through a weatherization program under section 413 or 16 section 414, or to nonprofit entities, to be used by such 17 an entity—

18 "(1) with respect to dwelling units that are oc-19 cupied by low-income persons, to—

20 "(A) implement measures to make such
21 dwelling units weatherization-ready by address22 ing structural, plumbing, roofing, and electrical
23 issues, environmental hazards, or other meas24 ures that the Secretary determines to be appro25 priate;

1	"(B) install energy efficiency technologies,
2	including home energy management systems,
3	smart devices, and other technologies the Sec-
4	retary determines to be appropriate;
5	"(C) install renewable energy systems (as
6	defined in section $415(c)(6)(A)$; and
7	"(D) implement measures to ensure
8	healthy indoor environments by improving in-
9	door air quality, accessibility, and other healthy
10	homes measures as determined by the Sec-
11	retary;
12	"(2) to improve the capability of the entity—
13	"(A) to significantly increase the number
14	of energy retrofits performed by such entity;
15	"(B) to replicate best practices for work
16	performed pursuant to this section on a larger
17	scale; and
18	"(C) to leverage additional funds to sus-
19	tain the provision of weatherization assistance
20	and other work performed pursuant to this sec-
21	tion after financial assistance awarded under
22	this section is expended;
23	"(3) for innovative outreach and education re-
24	garding the benefits and availability of weatheriza-

1	tion assistance and other assistance available pursu-
2	ant to this section;
3	"(4) for quality control of work performed pur-
4	suant to this section;
5	((5) for data collection, measurement, and
6	verification with respect to such work;
7	"(6) for program monitoring, oversight, evalua-
8	tion, and reporting regarding such work;
9	"(7) for labor, training, and technical assist-
10	ance relating to such work;
11	"(8) for planning, management, and adminis-
12	tration (up to a maximum of 15 percent of the as-
13	sistance provided); and
14	"(9) for such other activities as the Secretary
15	determines to be appropriate.
16	"(c) Award Factors.—In awarding financial assist-
17	ance under this section, the Secretary shall consider—
18	"(1) the applicant's record of constructing, ren-
19	ovating, repairing, or making energy efficient single-
20	family, multifamily, or manufactured homes that are
21	occupied by low-income persons, either directly or
22	through affiliates, chapters, or other partners (using
23	the most recent year for which data are available);
24	((2) the number of dwelling units occupied by
25	low-income persons that the applicant has built, ren-

1 ovated, repaired, weatherized, or made more energy 2 efficient in the 5 years preceding the date of the ap-3 plication; "(3) the qualifications, experience, and past 4 5 performance of the applicant, including experience 6 successfully managing and administering Federal 7 funds: "(4) the strength of an applicant's proposal to 8 9 achieve one or more of the purposes under sub-10 section (a); 11 "(5) the extent to which such applicant will uti-12 partnerships and regional coordination to lize 13 achieve one or more of the purposes under sub-14 section (a); "(6) regional and climate zone diversity; 15 16 "(7) urban, suburban, and rural localities; and 17 "(8) such other factors as the Secretary deter-

18 mines to be appropriate.

19 "(d) Applications.—

20 "(1) ADMINISTRATION.—To be eligible for an
21 award of financial assistance under this section, an
22 applicant shall submit to the Secretary an applica23 tion in such manner and containing such informa24 tion as the Secretary may require.

1	"(2) AWARDS.—Subject to the availability of
2	appropriations, not later than 270 days after the
3	date of enactment of this section, the Secretary shall
4	make a first award of financial assistance under this
5	section.
6	"(e) Maximum Amount and Term.—
7	"(1) IN GENERAL.—The total amount of finan-
8	cial assistance awarded to an entity under this sec-
9	tion shall not exceed \$2,000,000.
10	"(2) Technical and training assistance.—
11	The total amount of financial assistance awarded to
12	an entity under this section shall be reduced by the
13	cost of any technical and training assistance pro-
14	vided by the Secretary that relates to such financial
15	assistance.
16	"(3) TERM.—The term of an award of financial
17	assistance under this section shall not exceed 3
18	years.
19	"(f) Requirements.—Not later than 90 days after
20	the date of enactment of this section, the Secretary shall
21	issue requirements to implement this section, including,
22	for entities receiving financial assistance under this sec-
23	tion—
24	"(1) standards for allowable expenditures;
25	((2) a minimum saving-to-investment ratio; and

1	"(3) standards for—
2	"(A) training programs;
3	"(B) energy audits;
4	"(C) the provision of technical assistance;
5	"(D) monitoring activities carried out
6	using such financial assistance;
7	"(E) verification of energy and cost sav-
8	ings;
9	"(F) liability insurance requirements; and
10	"(G) recordkeeping and reporting require-
11	ments, which shall include reporting to the Of-
12	fice of Weatherization and Intergovernmental
13	Programs of the Department of Energy applica-
14	ble data on each dwelling unit retrofitted or
15	otherwise assisted pursuant to this section.
16	"(g) Compliance With State and Local Law.—
17	Nothing in this section supersedes or otherwise affects any
18	State or local law, to the extent that the State or local
19	law contains a requirement that is more stringent than
20	the applicable requirement of this section.
21	"(h) REVIEW AND EVALUATION.—The Secretary
22	shall review and evaluate the performance of each entity
23	that receives an award of financial assistance under this
24	section (which may include an audit).

1 "(i) ANNUAL REPORT.—The Secretary shall submit 2 to Congress an annual report that provides a description 3 of— 4 "(1) actions taken under this section to achieve 5 the purposes of this section; and 6 "(2) accomplishments as a result of such ac-7 tions, including energy and cost savings achieved. "(j) FUNDING.— 8 9 "(1) Amounts.— 10 "(A) IN GENERAL.—For each of fiscal 11 years 2020 through 2024, of the amount made 12 available under section 422 for such fiscal year 13 to carry out the weatherization program under 14 this part (not including any of such amount 15 made available for Department of Energy head-16 quarters training or technical assistance), not

17 more than—

18 "(i) 2 percent of such amount (if such
19 amount is \$225,000,000 or more but less
20 than \$260,000,000) may be used to carry
21 out this section;

"(ii) 4 percent of such amount (if
such amount is \$260,000,000 or more but
less than \$300,000,000) may be used to
carry out this section; and

1	"(iii) 6 percent of such amount (if
2	such amount is \$300,000,000 or more)
3	may be used to carry out this section.
4	"(B) MINIMUM.—For each of fiscal years
5	2020 through 2024, if the amount made avail-
6	able under section 422 (not including any of
7	such amount made available for Department of
8	Energy headquarters training or technical as-
9	sistance) for such fiscal year is less than
10	\$225,000,000, no funds shall be made available
11	to carry out this section.
12	"(2) LIMITATION.—For any fiscal year, the
13	Secretary may not use more than \$25,000,000 of
14	the amount made available under section 422 to
15	carry out this section.".
16	(2) TABLE OF CONTENTS.—The table of con-
17	tents for the Energy Conservation and Production
18	Act is amended by inserting after the item relating
19	to section 414C the following:
	"Sec. 414D. Financial assistance for WAP enhancement and innovation.".
20	(f) Increase in Administrative Funds.—Section
21	415(a)(1) of the Energy Conservation and Production Act
22	(42 U.S.C. $6865(a)(1)$) is amended by striking "10 per-
23	cent" and inserting "15 percent".
24	(g) Amending Re-Weatherization Date.—Para-
25	graph (2) of section $415(c)$ of the Energy Conservation

1 and Production Act (42 U.S.C. 6865(c)) is amended to2 read as follows:

3 "(2) Dwelling units weatherized (including dwelling 4 units partially weatherized) under this part, or under 5 other Federal programs (in this paragraph referred to as 6 'previous weatherization'), may not receive further finan-7 cial assistance for weatherization under this part until the 8 date that is 15 years after the date such previous weather-9 ization was completed. This paragraph does not preclude 10 dwelling units that have received previous weatherization from receiving assistance and services (including the provi-11 12 sion of information and education to assist with energy management and evaluation of the effectiveness of in-13 14 stalled weatherization materials) other than weatheriza-15 tion under this part or under other Federal programs, or from receiving non-Federal assistance for weatheriza-16 tion.". 17

18 SEC. 32303. REPORT ON WAIVERS.

19 Not later than 180 days after the date of enactment 20 of this Act, the Secretary of Energy shall submit to Con-21 gress a report on the status of any request for a waiver 22 of any requirement under section 200.313 of title 2, Code 23 of Federal Regulations, as such requirement applies with 24 respect to the weatherization assistance program under 25 part A of title IV of the Energy Conservation and Produc1 tion Act (42 U.S.C. 6861 et seq.), including a description of any such waiver that has been granted and any such 2 request for a waiver that has been considered but not 3 4 granted.

5 PART 4-SMART ENERGY AND WATER 6 **EFFICIENCY**

7 SECTION 32401. SHORT TITLE.

8 This part may be cited as the "Smart Energy and 9 Water Efficiency Act of 2019".

SEC. 32402. SMART ENERGY AND WATER EFFICIENCY PRO-10 11

GRAM.

12 (a) DEFINITIONS.—In this section:

(1) ELIGIBLE ENTITY.—The term "eligible enti-13

14 tv" means—

15 (A) a municipality;

16 (B) a water district; and

17 (C) any other entity that provides water, 18 wastewater, or water reuse services, including a 19 joint water and power authority.

20 (2) SECRETARY.—The term "Secretary" means 21 the Secretary of Energy.

22 (3) SMART ENERGY AND WATER EFFICIENCY 23 PROGRAM.—The term "smart energy and water efficiency program" or "program" means the program 24 25 established under subsection (b).

(b) SMART ENERGY AND WATER EFFICIENCY PRO 2 GRAM.—

3 (1) IN GENERAL.—The Secretary shall establish
4 and carry out a smart energy and water efficiency
5 program in accordance with this section.

6 (2) ELIGIBLE PROJECTS.—In carrying out the 7 smart energy and water efficiency program, the Sec-8 retary shall award grants to eligible entities to carry 9 out projects that implement advanced and innovative 10 technology-based solutions that will improve the en-11 ergy or water efficiency of water, wastewater, or 12 water reuse systems to—

(A) help eligible entities make significant
progress in conserving water, conserving energy,
or reducing the operating costs of such systems;
(B) support the implementation of innovative processes or the installation of advanced

automated systems that provide real-time dataon energy and water; or

20 (C) improve predictive maintenance of
21 water, wastewater, or water reuse systems
22 through the use of Internet-connected tech23 nologies, such as sensors, intelligent gateways,
24 or security embedded in hardware.

25 (3) PROJECT SELECTION.—

1	(A) IN GENERAL.—The Secretary shall
2	make competitive, merit-reviewed grants under
3	the program to not fewer than 3, but not more
4	than 5, eligible entities.
5	(B) SELECTION CRITERIA.—In selecting an
6	eligible entity to receive a grant under the pro-
7	gram, the Secretary shall consider—
8	(i) energy and cost savings anticipated
9	to result from the project;
10	(ii) the innovative nature, commercial
11	viability, and reliability of the technology
12	to be used;
13	(iii) the degree to which the project
14	integrates innovative sensors, software,
15	hardware, analytics, and management
16	tools;
17	(iv) the anticipated cost-effectiveness
18	of the project in terms of energy savings,
19	water savings or reuse, and infrastructure
20	costs averted;
21	(v) whether the technology can be de-
22	ployed in a variety of geographic regions
23	and the degree to which the technology can
24	be implemented on a smaller or larger
25	scale, including whether the technology can

1	be implemented by other types of eligible
2	entities; and
3	(vi) whether implementation of the
4	project will be complete within 5 years.
5	(C) Applications.—
6	(i) IN GENERAL.—Subject to clause
7	(ii), an eligible entity seeking a grant
8	under the program shall submit to the Sec-
9	retary an application at such time, in such
10	manner, and containing such information
11	as the Secretary determines to be nec-
12	essary.
13	(ii) CONTENTS.—An application under
14	clause (i) shall, at a minimum, include—
15	(I) a description of the project;
16	(II) a description of the tech-
17	nology to be used in the project;
18	(III) the anticipated results, in-
19	cluding energy and water savings, of
20	the project;
21	(IV) a comprehensive budget for
22	the project; and
23	(V) the number of households or
24	customers that are served by the eligi-

1	ble entity and will benefit from the
2	project.
3	(4) Administration.—
4	(A) IN GENERAL.—Not later than 300
5	days after the date of enactment of this Act,
6	the Secretary shall select grant recipients under
7	this section.
8	(B) EVALUATIONS.—The Secretary shall
9	annually for 5 years carry out an evaluation of
10	each project for which a grant is provided
11	under this section that—
12	(i) evaluates the progress and effects
13	of the project; and
14	(ii) assesses the degree to which the
15	project can be replicated in other regions,
16	systems, and situations.
17	(C) TECHNICAL ASSISTANCE.—On the re-
18	quest of a grant recipient, the Secretary shall
19	provide technical assistance to the grant recipi-
20	ent to carry out the project.
21	(D) BEST PRACTICES.—The Secretary
22	shall make available to the public—
23	(i) a copy of each evaluation carried
24	out under subparagraph (B); and

1	(ii) a description of any best practices
2	identified by the Secretary as a result of
3	those evaluations.
4	(E) REPORT TO CONGRESS.—Not later
5	than the date on which the Secretary completes
6	the last evaluation required under subparagraph
7	(B), the Secretary shall submit to Congress a
8	report containing the results of each evaluation
9	carried out under such subparagraph.
10	(c) Authorization of Appropriations.—There is
11	authorized to be appropriated \$15,000,000 to carry out
12	this section, to remain available until expended.
13	PART 5—ACCELERATED ADOPTION OF ENERGY
13 14	PART 5—ACCELERATED ADOPTION OF ENERGY EFFICIENT ENGINES AND VEHICLES
14	EFFICIENT ENGINES AND VEHICLES
14 15	EFFICIENT ENGINES AND VEHICLES SEC. 32501. REAUTHORIZATION OF DIESEL EMISSIONS RE-
14 15 16	EFFICIENT ENGINES AND VEHICLES SEC. 32501. REAUTHORIZATION OF DIESEL EMISSIONS RE- DUCTION PROGRAM.
14 15 16 17	EFFICIENT ENGINES AND VEHICLES SEC. 32501. REAUTHORIZATION OF DIESEL EMISSIONS RE- DUCTION PROGRAM. Section 797(a) of the Energy Policy Act of 2005 (42
14 15 16 17 18	EFFICIENT ENGINES AND VEHICLES SEC. 32501. REAUTHORIZATION OF DIESEL EMISSIONS RE- DUCTION PROGRAM. Section 797(a) of the Energy Policy Act of 2005 (42 U.S.C. 16137(a)) is amended—
14 15 16 17 18 19 20	EFFICIENT ENGINES AND VEHICLES SEC. 32501. REAUTHORIZATION OF DIESEL EMISSIONS RE- DUCTION PROGRAM. Section 797(a) of the Energy Policy Act of 2005 (42 U.S.C. 16137(a)) is amended— (1) by striking "\$100,000,000" and inserting
14 15 16 17 18 19	EFFICIENT ENGINES AND VEHICLES SEC. 32501. REAUTHORIZATION OF DIESEL EMISSIONS RE- DUCTION PROGRAM. Section 797(a) of the Energy Policy Act of 2005 (42 U.S.C. 16137(a)) is amended— (1) by striking "\$100,000,000" and inserting "\$200,000,000"; and
 14 15 16 17 18 19 20 21 	EFFICIENT ENGINES AND VEHICLES SEC. 32501. REAUTHORIZATION OF DIESEL EMISSIONS RE- DUCTION PROGRAM. Section 797(a) of the Energy Policy Act of 2005 (42 U.S.C. 16137(a)) is amended— (1) by striking "\$100,000,000" and inserting "\$200,000,000"; and (2) by striking "2016" and inserting "2024".
 14 15 16 17 18 19 20 21 22 	EFFICIENT ENGINES AND VEHICLES SEC. 32501. REAUTHORIZATION OF DIESEL EMISSIONS RE- DUCTION PROGRAM. Section 797(a) of the Energy Policy Act of 2005 (42 U.S.C. 16137(a)) is amended— (1) by striking "\$100,000,000" and inserting "\$200,000,000"; and (2) by striking "2016" and inserting "2024". SEC. 32502. REAUTHORIZATION OF CLEAN SCHOOL BUSES

1	(1) Alternative fuel.—Section $741(a)(2)$ of
2	the Energy Policy Act of 2005 (42 U.S.C. 16091(a))
3	is amended—
4	(A) in subparagraph (B), by striking "or"
5	after the semicolon;
6	(B) in subparagraph (C), by striking the
7	period at the end and inserting "; or"; and
8	(C) by adding at the end the following new
9	subparagraph:
10	"(D) electricity.".
11	(2) CLEAN SCHOOL BUS.—Section $741(a)(3)$ of
12	the Energy Policy Act of 2005 (42 U.S.C.
13	16091(a)(3)) is amended by striking "that—" and
14	all that follows through "(B) is operated" and in-
15	serting "that is operated".
16	(b) Program for Retrofit or Replacement of
17	CERTAIN EXISTING SCHOOL BUSES WITH CLEAN
18	School Buses.—
19	(1) Priority of grant applications.—Sec-
20	tion $741(b)(2)$ of the Energy Policy Act of 2005 (42)
21	U.S.C. 16091(b)(2)) is amended—
22	(A) in subparagraph (A), by inserting be-
23	fore the period at the end "with clean school
24	buses with low or zero emissions"; and

1	(B) by amending subparagraph (B) to read
2	as follows:
3	"(B) Retrofitting.—In the case of
4	grant applications to retrofit school buses, the
5	Administrator shall give—
6	"(i) highest priority to applicants that
7	propose to retrofit school buses manufac-
8	tured in or after model year 1991 to be-
9	come clean school buses with low or zero
10	emissions; and
11	"(ii) second highest priority to appli-
12	cants that otherwise propose to retrofit
13	school buses manufactured in or after
14	model year 1991 to become clean school
15	buses.".
16	(2) Use of school bus fleet.—Section
17	741(b)(3)(B) of the Energy Policy Act of 2005 (42)
18	U.S.C. $16091(b)(3)(B)$) is amended by inserting
19	"charged," after "operated,".
20	(3) Replacement grants.—Paragraph (5) of
21	section 741(b) of the Energy Policy Act of 2005 (42 $$
22	U.S.C. 16091(b)) is amended to read as follows:
23	"(5) Replacement grants.—In the case of
24	grants to replace school buses—

1	"(A) the Administrator may award the
2	grants for up to 60 percent of the replacement
3	costs; and
4	"(B) such replacement costs may include
5	the costs of acquiring the clean school buses
6	and charging and fueling infrastructure.".
7	(4) Ultra low-sulfur diesel fuel.—Sec-
8	tion 741(b) of the Energy Policy Act of 2005 (42)
9	U.S.C. 16091(b)) is amended—
10	(A) by striking paragraph (6); and
11	(B) by redesignating paragraphs (7) and
12	(8) as paragraphs (6) and (7) , respectively.
13	(c) EDUCATION.—Paragraph (1) of section 741(c) of
14	the Energy Policy Act of 2005 (42 U.S.C. 16091(c)) is
15	amended to read as follows:
16	"(1) IN GENERAL.—Not later than 90 days
17	after the date of enactment of the Leading Infra-
18	structure for Tomorrow's America Act, the Adminis-
19	trator shall develop an education outreach program
20	to promote and explain the grant program under
21	subsection (b), as amended by such Act.".
22	(d) Authorization of Appropriations.—Section
23	741(d) of the Energy Policy Act of 2005 (42 U.S.C.
24	16091(d)) is amended by striking "until expended—" and
25	all that follows through the end of the subsection and in-

serting "until expended, \$50,000,000 for each of fiscal
 years 2020 through 2024.".

3	PART 6-ENERGY IMPROVEMENTS AT PUBLIC
4	SCHOOL FACILITIES
5	SEC. 32601. GRANTS FOR ENERGY EFFICIENCY IMPROVE-
6	MENTS AND RENEWABLE ENERGY IMPROVE-
7	MENTS AT PUBLIC SCHOOL FACILITIES.
8	(a) DEFINITIONS.—In this section:
9	(1) ELIGIBLE ENTITY.—The term "eligible enti-
10	ty" means a consortium of—
11	(A) one local educational agency; and
12	(B) one or more—
13	(i) schools;
14	(ii) nonprofit organizations;
15	(iii) for-profit organizations; or
16	(iv) community partners that have the
17	knowledge and capacity to partner and as-
18	sist with energy improvements.
19	(2) Energy improvements.—The term "en-
20	ergy improvements'' means—
21	(A) any improvement, repair, or renova-
22	tion, to a school that will result in a direct re-
23	duction in school energy costs including but not
24	limited to improvements to building envelope,
25	air conditioning, ventilation, heating system, do-

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mestic hot water heating, compressed air sys tems, distribution systems, lighting, power sys tems and controls;

(B) any improvement, repair, renovation, or installation that leads to an improvement in teacher and student health including but not limited to indoor air quality, daylighting, ventilation, electrical lighting, and acoustics; and

9 (C) the installation of renewable energy 10 technologies (such as wind power, photovoltaics, 11 solar thermal systems, geothermal energy, hy-12 drogen-fueled systems, biomass-based systems, 13 biofuels, anaerobic digesters, and hydropower) 14 involved in the improvement, repair, or renova-15 tion to a school.

(b) AUTHORITY.—From amounts made available for
grants under this section, the Secretary of Energy shall
provide competitive grants to eligible entities to make energy improvements authorized by this section.

(c) PRIORITY.—In making grants under this subsection, the Secretary shall give priority to eligible entities
that have renovation, repair, and improvement funding
needs and are—

(1) a high-need local educational agency, as defined in section 2102 of the Elementary and Sec-

ondary Education Act of 1965 (20 14 U.S.C. 6602);
 or

3 (2) a local educational agency designated with
4 a metrocentric locale code of 41, 42, or 43 as deter5 mined by the National Center for Education Statis6 tics (NCES), in conjunction with the Bureau of the
7 Census, using the NCES system for classifying local
8 educational agencies.

9 (d) COMPETITIVE CRITERIA.—The competitive cri-10 teria used by the Secretary shall include the following:

(1) The fiscal capacity of the eligible entity to
meet the needs for improvements of school facilities
without assistance under this section, including the
ability of the eligible entity to raise funds through
the use of local bonding capacity and otherwise.

16 (2) The likelihood that the local educational
17 agency or eligible entity will maintain, in good condi18 tion, any facility whose improvement is assisted.

19 (3) The potential energy efficiency and safety20 benefits from the proposed energy improvements.

(e) APPLICATIONS.—To be eligible to receive a grant
under this section, an applicant must submit to the Secretary an application that includes each of the following:

1	(1) A needs assessment of the current condition
2	of the school and facilities that are to receive the en-
3	ergy improvements.
4	(2) A draft work plan of what the applicant
5	hopes to achieve at the school and a description of
6	the energy improvements to be carried out.
7	(3) A description of the applicant's capacity to
8	provide services and comprehensive support to make
9	the energy improvements.
10	(4) An assessment of the applicant's expected
11	needs for operation and maintenance training funds,
12	and a plan for use of those funds, if any.
13	(5) An assessment of the expected energy effi-
14	ciency and safety benefits of the energy improve-
15	ments.
16	(6) A cost estimate of the proposed energy im-
17	provements.
18	(7) An identification of other resources that are
19	available to carry out the activities for which funds
20	are requested under this section, including the avail-
21	ability of utility programs and public benefit funds.
22	(f) Use of Grant Amounts.—
23	(1) IN GENERAL.—The recipient of a grant
24	under this section shall use the grant amounts only
25	to make the energy improvements contemplated in

the application, subject to the other provisions of
 this subsection.

3 (2) OPERATION AND MAINTENANCE TRAIN4 ING.—The recipient may use up to 5 percent for op5 eration and maintenance training for energy effi6 ciency and renewable energy improvements (such as
7 maintenance staff and teacher training, education,
8 and preventative maintenance training).

9 (3) AUDIT.—The recipient may use funds for a 10 third-party investigation and analysis for energy im-11 provements (such as energy audits and existing 12 building commissioning).

(4) CONTINUING EDUCATION.—The recipient
may use up to 1 percent of the grant amounts to develop a continuing education curriculum relating to
energy improvements.

17 (g) CONTRACTING REQUIREMENTS.—

(1) DAVIS-BACON.—Any laborer or mechanic
employed by any contractor or subcontractor in the
performance of work on any energy improvements
funded by a grant under this section shall be paid
wages at rates not less than those prevailing on
similar construction in the locality as determined by
the Secretary of Labor under subchapter IV of chap-

1	ter 31 of title 40, United States Code (commonly re-
2	ferred to as the Davis-Bacon Act).
3	(2) COMPETITION.—Each applicant that re-
4	ceives funds shall ensure that, if the applicant car-
5	ries out repair or renovation through a contract, any
6	such contract process—
7	(A) ensures the maximum number of quali-
8	fied bidders, including small, minority, and
9	women-owned businesses, through full and open
10	competition; and
11	(B) gives priority to businesses located in,
12	or resources common to, the State or the geo-
13	graphical area in which the project is carried
14	out.
15	(h) REPORTING.—Each recipient of a grant under
16	this section shall submit to the Secretary, at such time
17	as the Secretary may require, a report describing the use
18	of such funds for energy improvements, the estimated cost
19	savings realized by those energy improvements, the results
20	of any audit, the use of any utility programs and public
21	benefit funds and the use of performance tracking for en-
22	ergy improvements (such as the Department of Energy:
23	Energy Star program or LEED for Existing Buildings).

(i) BEST PRACTICES.—The Secretary shall develop
 and publish guidelines and best practices for activities car ried out under this section.

4 (j) AUTHORIZATION OF APPROPRIATIONS.—There is
5 authorized to be appropriated to carry out this section
6 \$100,000,000 for each of fiscal years 2020 through 2024.

7 PART 7—HOMEOWNER MANAGING ENERGY 8 SAVINGS

9 SECTION 32701. SHORT TITLE.

10 This part may be cited as the "Home Owner Man-11 aging Energy Savings Act of 2019" or the "HOMES12 Act".

13 SEC. 32702. DEFINITIONS.

14 In this part:

15 (1) BPI.—The term "BPI" means the Building
16 Performance Institute.

17 (2) ENERGY AUDIT.—The term "energy audit" 18 means an inspection, survey, and analysis of energy 19 flows for energy conservation in a building, process, 20 or system to reduce the amount of energy input into 21 the system without negatively affecting the output. 22 An energy audit is the first step in identifying op-23 portunities to reduce energy expense and carbon 24 footprints.
1	(3) ELECTRIC UTILITY.—The term "electric
2	utility" means any company, person, cooperative,
3	State, or Indian tribe agency that delivers or sells
4	electric energy at retail, including nonregulated utili-
5	ties, utilities that are subject to State or Indian tribe
6	rate regulation, and Federal power marketing ad-
7	ministrations.
8	(4) Federal rebate processing system.—
9	The term "Federal Rebate Processing System"
10	means the Federal Rebate Processing System estab-
11	lished under section 32703(b).
12	(5) Home.—The term "home" means a resi-
13	dential dwelling unit in a building with no more than
14	4 dwelling units that—
15	(A) is located in the United States;
16	(B) was constructed before the date of en-
17	actment of this Act; and
18	(C) is occupied at least six months out of
19	the year.
20	(6) Home energy savings retrofit rebate
21	PROGRAM.—The terms "Home Energy Savings Ret-
22	rofit Rebate Program" or "Program" means the
23	Home Energy Savings Retrofit Rebate Program es-
24	tablished under section 32703(a).

(7) HOMEOWNER.—The term "homeowner"
 means the owner of an owner-occupied home or a
 tenant-occupied home.

4 (8) INDIAN TRIBE.—The term "Indian tribe"
5 has the meaning given the term in section 4 of the
6 Indian Self-Determination and Education Assistance
7 Act (25 U.S.C. 5304).

8 (9) NATURAL GAS UTILITY.—The term "nat-9 ural gas utility" means any company, person, coop-10 erative, State or local governmental agency or in-11 strumentality, or Indian tribe that transports, dis-12 tributes, or sells natural gas at retail.

(10) QUALIFIED CONTRACTOR.—The term
"qualified contractor" means a residential energy efficiency contractor that meets minimum applicable
requirements established under section 32704.

17 (11) QUALIFIED HOME ENERGY EFFICIENCY
18 RETROFIT.—The term "qualified home energy effi19 ciency retrofit" means a retrofit described in section
20 32708(d).

(12) QUALITY ASSURANCE PROGRAM.—The
term "quality assurance program" means a program
established under this part, or recognized by the
Secretary under this part, to oversee the delivery of
home efficiency retrofit programs to ensure that

1 work is performed in accordance with standards and 2 criteria established under this part. Delivery of ret-3 rofit programs includes delivery of quality assurance 4 reviews of rebate applications and field inspections. 5 Individuals performing quality assurance work under 6 a quality assurance program must be certified under 7 an ANSI accredited quality control inspection certifi-8 cation designation. 9 (13) QUALITY ASSURANCE PROVIDER.—The 10 term "quality assurance provider" means any entity 11 that meets the minimum applicable requirements es-12 tablished under section 32706. 13 (14) REBATE AGGREGATOR.—The term "rebate 14 aggregator" means an entity that meets the require-15 ments of section 32705. 16 (15) RESNET.—The term "RESNET" means 17 the Residential Energy Services Network, which is a 18 nonprofit certification and standard setting organi-19 zation for home energy raters that evaluate the en-20 ergy performance of a home and Energy Smart Con-21 tractors that make energy improvements to the 22 home. 23 (16)SECRETARY.—The term "Secretary" 24 means the Secretary of Energy.

25 (17) STATE.—The term "State" means—

1	(A) a State;
2	(B) the District of Columbia;
3	(C) the Commonwealth of Puerto Rico;
4	(D) Guam;
5	(E) American Samoa;
6	(F) the Commonwealth of the Northern
7	Mariana Islands;
8	(G) the United States Virgin Islands; and
9	(H) any other territory or possession of the
10	United States.
11	SEC. 32703. HOME ENERGY SAVINGS RETROFIT REBATE
12	PROGRAM.
12 13	(a) IN GENERAL.—The Secretary shall establish the
13	(a) IN GENERAL.—The Secretary shall establish the
13 14	(a) IN GENERAL.—The Secretary shall establish the Home Energy Savings Retrofit Rebate Program.
13 14 15	(a) IN GENERAL.—The Secretary shall establish theHome Energy Savings Retrofit Rebate Program.(b) FEDERAL REBATE PROCESSING SYSTEM.—
13 14 15 16	 (a) IN GENERAL.—The Secretary shall establish the Home Energy Savings Retrofit Rebate Program. (b) FEDERAL REBATE PROCESSING SYSTEM.— (1) IN GENERAL.—Not later than 180 days
 13 14 15 16 17 	 (a) IN GENERAL.—The Secretary shall establish the Home Energy Savings Retrofit Rebate Program. (b) FEDERAL REBATE PROCESSING SYSTEM.— (1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Sec-
 13 14 15 16 17 18 	 (a) IN GENERAL.—The Secretary shall establish the Home Energy Savings Retrofit Rebate Program. (b) FEDERAL REBATE PROCESSING SYSTEM.— (1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary, in consultation with the Secretary of the
 13 14 15 16 17 18 19 	 (a) IN GENERAL.—The Secretary shall establish the Home Energy Savings Retrofit Rebate Program. (b) FEDERAL REBATE PROCESSING SYSTEM.— (1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary, in consultation with the Secretary of the Treasury, shall—
 13 14 15 16 17 18 19 20 	 (a) IN GENERAL.—The Secretary shall establish the Home Energy Savings Retrofit Rebate Program. (b) FEDERAL REBATE PROCESSING SYSTEM.— (1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary, in consultation with the Secretary of the Treasury, shall— (A) establish a Federal Rebate Processing
 13 14 15 16 17 18 19 20 21 	 (a) IN GENERAL.—The Secretary shall establish the Home Energy Savings Retrofit Rebate Program. (b) FEDERAL REBATE PROCESSING SYSTEM.— (1) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, the Secretary, in consultation with the Secretary of the Treasury, shall— (A) establish a Federal Rebate Processing System which shall serve as a database and in-

1	(B) establish a national retrofit website
2	that provides information on the Home Energy
3	Savings Retrofit Rebate Program, including—
4	(i) how to determine whether par-
5	ticular efficiency measures are eligible for
6	rebates; and
7	(ii) how to participate in the Program;
8	and
9	(C) make available model forms for dem-
10	onstrating compliance with all applicable re-
11	quirements of this part, which shall be required
12	to be submitted by—
13	(i) each qualified contractor on com-
14	pletion of an eligible home energy retrofit;
15	and
16	(ii) each quality assurance provider on
17	completion of field verification.
18	(2) Model forms.—In carrying out paragraph
19	(1)(C), the Secretary shall convene a group of stake-
20	holders that are directly and materially affected by
21	the Program to develop the final forms.
22	SEC. 32704. CONTRACTORS.
23	(a) Contractor Qualifications.—A contractor
24	may perform retrofit work under the Home Energy Sav-

1	ings Retrofit Rebate Program in a State if the con-
2	tractor—
3	(1) meets all applicable contractor licensing re-
4	quirements established by the State;
5	(2) is—
6	(A) accredited by—
7	(i) BPI as a BPI GoldStar Con-
8	tractor;
9	(ii) RESNET as an Energy Smart
10	Home Performance Team;
11	(iii) ACCA as a QA Home Perform-
12	ance Contractor;
13	(iv) a State-based certification pro-
14	gram established to carry out State energy,
15	clean air, or environmental programs; or
16	(v) an equivalent accreditation pro-
17	gram approved by the Secretary for this
18	purpose; or
19	(B) the general contractor, and—
20	(i) subjects the energy efficiency ret-
21	rofit to a third-party review by a party ap-
22	proved by the Secretary and a quality as-
23	surance inspection authorized by the Sec-
24	retary; and

1	(ii) employs, or utilizes subcontractors
2	who employ, individuals to complete indi-
3	vidual or comprehensive scopes of work re-
4	lated to the energy efficiency retrofit who
5	are certified by—
6	(I) BPI;
7	(II) RESNET;
8	(III) NATE;
9	(IV) ACCA;
10	(V) LIUNA;
11	(VI) the Regional and State De-
12	partment of Energy Weatherization
13	Training Centers; or
14	(VII) other contractor or worker
15	certification programs approved by
16	the Secretary;
17	(3) holds insurance coverage of at least
18	\$1,000,000 for general liability, and for such other
19	purposes and in such other amounts as required by
20	the State;
21	(4) provides warranties to the homeowner that
22	completed work will—
23	(A) be free of significant defects;

1	(B) be installed in accordance with the
2	specifications of the manufacturer, and all ap-
3	plicable State and local codes; and
4	(C) perform properly for a period of at
5	least 1 year after the date of completion of the
6	work; and
7	(5) completes an energy audit to determine the
8	impact of the proposed energy efficiency measures in
9	accordance with an ANSI accredited energy auditing
10	standard.
11	(b) Agreement Between Contractor and
12	HOMEOWNER.—A contractor who performs retrofit work
13	under the Home Energy Savings Retrofit Rebate Program
14	must sign a written or electronic contract with the home-
15	owner that includes—
16	(1) an agreement to not increase the cost of the
17	home improvement as a result of the rebates re-
18	ceived under this part with respect to physical im-
19	provements made to the home;
20	(2) if the contractor and homeowner choose the
21	transferable rebate option authorized under section
22	32707, an agreement to provide the homeowner, be-
23	fore a contract is executed between the contractor
24	and the homeowner covering the eligible work, a no-
25	tice of the rebate amount the contractor intends to

1	apply for with respect to eligible work under this
2	part; and
3	(3) a notice that the homeowner acknowledges
4	that they—
5	(A) reviewed the national retrofit website
6	for the Program;
7	(B) understand the scope of work intended
8	to be completed and that such work may be eli-
9	gible for a rebate under the Program; and
10	(C) understand that the rebate funds are
11	fully subject to availability from the Depart-
12	ment of Energy or rebate aggregator and not
13	within the control of the contractor.
14	SEC. 32705. REBATE AGGREGATORS.
15	(a) IN GENERAL.—The Secretary shall develop a net-
16	work of rebate aggregators or a national rebate aggregator
17	that can facilitate the delivery of rebates to homeowners
18	or contractors participating in the Home Energy Savings
19	Retrofit Rebate Program by—
20	(1) reviewing the proposed rebate application
21	for completeness and accuracy;
22	(2) reviewing measures for eligibility in accord-
23	ance with this part;

1 (3) providing data to the Federal Rebate Proc-2 essing System consistent with data protocols estab-3 lished by the Secretary; and 4 (4) not later than 30 days after the date of re-5 ceipt, distributing funds received from the Depart-6 ment of Energy to homeowners or contractors. 7 (b) ELIGIBILITY.—To be eligible to apply to the Sec-8 retary for approval as a rebate aggregator, an entity shall 9 be— 10 (1) a Home Performance with Energy Star pro-11 gram sponsor; 12 (2) an entity administering a residential or 13 building energy efficiency retrofit program, solar 14 program, or other such program impacting energy 15 efficiency in homes established or approved by a 16 State or local government; 17 (3) a Federal power marketing administration, 18 an electric utility, or a natural gas utility that has— 19 (A) a residential energy efficiency retrofit 20 program; and 21 (B) a quality assurance provider or pro-22 vider network; or 23 (4) an entity that demonstrates to the Sec-24 retary that the entity can perform the functions of 25 a rebate aggregator, without disrupting existing resi-

1	dential retrofits in the States that are incorporating
2	the Home Energy Savings Retrofit Rebate Program,
3	including demonstration of—
4	(A) the capability to provide electronic
5	data to the Federal Rebate Processing System;
6	(B) a financial system that is capable of
7	tracking the distribution of rebates to partici-
8	pating contractors; and
9	(C) coordination and cooperation by the
10	entity with the appropriate State energy office
11	regarding participation in the existing energy
12	efficiency programs that will be delivering the
13	Home Energy Savings Retrofit Rebate Pro-
14	gram.
15	(c) Public Utility Commission Efficiency Tar-
16	GETS.—The Secretary shall—
17	(1) develop guidelines for States and local gov-
18	ernments to use to allow utilities participating as re-
19	bate aggregators to count the energy savings from
20	the participation of the utilities toward State and
21	local level energy savings targets; and
22	(2) work with States and local governments to
23	assist in the adoption of those guidelines for the
24	purposes and duration of the Home Energy Savings
25	Retrofit Rebate Program.

1 SEC. 32706. QUALITY ASSURANCE PROVIDERS.

2 (a) QUALIFICATIONS.—An entity shall be considered
3 a quality assurance provider under this part only if the
4 entity is qualified through—

5 (1) the BPI;

6 (2) RESNET; or

7 (3) any other entity designated by the Secretary
8 such as a State, local government, or State-approved
9 or local government-approved residential energy effi10 ciency retrofit program.

11 (b) FUNCTIONS.—A quality assurance provider12 shall—

13 (1) be independent of the contractor;

14 (2) confirm that contractors or installers of
15 home energy efficiency retrofits meet the qualifica16 tion requirements of this part; and

17 (3) perform field inspections to confirm the
18 compliance of the retrofit work and the simulated
19 energy savings under the Home Energy Savings Ret20 rofit Rebate Program.

21 SEC. 32707. TRANSFERABILITY OF HOME ENERGY SAVINGS
22 REBATE.

A homeowner may transfer the rebate provided under
the Home Energy Savings Retrofit Rebate Program to the
contractor performing the retrofit work if the contractor
completes a form that accompanies the rebate form devel-

1	oped under section 32703(b). This form, to be made pub-
2	lically available by the Secretary 90 days after the date
3	of enactment of this Act, must be approved by paper sig-
4	nature or electronically by the homeowner and include—
5	(1) the amount of the rebate the contractor will
6	submit for disbursement to the contractor;
7	(2) the level of energy use reduction of the
8	home retrofit certified under section $32708(e)(4)$,
9	and assurance that the contractor will provide the
10	certificate to the homeowner within 30 days of re-
11	ceipt from the Department of Energy;
12	(3) a documentation report of the retrofit per-
13	formed and paid by the homeowner; and
14	(4) confirmation from the homeowner that they
15	understand they have the right to submit directly for
16	the rebate and have chosen to transfer the credit in
17	full to the contractor.
18	SEC. 32708. HOME ENERGY SAVINGS RETROFIT REBATE
19	PROGRAM.
20	(a) IN GENERAL.—If a qualified home energy effi-
21	ciency retrofit of a home is carried out after the date of
22	enactment of this Act by a qualified contractor in accord-
23	ance with this part, subject to appropriations made avail-
24	
24	able for such purpose, rebates shall be awarded for retro-

fits that achieve home energy savings in accordance with
 this part.

- 3 (b) Amount of Rebates.—
- 4 (1) IN GENERAL.—Subject to subsection (e),
 5 the amount of a rebate provided to the owner of a
 6 home or a designee of the owner under this section
 7 shall be determined in accordance with the following
 8 formula:
- 9 (A) Retrofits that are projected to save at
 10 least 20 percent of energy use (Home Perform11 ance Retrofits) shall receive a rebate of \$2,500.
- (B) Retrofits that are projected to save at
 least 40 percent of energy use (Deep Home
 Performance Retrofits) shall receive a rebate of
 \$5,000.
- 16 (2) Rebate payment.—
- 17 (A) IN GENERAL.—The rebate shall be
 18 paid, based on energy savings as calculated
 19 under subsection (e), within 60 days after—
- 20 (i) submission of the required rebate
 21 forms; and
 22 (ii) the completion of any quality as-
- 23 surance assessment required under sub24 paragraph (B).

1 (B) QUALITY ASSURANCE ASSESSMENTS.— 2 The Secretary shall establish a schedule of re-3 quired quality assurance assessments. In the 4 first year of the Program, the first 10 homes 5 retrofit by each contractor and then 60 percent 6 of all future homes shall be required to have a 7 quality assurance assessment. The Secretary 8 shall establish a cost effective schedule of re-9 quired quality assurance assessments for subse-10 quent years based on performance under the 11 Program.

12 INCENTIVE.—Recipients of (C) Bonus 13 32709 under section and rebate grants 14 aggregators are encouraged to present a pro-15 posal to the Secretary for an incentive bonus for contractors who have delivered services to 16 17 consumers and who have achieved a 70 percent 18 or greater realization rate for predicted gross 19 energy cost savings achieved by their portfolio 20 of participating customers. Bonus incentives 21 under such a proposal may be up to 20 percent 22 of the rebate paid to the homeowner.

23 (3) LIMITATION.—In no event shall the amount
24 of rebates under this subsection exceed—

(A) \$10,000 with respect to any individual;
or
(B) 50 percent of the qualified home en-
ergy efficiency expenditures paid or incurred by
the homeowner under subsection (c).
(c) QUALIFIED HOME ENERGY EFFICIENCY EX-
PENDITURES.—For purposes of this section, the term
"qualified home energy efficiency expenditures"—
(1) means any amount paid or incurred by a
homeowner for a qualified home energy efficiency
retrofit, including the cost of diagnostic procedures,
labor, reporting, and modeling; and
(2) does not include—
(A) improvements to swimming pools or
hot tubs; or
(B) any amount paid or incurred to pur-
chase or install a biomass, wood, or wood pellet
furnace, boiler, or stove, unless the system—
(i) is designed to meet at least 70 per-
cent of the heating demands of the home;
(ii) in the case of woodstoves, is cer-
tified by the Environmental Protection
Agency;
(iii) in the case of a wood stove re-
placement, replaces an existing wood stove

1	with a stove that is certified by the Envi-
2	ronmental Protection Agency, if a voucher
3	is provided by the installer or other respon-
4	sible party certifying that the old stove has
5	been removed and made inoperable;
6	(iv) in the case of a furnace or boiler,
7	is in a home with a distribution system
8	(such as piping, ducts, vents, blowers, or
9	affixed fans) that allows heat from the fur-
10	nace or boiler to reach all or most parts of
11	the home; and
12	(v) is certified by an independent test
13	laboratory approved by the Secretary as
14	having-
15	(I) thermal efficiency (with a
16	high heating value) of at least 75 per-
17	cent for stoves and 80 percent for fur-
18	naces and boilers;
19	(II) particulate emissions of less
20	than 3.0 grams per hour for wood
21	stoves or pellet stoves; and
22	(III) less than 0.07 lbs per mil-
23	lion BTU for outdoor boilers and fur-
24	naces.

1 (d) QUALIFIED HOME ENERGY EFFICIENCY RET-2 ROFIT.—

3	(1) IN GENERAL.—A qualified home energy ef-
4	ficiency retrofit is a retrofit that implements meas-
5	ures, during a rebate-eligible year in the existing
6	principal residence of the homeowner which is lo-
7	cated in the United States, intended to reduce the
8	energy use of such residence. A qualified home en-
9	ergy efficiency retrofit shall—
10	(A) be implemented and installed by a
11	qualified contractor;
12	(B) install a set of measures modeled to
13	achieve a reduction in home energy use of 20
14	percent or more from the baseline established
15	under subparagraph (C), using computer mod-
16	eling software approved under paragraph (2);
17	(C) establish the baseline energy use as
18	provided in subsection $(e)(1)(C);$
19	(D) implement a test-out procedure, fol-
20	lowing guidelines of the applicable accrediting
21	program established by an organization identi-
22	fied in section $32704(a)(2)$ or equivalent guide-
23	lines approved by the Secretary for this pur-
24	pose, to ensure—

1	(i) the safe operation of all systems
2	post retrofit; and
3	(ii) that, except as provided in para-
4	graph (3), all improvements are included
5	in, and have been installed according to—
6	(I) standards of the applicable
7	accrediting program established by an
8	organization identified in section
9	32704(a)(2);
10	(II) manufacturers installation
11	specifications; and
12	(III) all applicable State and
13	local codes or equivalent standards
14	approved by the Secretary for this
15	purpose;
16	(E) include only measures that have an av-
17	erage estimated life of 5 years or more as deter-
18	mined by the Secretary;
19	(F) not include funds paid or incurred in
20	connection with any expansion of the square
21	footage of the residence; and
22	(G) not include improvements to swimming
23	pools or hot tubs or any other expenditure spe-
24	cifically excluded by the Secretary.

1	(2) Approved modeling software.—The
2	contractor shall use modeling software certified by
3	RESNET as following the software verification test
4	suites in section 4.2.1 of RESNET Publication No.
5	13–001, or under equivalent standards approved by
6	the Secretary for this purpose, and shall have the
7	ability at a minimum to assess the savings associ-
8	ated with all the measures for Home Energy Savings
9	Retrofit Rebate Program.
10	(3) EXCEPTION.—For purposes of paragraph
11	(1)(D)(ii), installation of gas-fired appliances shall
12	comply with requirements of the National Fuel Gas
13	Code (ANSI Z223.1/NFPA 54) and applicable in-
14	stallation requirements in lieu of performance of
15	combustion tests outside those required by the Na-
16	tional Fuel Gas Code (2012 Edition) and the Inter-
17	national Fuel Gas Code (2012 Edition).
18	(e) Energy Use Reduction.—
19	(1) DETERMINATION OF ENERGY USE REDUC-
20	TION.—
21	(A) IN GENERAL.—The reduction in en-
22	ergy use for any residence shall be determined
23	by modeling the annual predicted percentage re-
24	
<i>ш</i> т	duction in total energy consumption or costs for

lighting. It shall be modeled using computer
 modeling software approved under subsection
 (d)(2) and calibrated according to subpara graph (C) of this paragraph.

5 (B) ENERGY COSTS.—For the purposes of 6 subparagraph (A), the energy cost per unit of 7 fuel for each fuel type shall be determined by 8 dividing the total actual energy bill (subtracting 9 taxes and fees) for the residence for that fuel 10 type for the most recent available 12-month pe-11 riod by the total energy units of that fuel type 12 used over the same period.

13 BASELINE ENERGY USE.—For the (\mathbf{C}) 14 purposes of subparagraph (A), the software 15 model that establishes the baseline energy use 16 and predicted energy savings shall be calibrated 17 according to the procedures set forth in sections 18 3 and 4 of ANSI/BPI Standard BPI-2400-S-19 Standard Practice for Standardized 2012:20 Qualification of Whole-House Energy Savings 21 Predictions by Calibration to Energy Use His-22 tory, or an equivalent standard approved by the 23 Secretary for this purpose.

24 (2) DOCUMENTATION.—The percent improve-25 ment in energy consumption calculated under this

1	section shall be documented through modeling soft-
2	ware described in subsection $(d)(2)$.
3	(3) MONITORING.—The Secretary—
4	(A) shall periodically evaluate the software
5	packages used for determining rebates under
6	this section;
7	(B) shall monitor and compare the pre-
8	dictions to the real energy data, and based on
9	the results, create performance criteria to allow
10	or disallow the software; and
11	(C) may disallow the use of software pro-
12	grams that improperly assess energy savings.
13	(4) CERTIFICATE OF RETROFIT PERFORM-
14	ANCE.—The Secretary shall establish a system for
15	distribution of a certificate of performance in ac-
16	cordance with BPI-2101-S-2013: Standard Re-
17	quirements for a Certificate of Completion for Resi-
18	dential Energy Efficiency Upgrades with the
19	issuance of a rebate that certifies the predicted level
20	of energy use reduction achieved by the retrofit. The
21	certificate shall be provided to the rebate recipient.
22	If the recipient is the contractor under the terms of
23	section 32707, the contractor shall remit the certifi-
24	cate to the homeowner, to be delivered or post-

1	marked not later than 30 days after the contractor's
2	receipt of the certificate.
3	(5) EXCEPTION.—The Secretary shall not uti-
4	lize the authority provided under this part to—
5	(A) develop, adopt, or implement a public
6	labeling system that rates and compares the en-
7	ergy performance of one home with another; or
8	(B) require the public disclosure of an en-
9	ergy performance evaluation or rating developed
10	for any specific home.
11	Nothing in this paragraph shall preclude the com-
12	putation, collection, or use, by the Secretary, rebate
13	aggregators, or quality assurance providers, or the
14	States or Indian tribes, for the purposes of gath-
15	ering information on the rating and comparison of
16	the energy performance of homes with and without
17	energy efficiency retrofits.
18	(f) QUALIFICATION FOR REBATE.—On submission of
19	a claim for a retrofit rebate by a rebate aggregator, the
20	Secretary shall provide reimbursement to the rebate
21	aggregator, if—
22	(1) the retrofit is a qualified home energy effi-
23	ciency retrofit;
24	(2) the amount of the reimbursement is not
25	more than the amount described in subsection (b);

1	(3) documentation required to verify the claim
2	is transmitted with the claim; and
3	(4) any quality assurance assessment required
4	by the Secretary or the rebate aggregator has been
5	completed.
6	(g) AUDITS.—
7	(1) IN GENERAL.—On making payment for a
8	submission under this section, the Secretary shall re-
9	view rebate requests to determine whether Program
10	requirements were met in all respects.
11	(2) Incorrect payment.—On a determination
12	of the Secretary under paragraph (1) that a pay-
13	ment was made incorrectly to a party, not later than
14	3 years after the payment was provided the Sec-
15	retary shall—
16	(A) recoup the amount of the incorrect
17	payment; or
18	(B) withhold the amount of the incorrect
19	payment from the next payment made to the
20	party pursuant to a subsequent request.
21	(h) INCENTIVES.—The amount of incentives that the
22	Secretary may provide to quality assurance providers and
23	rebate aggregators under this part shall be—
24	(1) \$50 for each rebate review and submission
25	provided under the Program;

1 (2) \$250 for each field inspection conducted 2 under the Program; or 3 (3) such other amounts as the Secretary con-4 siders necessary to carry out the quality assurance 5 provisions of this part. 6 SEC. 32709. GRANTS TO STATES AND INDIAN TRIBES. 7 (a) IN GENERAL.—A State or Indian tribe that re-8 ceives a grant under subsection (d) shall be permitted to 9 use the grant for— 10 (1) administrative costs; 11 (2) oversight of quality assurance plans; 12 (3) development of a quality assurance pro-13 gram; 14 (4) establishment and delivery of financing pi-15 lots in accordance with this part; 16 (5) coordination with existing residential ret-17 rofit programs and infrastructure development to as-18 sist deployment of the Home Energy Savings Ret-19 rofit Rebate Program; and 20 (6) the costs of carrying out the responsibilities 21 of the State or Indian tribe under the Home Energy 22 Savings Retrofit Rebate Program. 23 (b) INITIAL GRANTS.—Not later than 60 days after 24 receipt of a completed application for a grant under this

section, the Secretary shall either make the grant or pro vide to the applicant an explanation for denying the grant.

3 (c) INDIAN TRIBES.—The Secretary shall reserve an
4 appropriate amount of funding made available to carry out
5 this section for each fiscal year to make grants available
6 to Indian tribes under this section.

7 (d) STATE ALLOTMENTS.—From the amounts made
8 available to carry out this section for each fiscal year re9 maining after the reservation required under subsection
10 (c), the Secretary shall make grants available to States
11 in accordance with section 32715.

12 (e) QUALITY ASSURANCE PROGRAMS.—

13 (1) IN GENERAL.—A State or Indian tribe may
14 use a grant made under this section to carry out a
15 quality assurance program that is—

16 (A) operated as part of a State or local
17 government approved energy conservation plan
18 established under part D of title III of the En19 ergy Policy and Conservation Act (42 U.S.C.
20 6321 et seq.);

(B) managed by the office or the designee
of the office that is—

(i) responsible for the development of
the plan under section 362 of that Act (42
U.S.C. 6322); and

1	(ii) to the maximum extent practicable
2	conducting an existing energy efficiency
3	program; and
4	(C) in the case of a grant made to an In-
5	dian tribe, managed by an entity designated by
6	the Indian tribe to carry out a quality assur-
7	ance program or a national quality assurance
8	program manager.
9	(2) NONCOMPLIANCE.—If the Secretary deter-
10	mines that a State or Indian tribe has not provided
11	or cannot provide adequate oversight over a quality
12	assurance program to ensure compliance with this
13	part, the Secretary may—
14	(A) withhold further quality assurance
15	funds from the State or Indian tribe; and
16	(B) require that quality assurance pro-
17	viders operating in the State or by the Indian
18	tribe be overseen by a national quality assur-
19	ance program manager selected by the Sec-
20	retary.
21	(f) IMPLEMENTATION.—A State or Indian tribe that
22	receives a grant under this section may implement a qual-
23	ity assurance program through the State, the Indian tribe,
24	or a third party designated by the State or Indian tribe,
25	including—

1	(1) an energy service company;
2	(2) an electric utility;
3	(3) a natural gas utility;
4	(4) a third-party administrator designated by
5	the State or Indian tribe; or
6	(5) a unit of local government.
7	(g) Public-Private Partnerships.—A State or
8	Indian tribe that receives a grant under this section is en-
9	couraged to form partnerships with utilities, energy serv-
10	ice companies, and other entities—
11	(1) to assist in marketing a program;
12	(2) to facilitate consumer financing;
13	(3) to assist in implementation of the Home
14	Energy Savings Retrofit Rebate Program, including
15	installation of qualified home energy efficiency retro-
16	fits; and
17	(4) to assist in implementing quality assurance
18	programs.
19	(h) Coordination of Rebate and Existing
20	STATE-SPONSORED PROGRAMS.—
21	(1) IN GENERAL.—A State or Indian tribe
22	shall, to the maximum extent practicable, prevent
23	duplication through coordination of a program au-
24	thorized under this part with—

1	(A) the Energy Star appliance rebates pro-
2	gram authorized under the American Recovery
3	and Reinvestment Act of 2009 (Public Law
4	111–5; 123 Stat. 115); and
5	(B) comparable programs planned or oper-
6	ated by States, political subdivisions, electric
7	and natural gas utilities, Federal power mar-
8	keting administrations, and Indian tribes.
9	(2) EXISTING PROGRAMS.—In carrying out this
10	subsection, a State or Indian tribe shall—
11	(A) give priority to—
12	(i) comprehensive retrofit programs in
13	existence on the date of enactment of this
14	Act, including programs under the super-
15	vision of State utility regulators; and
16	(ii) using funds made available under
17	this part to enhance and extend existing
18	programs; and
19	(B) seek to enhance and extend existing
20	programs by coordinating with administrators
21	of the programs.
22	SEC. 32710. QUALITY ASSURANCE PROGRAM.
23	(a) PLAN.—As part of a grant application described
24	in section 32709(b), a State or Indian tribe shall submit
25	to the Secretary a plan to implement a quality assurance

program that covers all federally assisted residential effi ciency retrofit work administered, supervised, or spon sored by the State or Indian tribe.

4 (b) IMPLEMENTATION.—The State or Indian tribe5 shall—

6 (1) develop a quality assurance program in con-7 sultation with industry stakeholders, including rep-8 resentatives of efficiency program managers, con-9 tractors, and environmental, energy efficiency, and 10 labor organizations; and

(2) implement the quality assurance program
not later than 180 days after receipt of a grant
under section 32709.

14 (c) COMPONENTS.—The quality assurance program
15 established under this section shall include—

16 (1) maintenance of a list of qualified contrac17 tors authorized to perform such retrofit work as de18 scribed in section 32704; and

19 (2) nonbinding targets and realistic plans for—
20 (A) the recruitment of small minority21 owned or women-owned business enterprises;
22 and

(B) the employment of graduates of training programs that primarily serve low-income
populations with a median income that is below

200 percent of the poverty line (as defined in
 section 673(2) of the Community Services
 Block Grant Act (42 U.S.C. 9902(2)), including
 any revision required by that section) by par ticipating contractors.

6 (d) NONCOMPLIANCE.—If the Secretary determines 7 that a State or Indian tribe has not taken the steps re-8 quired under this section, the Secretary shall provide to 9 the State or Indian tribe a period of at least 90 days to 10 comply before suspending the participation of the State 11 or Indian tribe in the program.

12 SEC. 32711. EVALUATION REPORT TO CONGRESS.

(a) IN GENERAL.—Not later than 1 year after the
date of enactment of this Act and annually thereafter, the
Secretary shall submit to the Committee on Energy and
Natural Resources of the Senate and the Committee on
Energy and Commerce of the House of Representatives
a report on the use of funds under this part.

- 19 (b) CONTENTS.—The report submitted under sub-20 section (a) shall evaluate—
- (1) how many eligible participants have partici-pated in the Program;
- 23 (2) how many jobs have been created through24 the Program, directly and indirectly;

(3) what steps could be taken to promote fur ther deployment of energy efficiency and renewable
 energy retrofits;

4 (4) the quantity of verifiable energy savings,
5 homeowner energy bill savings, and other benefits of
6 the Program;

7 (5) any waste, fraud, or abuse with respect to8 such funds; and

9 (6) any other information the Secretary con-10 siders appropriate.

11 (c) NONCOMPLIANCE.—The Secretary shall require 12 rebate aggregators, States, and Indian tribes to provide 13 the information required to enable the Secretary to carry out this section. If the Secretary determines that a rebate 14 15 aggregator, State, or Indian tribe has not provided such information on a timely basis, the Secretary shall provide 16 to the rebate aggregator, State, or Indian tribe a period 17 of at least 90 days to provide any necessary information, 18 19 subject to withholding of funds or reduction of future grant amounts, or decertification of rebate aggregators. 20

21 SEC. 32712. ADMINISTRATION.

(a) IN GENERAL.—Subject to section 32715(b), not
later than 30 days after the date of enactment of this Act,
the Secretary shall provide such administrative and tech-

nical support to rebate aggregators, States, and Indian
 tribes as is necessary to carry out this part.

3 (b) APPOINTMENT PERSONNEL.—Notwith-OF 4 standing the provisions of title 5, United States Code, gov-5 erning appointments in the competitive service and General Schedule classifications and pay rates, the Secretary 6 7 may appoint such professional and administrative per-8 sonnel as the Secretary considers necessary to carry out 9 this part.

(c) RATE OF PAY.—The rate of pay for a person appointed under subsection (b) shall not exceed the maximum rate payable for GS-15 of the General Schedule
under chapter 53 of title 5, United States Code.

14 INFORMATION COLLECTION.—The Secretary (d) 15 shall establish, and make available to a homeowner, or the homeowner's designated representative, seeking a rebate 16 under this part, release forms authorizing access by the 17 18 Secretary, or a designated third-party representative to information in the utility bills of the homeowner. The form 19 shall not include personal identifying information such as 20 21 name, address, social security number or other identifying 22 information as defined by the Secretary.

1 SEC. 32713. TREATMENT OF REBATES.

2 (a) IN GENERAL.—For purposes of the Internal Rev3 enue Code of 1986, rebates received for a qualified home
4 energy efficiency retrofit under this part—

5 (1) shall not be considered taxable income to a6 homeowner; and

7 (2) shall prohibit the consumer from applying
8 for a tax credit allowed under section 25C or 25D
9 of that Code for the same retrofit work performed
10 in the home of the homeowner. If the work is addi11 tional, and not included in the rebate baseline, a
12 homeowner may claim the credit.

13 (b) NOTICE.—

14 (1) IN GENERAL.—A participating contractor
15 shall provide notice to a homeowner of the provisions
16 of subsection (a) before eligible work is performed in
17 the home of the homeowner.

18 (2) NOTICE IN REBATE FORM.—A homeowner
19 shall be notified of the provisions of subsection (a)
20 in the appropriate rebate form developed by the Sec21 retary, in consultation with the Secretary of the
22 Treasury.

23 SEC. 32714. PENALTIES.

(a) IN GENERAL.—It shall be unlawful for any per-son to violate this part (including any regulation issued

under this part), other than a violation as the result of
 a clerical error.

3 (b) CIVIL PENALTY.—In addition to any penalty ap4 plicable under other Federal law for fraud or other crimes,
5 any person who commits a violation of this part shall be
6 liable to the United States for a civil penalty in an amount
7 that is not more than the higher of—

8 (1) \$15,000 for each violation; or

- 9 (2) 3 times the value of any associated rebate10 under this part.
- 11 (c) ADMINISTRATION.—The Secretary may—
- 12 (1) assess and compromise a penalty imposed13 under subsection (b); and
- 14 (2) require from any entity the records and in-15 spections necessary to enforce this part.

16 SEC. 32715. FUNDING.

17 (a) AUTHORIZATION OF APPROPRIATIONS.—

- (1) IN GENERAL.—There are authorized to be
 appropriated to the Secretary to carry out this part
 \$250,000,000 for each of fiscal years 2020 through
 2024, to remain available until expended.
- (2) MAINTENANCE OF FUNDING.—Funds provided under this section shall supplement and not
 supplant any Federal and State funding provided to

- carry out energy efficiency programs in existence on
 the date of enactment of this Act.
- 3 (b) GRANTS TO STATES.—
- 4 (1) IN GENERAL.—Of the amounts provided
 5 under subsection (a), not more than 6 percent shall
 6 be used to carry out section 32709.

7 (2)DISTRIBUTION TO STATE ENERGY OF-8 FICES.—Not later than 45 days after the date of en-9 actment of this Act, the Secretary shall determine a 10 formula to provide funds described in paragraph (1) 11 to State energy offices, in accordance with the allo-12 cation formula for State energy conservation plans 13 established under part D of title III of the Energy 14 Policy and Conservation Act (42 U.S.C. 6321 et 15 seq.).

16 (c) TRACKING OF REBATES AND EXPENDITURES.— 17 Of the amount provided under subsection (a), not more 18 than 2.5 percent are authorized to be appropriated to the 19 Secretary to be used for costs associated with tracking re-20 bates and expenditures through the Federal Rebate Proc-21 essing System under this part, technical assistance to 22 States, and related administrative costs incurred by the 23 Secretary.

24 (d) Program Review and Backstop Funding.—
(1) IN GENERAL.—Not later than 180 days
 after the date of enactment of this Act, the Sec retary shall perform a State-by-State analysis and
 review the distribution of rebates under this part.

5 (2) ADJUSTMENT.—The Secretary may allocate
6 technical assistance funding to assist States that
7 have not sufficiently benefitted from the Home Energy Savings Retrofit Rebate Program.

9 SEC. 32716. PILOT PROGRAM.

10 (a) Establishment.—

(1) IN GENERAL.—Notwithstanding any other
provision of this part, the Secretary shall establish
a Residential Energy Efficiency Pay for Performance pilot program for States to encourage the use
of measured energy savings, and financial payments
for those energy savings, in the operation of residential energy efficiency programs.

(2) CRITERIA.—Not later than 180 days after
the date of enactment of this Act, the Secretary
shall provide common measurement criteria, developed with input from home performance industry
stakeholders, to ensure comparability among programs but allow flexibility in program design.

(b) GRANTS.—In carrying out the pilot program es-tablished under this section, the Secretary shall provide,

on a competitive basis, grants to not less than 5 State
 energy offices.

3 (c) AUTHORIZATION OF APPROPRIATIONS.—For fis4 cal year 2020, there are authorized to be appropriated to
5 carry out this section \$100,000,000.

6 (d) DEFINITION.—In this section, the term "State 7 energy office" means the office or agency of a State re-8 sponsible for developing the State energy plan for the 9 State under section 362 of the Energy Policy and Con-10 servation Act (42 U.S.C. 6322).

Subtitle C—Energy Supply Infrastructure

13 PART 1—LOW-INCOME SOLAR

14 SECTION 33101. SHORT TITLE.

15 This part may be cited as the "Low-Income Solar Act16 of 2019".

17 SEC. 33102. LOAN AND GRANT PROGRAM FOR SOLAR IN-

18 STALLATIONS IN LOW-INCOME AND UNDER-

19 SERVED AREAS.

20 (a) DEFINITIONS.—In this section:

(1) ADMINISTRATIVE EXPENSES.—The term
"administrative expenses" has such meaning as may
be established by the Secretary.

24 (2) COMMUNITY SOLAR FACILITY.—The term
25 "community solar facility" means a photovoltaic

1	solar electricity generating facility that, as deter-
2	mined by the Secretary—
3	(A) through a voluntary program, provides
4	electric power or financial benefit to, or is
5	owned by, multiple community members;
6	(B) has a nameplate rating of 2 megawatts
7	or less;
8	(C) is located in or near a community of
9	subscribers; and
10	(D) the owner or operator of which re-
11	serves not less than 25 percent of the quantity
12	of electricity generated by the facility for low-
13	income households that are subscribers to the
14	facility.
15	(3) ELIGIBLE ENTITY.—The term "eligible enti-
16	ty" means—
17	(A) a low-income household;
18	(B) a unit of State, territorial, or local
19	government;
20	(C) an Indian Tribe;
21	(D) a Native Hawaiian community-based
22	organization;
23	(E) any other national or regional entity
24	that—

1	(i) deploys a safe, high-quality photo-
2	voltaic solar electricity generating facility
3	for consumers under a model that maxi-
4	mizes energy savings to those consumers;
5	and
6	(ii) has experience, as determined by
7	the Secretary, installing solar systems
8	using a job training or community volun-
9	teer-based installation model; and
10	(F) for the loan program only, in addition
11	to entities described in subsections (A) through
12	(E), a private entity that—
13	(i) deploys a safe, high-quality photo-
14	voltaic solar electricity generating facility
15	for consumers under a model that maxi-
16	mizes energy savings to those consumers;
17	and
18	(ii) will install solar systems using a
19	job training installation model.
20	(4) GRANT-ELIGIBLE HOUSEHOLD.—The term
21	"grant-eligible household" means a low-income
22	household the members of which reside in an owner-
23	occupied home.
24	(5) INDIAN TRIBE.—The term "Indian Tribe"
25	means any Indian Tribe, band, nation, or other or-

1 ganized group or community, including any Alaska 2 Native village, Regional Corporation, or Village Cor-3 poration (as defined in, or established pursuant to, 4 the Alaska Native Claims Settlement Act (43 U.S.C. 5 1601 et seq.)), that is recognized as eligible for the 6 special programs and services provided by the 7 United States to Indians because of their status as 8 Indians.

9 (6) LOW-INCOME HOUSEHOLD.—The term 10 "low-income household" means a household with an 11 income equal to 80 percent or less of the applicable 12 area median income, as defined for the applicable 13 year by the Secretary of Housing and Urban Devel-14 opment.

15 (7) MULTI-FAMILY AFFORDABLE HOUSING.—
16 The term "multi-family affordable housing" means
17 any federally subsidized affordable housing complex
18 in which at least 50 percent of the units are reserved
19 for low-income households.

(8) NATIVE HAWAIIAN COMMUNITY-BASED ORGANIZATION.—The term "Native Hawaiian community-based organization" means any organization
that is composed primarily of Native Hawaiians
from a specific community and that assists in the

1	social, cultural, and educational development of Na-
2	tive Hawaiians in that community.
3	(9) Photovoltaic solar electricity gen-
4	ERATING FACILITY.—The term "photovoltaic solar
5	electricity generating facility" means—
6	(A) a generator that creates electricity
7	from light photons; and
8	(B) the accompanying hardware enabling
9	that electricity to flow—
10	(i) onto the electric grid; or
11	(ii) into an energy storage device.
12	(10) SECRETARY.—The term "Secretary"
13	means the Secretary of Energy.
14	(11) SUBSCRIBER.—The term "subscriber"
15	means an electricity consumer who owns a subscrip-
16	tion, or an equivalent unit or share of the capacity
17	or generation, of a community solar facility.
18	(12) SUBSCRIPTION.—The term "subscription"
19	means a share in the capacity, or a proportional in-
20	terest in the solar electricity generation, of a com-
21	munity solar facility.
22	(13) UNDERSERVED AREA.—The term "under-
23	served area" means—

1	(A) a geographical area with low or no
2	photovoltaic solar deployment, as determined by
3	the Secretary; or
4	(B) trust land, as defined in section 3765
5	of title 38, United States Code.
6	(b) Establishment of Loan and Grant Pro-
7	GRAM.—
8	(1) IN GENERAL.—The Secretary shall establish
9	a program under which the Secretary shall provide
10	loans and grants to eligible entities for use in ac-
11	cordance with this section.
12	(2) FUNDING.—
13	(A) IN GENERAL.—Subject to the avail-
14	ability of appropriations, the Secretary shall
15	make grants and issue loans in accordance with
16	this subsection.
17	(B) LOANS.—Not more than 50 percent of
18	funds made available pursuant to subparagraph
19	(A) for a fiscal year shall be used to provide
20	loans to eligible entities for—
21	(i) construction or installation of com-
22	munity solar facilities; or
23	(ii) construction or installation of pho-
24	tovoltaic solar electricity generating facili-

1	ties to serve multi-family affordable hous-
2	ing.
3	(C) GRANTS.—After allocating amounts to
4	carry out subparagraph (B), the Secretary shall
5	use the remaining funds made available pursu-
6	ant to subparagraph (A) for a fiscal year to
7	provide grants to eligible entities for eligible
8	uses described in subsection (e).
9	(3) GOALS AND ACCOUNTABILITY.—In pro-
10	viding loans and grants under this subsection, the
11	Secretary shall take such actions as may be nec-
12	essary to ensure that—
13	(A) the assistance provided under this sub-
14	section is used to facilitate and encourage inno-
15	vative solar installation and financing models,
16	under which the recipients develop and install
17	photovoltaic solar electricity generating facilities
18	that provide significant savings to low-income
19	households while providing job training or com-
20	munity engagement opportunities with respect
21	to each solar system installed;
22	(B) the photovoltaic solar electricity gener-
23	ating facilities installed using assistance pro-
24	vided under this subsection are safe, high-qual-

1	ity systems that comply with local building and
2	safety codes and standards;
3	(C) the program under this section estab-
4	lishes and fosters a partnership between the
5	Federal Government and eligible entities, re-
6	sulting in efficient development of solar installa-
7	tions with—
8	(i) minimal governmental intervention;
9	(ii) limited governmental regulation;
10	and
11	(iii) significant involvement by non-
12	profit and private entities;
13	(D) photovoltaic solar electricity generating
14	facilities installed using assistance provided
15	under this subsection—
16	(i) include job training and commu-
17	nity participation to the extent practicable;
18	and
19	(ii) may include community participa-
20	tion in which job trainees and volunteers
21	assist in the development of solar projects;
22	(E) assistance provided under this sub-
23	section prioritizes development in underserved
24	areas;

(F) photovoltaic solar electricity generating
 facilities are developed using assistance pro vided under this subsection on a geographically
 diverse basis among the eligible entities; and

5 (G) to the maximum extent practicable, 6 solar installation activities for which assistance 7 is provided under this section leverage, or con-8 nect grant-eligible households to, federally or lo-9 cally subsidized weatherization and energy effi-10 ciency efforts that meet or exceed local energy 11 efficiency standards.

12 (c) NATIONAL COMPETITION.—

(1) IN GENERAL.—The Secretary shall select eligible entities to receive loans or grants under this
section through a nationwide competitive process, to
be established by the Secretary.

17 (2) APPLICATIONS.—To be eligible to receive a
18 loan or grant under this section, an eligible entity
19 shall submit to the Secretary an application at such
20 time, in such manner, and containing such informa21 tion as the Secretary may require.

(3) REQUIREMENTS.—In selecting eligible entities to receive loans or grants under this section, the
Secretary shall, at a minimum—

25 (A) require that the eligible entity—

1	(i) enter into a grant or loan agree-
2	ment, as applicable, under subsection (d);
3	and
4	(ii) has obtained financial commit-
5	ments (or has demonstrated the capacity
6	to obtain financial commitments) necessary
7	to comply with that agreement;
8	(B) ensure that loans and grants are pro-
9	vided, and amounts are used, in a manner that
10	results in geographical diversity throughout the
11	United States and within States, territories,
12	and Indian tribal land among photovoltaic solar
13	electricity generating facilities installed using
14	the assistance provided under this section;
15	(C) to the maximum extent practicable, ex-
16	pand photovoltaic solar energy availability to—
17	(i) geographical areas, throughout the
18	United States and within States, terri-
19	tories, and Indian tribal land, with—
20	(I) low photovoltaic solar pene-
21	tration; or
22	(II) areas with a higher cost bur-
23	den with respect to the deployment or
24	installation of photovoltaic solar elec-
25	tricity generating facilities;

	101
1	(ii) rural areas;
2	(iii) Indian tribes; and
3	(iv) other underserved areas, including
4	Appalachian and Alaska Native commu-
5	nities;
6	(D) take into account the warranty period
7	and quality of the applicable photovoltaic solar
8	electricity generating facility equipment and any
9	necessary interconnecting equipment; and
10	(E) ensure all calculations for estimated
11	household energy savings are based solely on
12	electricity offsets from the photovoltaic solar
13	electricity generating facilities.
14	(d) LOAN AND GRANT AGREEMENTS.—
15	(1) IN GENERAL.—As a condition of receiving a
16	loan or grant under this section, an eligible entity
17	shall enter into a loan or grant agreement, as appli-
18	cable, with the Secretary.
19	(2) REQUIREMENTS.—A loan or grant agree-
20	ment under this subsection shall—
21	(A) require the Secretary to rescind any
22	amounts provided to the eligible entity that are
23	not used during the 2-year period beginning on
24	the date on which the amounts are initially dis-
25	tributed to the eligible entity, except in any case

1	in which the eligible entity has demonstrated to
2	the satisfaction of the Secretary that a longer
3	period, not to exceed 3 years after the date of
4	initial distribution, is necessary to deliver pro-
5	posed services;
6	(B) for a loan provided under this section,
7	establish—
8	(i) an interest rate equal to the then-
9	current cost of funds to the Department of
10	the Treasury for obligations of comparable
11	maturity to the loan; and
12	(ii) a payout time that maximizes the
13	savings to subscribers during the effective
14	period of the agreement; and
15	(C) contain such other terms as the Sec-
16	retary may require to ensure compliance with
17	the requirements of this section.
18	(e) USE.—An eligible entity shall use a loan or grant
19	provided under this section only for the following activi-
20	ties, for the purpose of developing new photovoltaic solar
21	electricity generating facilities in the United States for
22	low-income households and individuals who otherwise
23	would likely be unable to afford or purchase photovoltaic
24	solar electricity generating facilities:

1	(1) Photovoltaic solar equipment and in-
2	STALLATION.—To pay the costs of—
3	(A) photovoltaic solar equipment and stor-
4	age and all hardware or software components
5	relating to safely producing, monitoring, and
6	connecting the system to the electric grid or on-
7	site storage; and
8	(B) installation, including all direct labor
9	costs associated with installing the photovoltaic
10	solar equipment and storage.
11	(2) JOB TRAINING.—To fund onsite job train-
12	ing and community or volunteer engagement, includ-
13	ing—
14	(A) job training costs directly associated
15	with the solar projects funded under this sec-
16	tion; and
17	(B) job training opportunities that may
18	cover the full range of the solar value chain,
19	such as marketing and outreach, customer ac-
20	quisition, system design, and installation posi-
21	tions.
22	(3) Deployment support.—To fund entities
23	that have a demonstrated ability, as determined by
24	the Secretary—

1	(A) to advise State and local entities re-
2	garding low-income solar policy, regulatory, and
3	program design to continue and expand the
4	work of the entities;
5	(B) to foster community outreach and edu-
6	cation regarding the benefits of photovoltaic
7	solar energy for low-income and disadvantaged
8	communities; or
9	(C) to provide apprenticeship program op-
10	portunities registered and approved by—
11	(i) the Office of Apprenticeship of the
12	Department of Labor pursuant to part 29
13	of title 29, Code of Federal Regulations (or
14	successor regulations); or
15	(ii) a State Apprenticeship Agency
16	recognized by that Office.
17	(4) Administration.—To pay the administra-
18	tive expenses of the eligible entity, including
19	preproject feasibility efforts, associated with deliv-
20	ering proposed services, subject to the requirement
21	that not more than 15 percent of the total amount
22	of the assistance provided to the eligible entity under
23	this section may be used for administrative expenses.
24	(f) COMPLIANCE.—

1 (1) RECORDS AND AUDITS.—During the period 2 beginning on the date of initial distribution to an eli-3 gible entity of a loan or grant under this section and 4 ending on the termination date of the loan or grant 5 under subsection (g), the eligible entity shall main-6 tain such records and adopt such administrative 7 practices as the Secretary may require to ensure 8 compliance with the requirements of this section and 9 the applicable loan or grant agreement.

10 (2) DETERMINATION BY SECRETARY.—If the 11 Secretary determines that an eligible entity that re-12 ceives a grant or loan under this section has not, 13 during the 2-year period beginning on the date of 14 initial distribution to the eligible entity of the assist-15 ance (or such longer period as is established under 16 subsection (d)(2)(B), substantially fulfilled the obli-17 gations of the eligible entity under the applicable 18 loan or grant agreement, the Secretary shall—

19 (A) rescind the balance of any funds dis20 tributed to, but not used by, the eligible entity
21 under this section; and

(B) use those amounts to provide other
loans or grants in accordance with this section.
(g) TERMINATION.—The Secretary shall terminate a
loan or grant provided under this section on a determina-

1 tion that the total amount of the loan or grant (excluding
2 any interest, fees, and other earnings of the loan or grant)
3 has been—

4 (1) fully expended by the eligible entity; or

5 (2) returned to the Secretary.

6 (h) REGULATIONS.—Not later than 90 days after the 7 date of enactment of this Act, the Secretary shall promul-8 gate such regulations as the Secretary determines to be 9 necessary to carry out this section, to take effect on the 10 date of promulgation.

(i) FUNDING.—There is authorized to be appropriated to the Secretary to carry out this section
\$200,000,000 for each of fiscal years 2020 through 2024,
to remain available until expended.

15 PART 2—SAFE, AFFORDABLE, AND ENVIRON16 MENTALLY SOUND NATURAL GAS DISTRIBU17 TION

18 SECTION 33201. IMPROVING THE NATURAL GAS DISTRIBU-

19 TION SYSTEM.

(a) ESTABLISHMENT OF PROGRAM.—The Secretary
of Energy shall establish a program to award grants to
States, in accordance with this section, for the purpose
of providing incentives for natural gas distribution companies to improve the public safety and environmental performance of the natural gas distribution system.

1 (b) GRANTS TO STATES.—

2 (1) IN GENERAL.—A State may apply for a
3 grant under this section to provide funds to natural
4 gas distribution companies in the State that are car5 rying out an eligible project.

6 (2) REQUIREMENTS.—In applying for a grant 7 under this section, a State shall demonstrate how 8 the State rate-setting program will ensure that 9 funds provided to natural gas distribution companies 10 under this section are used in accordance with the 11 requirements of this section.

12 (c) ELIGIBLE PROJECTS.—A project that is eligible 13 to be funded through a grant to a State under this section 14 is a project carried out by a natural gas distribution com-15 pany to accelerate, expand, or enhance the implementation 16 of a plan approved by the State before the date of enact-17 ment of this section for—

18 (1) replacement of cast and wrought iron and
19 bare steel pipes and other leak-prone components of
20 the natural gas distribution system; or

(2) inspection and maintenance programs forthe natural gas distribution system.

23 (d) RATE ASSISTANCE.—A natural gas distribution
24 company receiving funds through a grant to a State under
25 this section may use such funds only to offset the near-

term incremental costs, as reflected in rate increases to
 low-income households, of the eligible project.

- 3 (e) LIMIT TO TRANSITIONAL ASSISTANCE.—A State
 4 may provide funds to a natural gas distribution company
 5 under this section for a period not to exceed 4 years.
- 6 (f) PRIORITIZATION.—In awarding grants under this 7 section, the Secretary shall prioritize applications based 8 on the expected results of the State proposal with respect 9 to—
- 10 (1) quantifiable benefits for public safety;
- (2) the magnitude of methane emissions reduc-tions;
- (3) innovation in technical or policy approaches;
 (4) the number of low-income households anticipated to benefit from the assistance; and

16 (5) overall cost-effectiveness.

17 (g) AUDITING AND REPORTING REQUIREMENTS.—
18 The Secretary shall establish auditing and reporting re19 quirements for States with respect to grants awarded
20 under this section.

21 (h) DEFINITIONS.—In this section:

(1) LOW-INCOME HOUSEHOLD.—The term
"low-income household" means a household that is
eligible to receive payments under section 2605(b)(2)

1	of the Low-Income Home Energy Assistance Act of
2	1981 (42 U.S.C. 8624(b)(2)).
3	(2) NATURAL GAS DISTRIBUTION COMPANY
4	The term "natural gas distribution company" means
5	a person or municipality engaged in the local dis-
6	tribution of natural gas to the public.
7	(3) NATURAL GAS DISTRIBUTION SYSTEM.—
8	The term "natural gas distribution system" means
9	the facilities used for the local distribution of nat-
10	ural gas.
11	(i) AUTHORIZATION OF APPROPRIATIONS.—There
12	are authorized to be appropriated to the Secretary to carry
13	out this section $$150,000,000$ per fiscal year, with the
14	total amount not to exceed \$1,500,000,000.
15	PART 3—CLEAN DISTRIBUTED ENERGY
16	PROGRAM
17	SEC. 33301. SHORT TITLE.
18	This part may be cited as the "Local Energy Supply
19	and Resiliency Act of 2019".
20	SEC. 33302. DEFINITIONS.
21	In this part:
22	(1) Combined heat and power system.—
23	The term "combined heat and power system" means
24	generation of electric energy and heat in a single, in-
25	tegrated system that meets the efficiency criteria in

1	clauses (ii) and (iii) of section $48(c)(3)(A)$ of the In-
2	ternal Revenue Code of 1986, under which heat that
3	is conventionally rejected is recovered and used to
4	meet thermal energy requirements.
5	(2) DEMAND RESPONSE.—The term "demand
6	response" means changes in electric usage by elec-
7	tric utility customers from the normal consumption
8	patterns of the customers in response to—
9	(A) changes in the price of electricity over
10	time; or
11	(B) incentive payments designed to induce
12	lower electricity use at times of high wholesale
13	market prices or when system reliability is jeop-
14	ardized.
15	(3) DISTRIBUTED ENERGY.—The term "distrib-
16	uted energy" means energy sources and systems
17	that—
18	(A) produce electric or thermal energy
19	close to the point of use using renewable energy
20	resources or waste thermal energy;
21	(B) generate electricity using a combined
22	heat and power system;
23	(C) distribute electricity in microgrids;
24	(D) store electric or thermal energy; or

(E) distribute thermal energy or transfer
 thermal energy to building heating and cooling
 systems through a district energy system.

4 (4) DISTRICT ENERGY SYSTEM.—The term 5 "district energy system" means a system that pro-6 vides thermal energy to buildings and other energy 7 consumers from one or more plants to individual 8 buildings to provide space heating, air conditioning, 9 domestic hot water, industrial process energy, and 10 other end uses.

(5) ISLANDING.—The term "islanding" means
a distributed generator or energy storage device continuing to power a location in the absence of electric
power from the primary source.

(6) LOAN.—The term "loan" has the meaning
given the term "direct loan" in section 502 of the
Federal Credit Reform Act of 1990 (2 U.S.C. 661a).
(7) MICROGRID.—The term "microgrid" means
an integrated energy system consisting of interconnected loads and distributed energy resources, including generators and energy storage devices, with-

22 in clearly defined electrical boundaries that—

23 (A) acts as a single controllable entity with
24 respect to the grid; and

1	(B) can connect and disconnect from the
2	grid to operate in both grid-connected mode
3	and island mode.
4	(8) RENEWABLE ENERGY RESOURCE.—The
5	term "renewable energy resource" includes—
6	(A) biomass;
7	(B) geothermal energy;
8	(C) hydropower;
9	(D) landfill gas;
10	(E) municipal solid waste;
11	(F) ocean (including tidal, wave, current,
12	and thermal) energy;
13	(G) organic waste;
14	(H) photosynthetic processes;
15	(I) photovoltaic energy;
16	(J) solar energy; and
17	(K) wind.
18	(9) RENEWABLE THERMAL ENERGY.—The term
19	"renewable thermal energy" means heating or cool-
20	ing energy derived from a renewable energy re-
21	source.
22	(10) SECRETARY.—The term "Secretary"
23	means the Secretary of Energy.
24	(11) THERMAL ENERGY.—The term "thermal
25	energy" means—

1	(A) heating energy in the form of hot
2	water or steam that is used to provide space
3	heating, domestic hot water, or process heat; or
4	(B) cooling energy in the form of chilled
5	water, ice, or other media that is used to pro-
6	vide air conditioning, or process cooling.
7	(12) WASTE THERMAL ENERGY.—The term
8	"waste thermal energy" means energy that—
9	(A) is contained in—
10	(i) exhaust gases, exhaust steam, con-
11	denser water, jacket cooling heat, or lubri-
12	cating oil in power generation systems;
13	(ii) exhaust heat, hot liquids, or flared
14	gas from any industrial process;
15	(iii) waste gas or industrial tail gas
16	that would otherwise be flared, incinerated,
17	or vented;
18	(iv) a pressure drop in any gas, ex-
19	cluding any pressure drop to a condenser
20	that subsequently vents the resulting heat;
21	(v) condenser water from chilled water
22	or refrigeration plants; or
23	(vi) any other form of waste energy,
24	as determined by the Secretary; and

1	(B)(i) in the case of an existing facility, is
2	not being used; or
3	(ii) in the case of a new facility, is not con-
4	ventionally used in comparable systems.
5	SEC. 33303. DISTRIBUTED ENERGY LOAN PROGRAM.
6	(a) LOAN PROGRAM.—
7	(1) IN GENERAL.—Subject to the provisions of
8	this subsection and subsections (b) and (c), the Sec-
9	retary shall establish a program to provide to eligible
10	entities—
11	(A) loans for the deployment of distributed
12	energy systems in a specific project; and
13	(B) loans to provide funding for programs
14	to finance the deployment of multiple distrib-
15	uted energy systems through a revolving loan
16	fund, credit enhancement program, or other fi-
17	nancial assistance program.
18	(2) ELIGIBILITY.—Entities eligible to receive a
19	loan under paragraph (1) include—
20	(A) a State, territory, or possession of the
21	United States;
22	(B) a State energy office;
23	(C) a tribal organization (as defined in sec-
24	tion 4 of the Indian Self-Determination and
25	Education Assistance Act (25 U.S.C. 5304));

1	(D) an institution of higher education (as
2	defined in section 101 of the Higher Education
3	Act of 1965 (20 U.S.C. 1001)); and
4	(E) an electric utility, including—
5	(i) a rural electric cooperative;
6	(ii) a municipally owned electric util-
7	ity; and
8	(iii) an investor-owned utility.
9	(3) Selection requirements.—In selecting
10	eligible entities to receive loans under this section,
11	the Secretary shall, to the maximum extent prac-
12	ticable, ensure—
13	(A) regional diversity among eligible enti-
14	ties to receive loans under this section, includ-
15	ing participation by rural States and small
16	States; and
17	(B) that specific projects selected for
18	loans—
19	(i) expand on the existing technology
20	deployment program of the Department of
21	Energy; and
22	(ii) are designed to achieve one or
23	more of the objectives described in para-
24	graph (4) .

1	(4) Objectives.—Each deployment selected
2	for a loan under paragraph (1) shall promote one or
3	more of the following objectives:
4	(A) Improved security and resiliency of en-
5	ergy supply in the event of disruptions caused
6	by extreme weather events, grid equipment or
7	software failure, or terrorist acts.
8	(B) Implementation of distributed energy
9	in order to increase use of local renewable en-
10	ergy resources and waste thermal energy
11	sources.
12	(C) Enhanced feasibility of microgrids, de-
13	mand response, or islanding.
14	(D) Enhanced management of peak loads
15	for consumers and the grid.
16	(E) Enhanced reliability in rural areas, in-
17	cluding high energy cost rural areas.
18	(5) RESTRICTION ON USE OF FUNDS.—Any eli-
19	gible entity that receives a loan under paragraph (1)
20	may only use the loan to fund programs relating to
21	the deployment of distributed energy systems.
22	(b) LOAN TERMS AND CONDITIONS.—
23	(1) TERMS AND CONDITIONS.—Notwithstanding
24	any other provision of law, in providing a loan under
25	this section, the Secretary shall provide the loan on

1 such terms and conditions as the Secretary deter-2 mines, after consultation with the Secretary of the 3 Treasury, in accordance with this section. 4 (2) Specific Appropriation.—No loan shall 5 be made unless an appropriation for the full amount 6 of the loan has been specifically provided for that 7 purpose. 8 (3) REPAYMENT.—No loan shall be made un-9 less the Secretary determines that there is reason-10 able prospect of repayment of the principal and in-11 terest by the borrower of the loan. 12 (4) INTEREST RATE.—A loan provided under this section shall bear interest at a fixed rate that 13 14 is equal or approximately equal, in the determination 15 of the Secretary, to the interest rate for Treasury 16 securities of comparable maturity. 17 (5) TERM.—The term of the loan shall require 18 full repayment over a period not to exceed the lesser 19 of— 20 (A) 20 years; or 21 (B) 90 percent of the projected useful life 22 of the physical asset to be financed by the loan 23 (as determined by the Secretary). 24 (6) Use of payments.—Payments of principal 25 and interest on the loan shall—

1	(A) be retained by the Secretary to support
2	energy research and development activities; and
3	(B) remain available until expended, sub-
4	ject to such conditions as are contained in an-
5	nual appropriations Acts.
6	(7) NO PENALTY ON EARLY REPAYMENT.—The
7	Secretary may not assess any penalty for early re-
8	payment of a loan provided under this section.
9	(8) RETURN OF UNUSED PORTION.—In order to
10	receive a loan under this section, an eligible entity
11	shall agree to return to the general fund of the
12	Treasury any portion of the loan amount that is un-
13	used by the eligible entity within a reasonable period
14	of time after the date of the disbursement of the
15	loan, as determined by the Secretary.
16	(9) Comparable wage rates.—Each laborer
17	and mechanic employed by a contractor or subcon-
18	tractor in performance of construction work fi-
19	nanced, in whole or in part, by the loan shall be paid
20	wages at rates not less than the rates prevailing on
21	similar construction in the locality as determined by
22	the Secretary of Labor in accordance with sub-
23	chapter IV of chapter 31 of title 40, United States
24	Code.

1 (c) Rules and Procedures; Disbursement of 2 Loans.—

3 (1) RULES AND PROCEDURES.—Not later than
4 180 days after the date of enactment of this Act, the
5 Secretary shall adopt rules and procedures for car6 rying out the loan program under subsection (a).

7 (2) DISBURSEMENT OF LOANS.—Not later than
8 1 year after the date on which the rules and proce9 dures under paragraph (1) are established, the Sec10 retary shall disburse the initial loans provided under
11 this section.

12 (d) REPORTS.—Not later than 2 years after the date 13 of receipt of the loan, and annually thereafter for the term 14 of the loan, an eligible entity that receives a loan under 15 this section shall submit to the Secretary a report describ-16 ing the performance of each program and activity carried 17 out using the loan, including itemized loan performance 18 data.

(e) AUTHORIZATION OF APPROPRIATIONS.—There
are authorized to be appropriated to carry out this section
such sums as are necessary.

22 SEC. 33304. TECHNICAL ASSISTANCE AND GRANT PRO-23 GRAM.

24 (a) Establishment.—

1	(1) IN GENERAL.—The Secretary shall establish
2	a technical assistance and grant program (referred
3	to in this section as the "program")—
4	(A) to disseminate information and provide
5	technical assistance directly to eligible entities
6	so the eligible entities can identify, evaluate,
7	plan, and design distributed energy systems;
8	and
9	(B) to make grants to eligible entities so
10	that the eligible entities may contract to obtain
11	technical assistance to identify, evaluate, plan,
12	and design distributed energy systems.
13	(2) TECHNICAL ASSISTANCE.—The technical
14	assistance described in paragraph (1) shall include
15	assistance with one or more of the following activi-
16	ties relating to distributed energy systems:
17	(A) Identification of opportunities to use
18	distributed energy systems.
19	(B) Assessment of technical and economic
20	characteristics.
21	(C) Utility interconnection.
22	(D) Permitting and siting issues.
23	(E) Business planning and financial anal-
24	ysis.
25	(F) Engineering design.

1	(3) INFORMATION DISSEMINATION.—The infor-
2	mation disseminated under paragraph $(1)(A)$ shall
3	include—
4	(A) information relating to the topics de-
5	scribed in paragraph (2), including case studies
6	of successful examples;
7	(B) computer software and databases for
8	assessment, design, and operation and mainte-
9	nance of distributed energy systems; and
10	(C) public databases that track the oper-
11	ation and deployment of existing and planned
12	distributed energy systems.
13	(b) ELIGIBILITY.—Any nonprofit or for-profit entity
14	shall be eligible to receive technical assistance and grants
15	under the program.
16	(c) APPLICATIONS.—
17	(1) IN GENERAL.—An eligible entity desiring
18	technical assistance or grants under the program
19	shall submit to the Secretary an application at such
20	time, in such manner, and containing such informa-
21	tion as the Secretary may require.
22	(2) Application process.—The Secretary
23	shall seek applications for technical assistance and
24	grants under the program—
25	(A) on a competitive basis; and

1	(B) on a periodic basis, but not less fre-
2	quently than once every 12 months.
3	(3) PRIORITIES.—In selecting eligible entities
4	for technical assistance and grants under the pro-
5	gram, the Secretary shall give priority to eligible en-
6	tities with projects that have the greatest potential
7	for—
8	(A) facilitating the use of renewable energy
9	resources;
10	(B) strengthening the reliability and resil-
11	iency of energy infrastructure to the impact of
12	extreme weather events, power grid failures,
13	and interruptions in supply of fossil fuels;
14	(C) improving the feasibility of microgrids
15	or islanding, particularly in rural areas, includ-
16	ing high energy cost rural areas;
17	(D) minimizing environmental impact, in-
18	cluding regulated air pollutants and greenhouse
19	gas emissions; and
20	(E) maximizing local job creation.
21	(d) GRANTS.—On application by an eligible entity,
22	the Secretary may award grants to the eligible entity to
23	provide funds to cover not more than—
24	(1) 100 percent of the costs of the initial as-
25	sessment to identify opportunities;

1	(2) 75 percent of the cost of feasibility studies
2	to assess the potential for the implementation;
3	(3) 60 percent of the cost of guidance on over-
4	coming barriers to implementation, including finan-
5	cial, contracting, siting, and permitting issues; and
6	(4) 45 percent of the cost of detailed engineer-
7	ing.
8	(e) Rules and Procedures.—
9	(1) RULES.—Not later than 180 days after the
10	date of enactment of this Act, the Secretary shall
11	adopt rules and procedures for carrying out the pro-
12	gram.
13	(2) GRANTS.—Not later than 120 days after
14	the date of issuance of the rules and procedures for
15	the program, the Secretary shall issue grants under
16	this part.
17	(f) REPORTS.—The Secretary shall submit to Con-
18	gress and make available to the public—
19	(1) not less frequently than once every 2 years,
20	a report describing the performance of the program
21	under this section, including a synthesis and analysis
22	of the information provided in the reports submitted
23	to the Secretary under section 33303(d); and
24	(2) on termination of the program under this
25	section, an assessment of the success of, and edu-

cation provided by, the measures carried out by eli gible entities during the term of the program.

3 (g) AUTHORIZATION OF APPROPRIATIONS.—There is
4 authorized to be appropriated to carry out this section
5 \$250,000,000 for the period of fiscal years 2020 through
6 2024, to remain available until expended.

7 PART 4—STRATEGIC PETROLEUM RESERVE 8 IMPROVEMENTS

9 SEC. 33401. STRATEGIC PETROLEUM RESERVE IMPROVE-

10 MENTS.

There 11 authorized be is to appropriated 12 \$4,000,000,000, to remain available until expended, for capital improvements on, and maintenance of, the Stra-13 tegic Petroleum Reserve established under part B of title 14 15 I of the Energy Policy and Conservation Act (42 U.S.C. 6231 et seq.) to ensure that the Reserve is operated and 16 maintained in an environmentally sound manner. 17

18 PART 5—REFINED PRODUCT RESERVES

19 SECTION 33501. REFINED PRODUCT RESERVES.

20 (a) REFINED PRODUCT RESERVES.—Title I of the
21 Energy Policy and Conservation Act (42 U.S.C. 6201 et
22 seq.) is amended by adding at the end the following:

23 **"PART E—REFINED PRODUCT RESERVES**

24 "SEC. 191. DEFINITIONS.

25 "In this part, the following definitions apply:

1	"(1) Refined petroleum product.—The
2	term 'refined petroleum product' means gasoline and
3	such other products as the Secretary determines, by
4	rule, appropriate.
5	"(2) RESERVE.—The term 'Reserve' means—
6	"(A) the Northeast Gasoline Supply Re-
7	serve established under this part;
8	"(B) the Southeast Refined Product Re-
9	serve established under this part; or
10	"(C) any other regional refined petroleum
11	product supply reserve established under this
12	part.
13	"(3) NORTHEAST.—The term 'Northeast'
14	means the States of New Jersey, New York,
15	Vermont, Pennsylvania, Connecticut, Rhode Island,
16	Massachusetts, Maine, New Hampshire, and any
17	other contiguous State that the Secretary determines
18	appropriate.
19	"(4) Southeast.—The term 'Southeast'
20	means the States of North Carolina, South Carolina,
21	Georgia, Florida, Alabama, and any other contig-
22	uous State that the Secretary determines appro-
23	priate.
24	"SEC. 192. ESTABLISHMENT.
25	"(a) IN GENERAL.—The Secretary—
"(1) shall establish, maintain, and operate in
 the Northeast a Northeast Gasoline Supply Reserve,
 which shall be a component of the Strategic Petro leum Reserve established under part B of this title;
 and

6 "(2) shall, by rule, establish, maintain, and op7 erate in the Southeast a Southeast Refined Product
8 Reserve, which shall be a component of the Strategic
9 Petroleum Reserve established under part B of this
10 title; and

11 "(3) may, by rule, establish, maintain, and op-12 erate in any other region of the United States, a re-13 gional refined petroleum product supply reserve, 14 which shall be a component of the Strategic Petro-15 leum Reserve established under part B of this title. 16 "(b) LIMITATION.—A Reserve established under this 17 part shall contain no more than 1 million barrels of refined 18 petroleum products.

"(c) APPLICATION OF PROVISIONS.—Except as otherwise provided in this part, the authorities and requirements of part B of this title shall apply to each Reserve. **"SEC. 193. CONDITIONS FOR RELEASE; PLAN.**

23 "(a) SALE OF PRODUCTS.—The Secretary may sell
24 refined petroleum products from a Reserve upon a finding
25 by the President that there exists, or is likely to exist with-

in the next 30 days, a severe energy supply interruption.
 Such a finding may be made only if the President deter mines that—

4 "(1) a dislocation in the refined petroleum
5 product market that will affect the region for which
6 the Reserve is established has resulted or is likely to
7 result from such interruption; or

8 "(2) a circumstance, other than that described 9 in paragraph (1), exists that constitutes a regional 10 shortage, of the refined petroleum product in the 11 Reserve, of significant scope and duration and that 12 action taken under this section would assist directly 13 and significantly in reducing the adverse impact of 14 such shortage.

15 "(b) RELEASE OF PETROLEUM.—After consultation
16 with potentially affected parties, the Secretary shall deter17 mine procedures governing the release of refined petro18 leum products from a Reserve. The procedures shall pro19 vide that—

20 "(1) the Secretary may—

21 "(A) sell refined petroleum products from
22 a Reserve through a competitive process; or
23 "(B) enter into exchange agreements for
24 the refined petroleum products that results in
25 the Secretary receiving a greater volume of such

1	products as repayment than the volume pro-
2	vided to the acquirer;
3	"(2) in all sales or exchanges described in para-
4	graph (1), the Secretary shall receive revenue or its
5	equivalent in refined petroleum products that pro-
6	vides the Department with fair market value;
7	"(3) at no time may refined petroleum products
8	be sold or exchanged resulting in a loss of revenue
9	or value to the United States; and
10	"(4) the Secretary shall only sell or dispose of
11	refined petroleum products in a Reserve to entities
12	customarily engaged in the sale and distribution of
13	such products.
13 14	such products. "(c) Plan.—Not later than 60 days after the date
	-
14	"(c) PLAN.—Not later than 60 days after the date
14 15	"(c) PLAN.—Not later than 60 days after the date of the enactment of this section, the Secretary shall trans- mit to the President and, if the President approves, to
14 15 16	"(c) PLAN.—Not later than 60 days after the date of the enactment of this section, the Secretary shall trans- mit to the President and, if the President approves, to
14 15 16 17	"(c) PLAN.—Not later than 60 days after the date of the enactment of this section, the Secretary shall trans- mit to the President and, if the President approves, to Congress a plan describing—
14 15 16 17 18	"(c) PLAN.—Not later than 60 days after the date of the enactment of this section, the Secretary shall trans- mit to the President and, if the President approves, to Congress a plan describing— "(1) the proposed acquisition of storage and re-
14 15 16 17 18 19	 "(c) PLAN.—Not later than 60 days after the date of the enactment of this section, the Secretary shall transmit to the President and, if the President approves, to Congress a plan describing— "(1) the proposed acquisition of storage and related facilities or storage services for the Northeast
 14 15 16 17 18 19 20 	 "(c) PLAN.—Not later than 60 days after the date of the enactment of this section, the Secretary shall transmit to the President and, if the President approves, to Congress a plan describing— "(1) the proposed acquisition of storage and related facilities or storage services for the Northeast Gasoline Supply Reserve and the Southeast Refined
 14 15 16 17 18 19 20 21 	 "(c) PLAN.—Not later than 60 days after the date of the enactment of this section, the Secretary shall transmit to the President and, if the President approves, to Congress a plan describing— "(1) the proposed acquisition of storage and related facilities or storage services for the Northeast Gasoline Supply Reserve and the Southeast Refined Product Reserve, including the potential use of stor-

1	"(3) the anticipated methods of disposition of
2	refined petroleum products from such Reserves;
3	"(4) the estimated costs of establishment, main-
4	tenance, and operation of such Reserves;
5	"(5) efforts the Department will take to mini-
6	mize any potential need for future drawdowns and
7	ensure that distributors and importers are not dis-
8	couraged from maintaining and increasing supplies
9	to the Northeast and Southeast; and
10	"(6) actions to be taken to ensure quality of the
11	refined petroleum products in such Reserves.
12	"SEC. 194. PRODUCTS FOR STORAGE IN A RESERVE.
13	"(a) IN GENERAL.—The Secretary may acquire,
14	place in storage, transport, or exchange refined petroleum
15	products acquired by purchase or exchange.
16	"(b) OBJECTIVES.—The Secretary shall, to the great-
17	est extent practicable, acquire refined petroleum products
18	for a Reserve in a manner consonant with the following
19	objectives:
20	"(1) Minimization of the cost of the Reserve.
21	"(2) Minimization of the Nation's vulnerability
22	to a severe energy supply interruption.
23	"(3) Minimization of the impact of an acquisi-
24	tion of refined petroleum products on supply levels
25	and market forces.

"(4) Encouragement of competition in the pe troleum industry.

3 "(c) PROCEDURES.—The Secretary shall develop,
4 with public notice and opportunity for comment, proce5 dures consistent with the objectives of this section to ac6 quire refined petroleum products for a Reserve. Such pro7 cedures shall take into account the need to—

8 "(1) maximize overall domestic supply of re9 fined petroleum products (including quantities stored
10 in private sector inventories);

"(2) avoid incurring excessive cost or appreciably affecting the price of refined petroleum products to consumers;

14 "(3) minimize the costs to the Department of
15 Energy in acquiring such refined petroleum prod16 ucts;

"(4) protect national security;

18 "(5) avoid adversely affecting current and fu19 tures prices, supplies, and inventories of refined pe20 troleum products; and

21 "(6) address such other factors that the Sec-22 retary determines to be appropriate.

23 "(d) SEVERE ENERGY SUPPLY DISRUPTION.—If the
24 Secretary finds that a severe energy supply interruption
25 may be imminent, the Secretary may suspend the acquisi-

1 tion of refined petroleum products for a Reserve and may

2 sell any refined petroleum product acquired for, and in

3 transit to, such Reserve.".

4 (b) TECHNICAL AND CONFORMING AMENDMENT.—
5 The table of sections for title I of the Energy Policy and
6 Conservation Act is amended by striking the items relating
7 to the second part D, including section 181 of such part,
8 and inserting the following:

"PART E—Refined Product Reserves

"Sec. 191. Definitions."Sec. 192. Establishment."Sec. 193. Conditions for release; plan."Sec. 194. Products for storage in a Reserve.".

9 PART 6—DEPARTMENT OF ENERGY OFFICE OF

10 INDIAN ENERGY

11 SECTION 33601. AMENDMENT TO REAUTHORIZE PROGRAMS

12 TO ASSIST INDIAN TRIBES.

13 (a) DEFINITION OF INDIAN LAND.—Section 2601(2)

14 of the Energy Policy Act of 1992 (25 U.S.C. 3501(2))
15 is amended—

16 (1) in subparagraph (B)(iii), by striking "and";

17 (2) in subparagraph (C), by striking "land."

18 and inserting "land; and"; and

19 (3) by adding at the end the following subpara-20 graph:

21 "(D) any land in a census tract in which
22 the majority of the residents are Natives (as de-

fined in section 3(b) of the Alaska Native 1 2 Claims Settlement Act (43 U.S.C. 1602(b))).". 3 (b) Cost REDUCTION OF SHARE.—Section 4 2602(b)(5) of the Energy Policy Act of 1992 (25 U.S.C. 5 3502(b)(5)) is amended by adding at the end the following 6 subparagraph:

"(D) The Director may reduce any applicable
cost share required of an Indian tribe in order to receive a grant under this subsection to not less than
10 percent if the Indian tribe meets criteria developed by the Director, including financial need.".

(c) AUTHORIZATION.—Section 2602(b)(7) of the Energy Policy Act of 1992 (25 U.S.C. 3502(b)(7)) is amended by striking "\$20,000,000 for each of fiscal years 2006
through 2016" and inserting "\$30,000,000 for each of fiscal years 2020 through 2024".

17 Subtitle D—Smart Communities 18 Infrastructure

19 PART 1—SMART COMMUNITIES

20 SEC. 34101. 3C ENERGY PROGRAM.

(a) ESTABLISHMENT.—The Secretary of Energy
shall establish a program to be known as the Cities, Counties, and Communities Energy Program (or the 3C Energy
Program) to provide technical assistance and competitively
awarded grants to local governments, public housing au-

thorities, nonprofit organizations, and other entities the
 Secretary determines to be eligible, to incorporate clean
 energy into community development and revitalization ef forts.

5 (b) BEST PRACTICE MODELS.—The Secretary of En-6 ergy shall—

7 (1) provide a recipient of technical assistance or
8 a grant under the program established under sub9 section (a) with best practice models that are used
10 in jurisdictions of similar size and situation; and

(2) assist such recipient in developing and implementing strategies to achieve its clean energy
technology goals.

(c) AUTHORIZATION OF APPROPRIATIONS.—There
are authorized to be appropriated to carry out this section
\$50,000,000 for each of fiscal years 2020 through 2024.

17 SEC. 34102. FEDERAL TECHNOLOGY ASSISTANCE.

18 (a) SMART CITY OR COMMUNITY ASSISTANCE PILOT19 PROGRAM.—

(1) IN GENERAL.—The Secretary of Energy
shall develop and implement a pilot program under
which the Secretary shall contract with the national
laboratories to provide technical assistance to cities
and communities, to improve the access of such cities and communities to expertise, competencies, and

infrastructure of the national laboratories for the
 purpose of promoting smart city or community tech nologies.

4 (2) PARTNERSHIPS.—In carrying out the pro5 gram under this subsection, the Secretary of Energy
6 shall prioritize assistance for cities and communities
7 that have partnered with small business concerns.

8 (b) TECHNOLOGIST IN RESIDENCE PILOT PRO-9 GRAM.—

10 (1) IN GENERAL.—The Secretary of Energy 11 shall expand the Technologist in Residence pilot pro-12 gram of the Department of Energy to include part-13 nerships between national laboratories and local gov-14 ernments with respect to research and development 15 relating to smart cities and communities.

16 (2) REQUIREMENTS.—For purposes of the part-17 nerships entered into under paragraph (1), tech-18 nologists in residence shall work with an assigned 19 unit of local government to develop an assessment of 20 smart city or community technologies available and 21 appropriate to meet the objectives of the city or 22 community, in consultation with private sector enti-23 ties implementing smart city or community tech-24 nologies.

(c) GUIDANCE.—The Secretary of Energy, in con sultation with the Secretary of Commerce, shall issue
 guidance with respect to—

4 (1) the scope of the programs established and
5 implemented under subsections (a) and (b); and

6 (2) requests for proposals from local govern-7 ments interested in participating in such programs. 8 (d) CONSIDERATIONS.—In establishing and imple-9 menting the programs under subsections (a) and (b), the 10 Secretary of Energy shall seek to address the needs of 11 small- and medium-sized cities.

(e) AUTHORIZATION OF APPROPRIATIONS.—There
are authorized to be appropriated to carry out this section
\$20,000,000 for each of fiscal years 2020 through 2024.
SEC. 34103. TECHNOLOGY DEMONSTRATION GRANT PROGRAM.

(a) IN GENERAL.—The Secretary of Commerce shall
establish a smart city or community regional demonstration grant program under which the Secretary shall conduct demonstration projects focused on advanced smart
city or community technologies and systems in a variety
of communities, including small- and medium-sized cities.
(b) GOALS.—The goals of the program established

24 under subsection (a) are—

25 (1) to demonstrate—

1	(A) potential benefits of concentrated in-
2	vestments in smart city or community tech-
3	nologies relating to public safety that are re-
4	peatable and scalable; and
5	(B) the efficiency, reliability, and resilience
6	of civic infrastructure and services;
7	(2) to facilitate the adoption of advanced smart
8	city or community technologies and systems; and
9	(3) to demonstrate protocols and standards that
10	allow for the measurement and validation of the cost
11	savings and performance improvements associated
12	with the installation and use of smart city or com-
13	munity technologies and practices.
	munity technologies and practices. (c) DEMONSTRATION PROJECTS.—
13	
13 14	(c) Demonstration Projects.—
13 14 15 16	(c) DEMONSTRATION PROJECTS.—(1) ELIGIBILITY.—Subject to paragraph (2), a
13 14 15	 (c) DEMONSTRATION PROJECTS.— (1) ELIGIBILITY.—Subject to paragraph (2), a unit of local government shall be eligible to receive
13 14 15 16 17	 (c) DEMONSTRATION PROJECTS.— (1) ELIGIBILITY.—Subject to paragraph (2), a unit of local government shall be eligible to receive a grant for a demonstration project under this sec-
13 14 15 16 17 18	 (c) DEMONSTRATION PROJECTS.— (1) ELIGIBILITY.—Subject to paragraph (2), a unit of local government shall be eligible to receive a grant for a demonstration project under this section.
 13 14 15 16 17 18 19 	 (c) DEMONSTRATION PROJECTS.— (1) ELIGIBILITY.—Subject to paragraph (2), a unit of local government shall be eligible to receive a grant for a demonstration project under this section. (2) COOPERATION.—To qualify for a dem-
 13 14 15 16 17 18 19 20 	 (c) DEMONSTRATION PROJECTS.— (1) ELIGIBILITY.—Subject to paragraph (2), a unit of local government shall be eligible to receive a grant for a demonstration project under this section. (2) COOPERATION.—To qualify for a demonstration project under this section, a unit of local
 13 14 15 16 17 18 19 20 21 	 (c) DEMONSTRATION PROJECTS.— (1) ELIGIBILITY.—Subject to paragraph (2), a unit of local government shall be eligible to receive a grant for a demonstration project under this section. (2) COOPERATION.—To qualify for a demonstration project under this section, a unit of local government shall agree to follow applicable best

1	implemented smart city or community technologies
2	to ensure that—
3	(A) technologies and interoperability can
4	be assessed;
5	(B) best practices can be shared; and
6	(C) data can be shared in a public, inter-
7	operable, and transparent format.
8	(3) Federal share of cost of technology
9	INVESTMENTS.—The Secretary of Commerce—
10	(A) subject to subparagraph (B), shall pro-
11	vide to a unit of local government selected
12	under this section for the conduct of a dem-
13	onstration project a grant in an amount equal
14	to not more than 50 percent of the total cost
15	of technology investments to incorporate and
16	assess smart city or community technologies in
17	the applicable jurisdiction; but
18	(B) may waive the cost-share requirement
19	of subparagraph (A) as the Secretary deter-
20	mines to be appropriate.
21	(d) REQUIREMENT.—In conducting demonstration
22	projects under this section, the Secretary shall—
23	(1) develop competitive, technology-neutral re-
24	quirements;

(2) seek to leverage ongoing or existing civic in frastructure investments; and

3 (3) take into consideration the non-Federal cost
4 share as a competitive criterion in applicant selec5 tion in order to leverage non-Federal investment.

6 (e) PUBLIC AVAILABILITY OF DATA AND RE7 PORTS.—The Secretary of Commerce shall ensure that re8 ports, public data sets, schematics, diagrams, and other
9 works created using a grant provided under this section
10 are—

11 (1) available on a royalty-free, non-exclusive12 basis; and

13 (2) open to the public to reproduce, publish, or14 otherwise use, without cost.

(f) AUTHORIZATION OF APPROPRIATIONS.—There
are authorized to be appropriated to carry out subsection
(c) \$100,000,000 for each of fiscal years 2020 through
2024.

19 SEC. 34104. SMART CITY OR COMMUNITY.

(a) IN GENERAL.—In this subtitle, the term "smart
city or community" means a community in which innovative, advanced, and trustworthy information and communication technologies and related mechanisms are applied—

25 (1) to improve the quality of life for residents;

1	(2) to increase the efficiency and cost effective-
2	ness of civic operations and services;
3	(3) to promote economic growth; and
4	(4) to create a community that is safer and
5	more secure, sustainable, resilient, livable, and work-
6	able.
7	(b) INCLUSIONS.—The term "smart city or commu-
8	nity" includes a local jurisdiction that—
9	(1) gathers and incorporates data from sys-
10	tems, devices, and sensors embedded in civic systems
11	and infrastructure to improve the effectiveness and
12	efficiency of civic operations and services;
13	(2) aggregates and analyzes gathered data;
14	(3) communicates the analysis and data in a va-
15	riety of formats;
16	(4) makes corresponding improvements to civic
17	systems and services based on gathered data; and
18	(5) integrates measures—
19	(A) to ensure the resilience of civic systems
20	against cybersecurity threats and physical and
21	social vulnerabilities and breaches;
22	(B) to protect the private data of resi-
23	dents; and

(C) to measure the impact of smart city or
 community technologies on the effectiveness and
 efficiency of civic operations and services.
 PART 2-CLEAN CITIES COALITION PROGRAM

5 SEC. 34201. CLEAN CITIES COALITION NETWORK PROGRAM.

6 (a) ESTABLISHMENT.—There is established within
7 the Department of Energy a program to be known as the
8 "Clean Cities Coalition Network".

9 (b) PROJECTS AND ACTIVITIES.—Under the program 10 established in subsection (a), the Secretary and the Clean 11 Cities coalitions shall carry out projects and activities, to 12 improve air quality and reduce petroleum consumption in 13 the transportation sector, that—

- 14 (1) encourage the use of alternative fuel vehi-15 cles and alternative fuels;
- 16 (2) expedite the establishment of regional and
 17 national infrastructure to fuel alternative fuel vehi18 cles;

19 (3) reduce vehicle emissions; and

20 (4) promote fuel efficient technologies and traf-21 fic management practices.

(c) PROGRAM ELEMENTS.—In carrying out the program established in subsection (a) the Secretary shall—
(1) establish criteria for designating partnerships between State and local governments, institu-

1	tions of higher education, and private entities as
2	Clean Cities coalitions under the program;
3	(2) designate partnerships that the Secretary
4	determines meet the criteria established under para-
5	graph (1) as Clean Cities coalitions;
6	(3) make awards to Clean Cities coalitions that
7	provide matching funds—
8	(A) to support project-specific activities of
9	such coalitions; and
10	(B) to promote public education and
11	awareness of alternative fuel vehicles and alter-
12	native fuels;
13	(4) make awards to Clean Cities coalitions for
14	administrative expenses of such coalitions;
15	(5) provide technical assistance and training to
16	Clean Cities coalitions;
17	(6) provide opportunities for communication
18	among Clean Cities coalitions; and
19	(7) maintain, and make available to the public,
20	a centralized database of information included in the
21	reports submitted under subsection (d).
22	(d) ANNUAL REPORT.—Each Clean Cities coalition
23	shall submit an annual report to the Secretary on the ac-
24	tivities and accomplishments of the coalition.
25	(e) DEFINITIONS.—In this section:

1	(1) Alternative fuel.—The term "alter-
2	native fuel" has the meaning given such term in sec-
3	tion 32901 of title 49, United States Code.
4	(2) ALTERNATIVE FUEL VEHICLE.—The term
5	"alternative fuel vehicle" any vehicle that is capable
6	of operating, partially or exclusively, on an alter-
7	native fuel.
8	(3) Secretary.—The term "Secretary" means
9	the Secretary of Energy.
10	(f) Authorization of Appropriations.—There
11	are authorized to be appropriated to carry out this sec-
12	tion—
13	(1) \$50,000,000 for fiscal year 2020;
14	(2) \$55,000,000 for fiscal year 2021;
15	(3) \$60,000,000 for fiscal year 2022;
16	(4) \$65,000,000 for fiscal year 2023; and
17	(5) \$70,000,000 for fiscal year 2024.
18	PART 3-ELECTRIC VEHICLE INFRASTRUCTURE
19	SEC. 34301. STATEMENT OF NATIONAL POLICY.
20	It is the policy of the United States to promote great-
21	er electrification of the transportation sector in order to
22	maintain a transportation sector that can provide for the
23	movement of people, goods, and services and achieve each
24	of the following, which together characterize a transpor-
25	tation system with fewer negative environmental effects:

1	(1) Reduced greenhouse gas emissions.
2	(2) Improved air quality.
3	(3) Greater fuel efficiency.
4	(4) Nationwide deployment of electric vehicles
5	and integration of electric vehicle supply equipment.
6	(5) Maintenance of a competitive domestic man-
7	ufacturing base and skilled workforce to provide
8	electric vehicles and electric vehicle supply equip-
9	ment.
10	SEC. 34302. DEFINITIONS.
11	In this part, the following definitions apply:
12	(1) Electric vehicle supply equipment.—
12 13	(1) ELECTRIC VEHICLE SUPPLY EQUIPMENT.— The term "electric vehicle supply equipment" means
13	The term "electric vehicle supply equipment" means
13 14	The term "electric vehicle supply equipment" means the conductors, including the ungrounded, grounded,
13 14 15	The term "electric vehicle supply equipment" means the conductors, including the ungrounded, grounded, and equipment grounding conductors, the electric ve-
13 14 15 16	The term "electric vehicle supply equipment" means the conductors, including the ungrounded, grounded, and equipment grounding conductors, the electric ve- hicle connectors, attachment plugs, and all other fit-
13 14 15 16 17	The term "electric vehicle supply equipment" means the conductors, including the ungrounded, grounded, and equipment grounding conductors, the electric ve- hicle connectors, attachment plugs, and all other fit- tings, devices, power outlets, or apparatuses installed
13 14 15 16 17 18	The term "electric vehicle supply equipment" means the conductors, including the ungrounded, grounded, and equipment grounding conductors, the electric ve- hicle connectors, attachment plugs, and all other fit- tings, devices, power outlets, or apparatuses installed specifically for the purpose of delivering energy to an

1SEC. 34303. MODEL BUILDING CODE FOR ELECTRIC VEHI-2CLE SUPPLY EQUIPMENT.

3 (a) DEVELOPMENT.—The Secretary shall develop a
4 proposal to establish or update, as appropriate, model
5 building codes for—

6 (1) integrating electric vehicle supply equipment
7 into residential and commercial buildings that in8 clude space for individual vehicle or fleet vehicle
9 parking; and

10 (2) integrating onsite renewable power equip11 ment and electric storage equipment (including elec12 tric vehicle batteries to be used for electric storage)
13 in residential and commercial buildings.

(b) CONSULTATION.—In developing the proposal
under subsection (a), the Secretary shall consult with
stakeholders representing the building construction industry, manufacturers of electric vehicles and electric vehicle
supply equipment, State and local governments, and any
other persons with relevant expertise or interests.

(c) DEADLINE.—Not later than 1 year after the date
of enactment of this Act, the Secretary shall submit the
proposal developed under subsection (a) to the American
Society of Heating, Refrigerating, and Air Conditioning
Engineers and the International Code Council for consideration.

SEC. 34304. UTILITY ELECTRIC VEHICLE CHARGING PRO GRAMS.

3 (a) CONSIDERATION AND DETERMINATION RESPECT4 ING CERTAIN RATEMAKING STANDARDS.—Section 111(d)
5 of the Public Utility Regulatory Policies Act of 1978 (16)
6 U.S.C. 2621(d)) is amended by adding at the end the fol7 lowing:

8 "(20) UTILITY ELECTRIC VEHICLE CHARGING
9 PROGRAMS.—

10 "(A) IN GENERAL.—Each State shall con-11 sider authorizing each electric utility of the 12 State to recover from ratepayers any capital, 13 operating expenditure, or other costs of the 14 electric utility relating to the deployment of 15 electric vehicle supply equipment designed to 16 provide vehicle charging or load management.

17 "(B) DEFINITION.—For purposes of this 18 paragraph, the term 'electric vehicle supply 19 equipment' means the conductors, including the 20 ungrounded, grounded, and equipment ground-21 ing conductors, the electric vehicle connectors, 22 attachment plugs, and all other fittings, devices, 23 power outlets, or apparatuses installed specifi-24 cally for the purpose of delivering energy to an 25 electric vehicle.".

(b) Obligations to Consider and Determine.—

(1) TIME LIMITATIONS.—Section 112(b) of the
 Public Utility Regulatory Policies Act of 1978 (16
 U.S.C. 2622(b)) is amended by adding at the end
 the following:

5 ((7)(A) Not later than 1 year after the enact-6 ment of this paragraph, each State regulatory au-7 thority (with respect to each electric utility for which 8 it has ratemaking authority) and each nonregulated 9 utility shall commence the consideration referred to 10 in section 111, or set a hearing date for consider-11 ation, with respect to the standards established by 12 paragraph (20) of section 111(d).

13 "(B) Not later than 2 years after the date of 14 the enactment of this paragraph, each State regu-15 latory authority (with respect to each electric utility 16 for which it has ratemaking authority), and each 17 nonregulated electric utility, shall complete the con-18 sideration, and shall make the determination, re-19 ferred to in section 111 with respect to each stand-20 ard established by paragraph (20) of section 21 111(d).".

(2) FAILURE TO COMPLY.—Section 112(c) of
the Public Utility Regulatory Policies Act of 1978
(16 U.S.C. 2622(c)) is amended by striking "(19)"
and inserting "(20)".

(3) PRIOR STATE ACTIONS.—Section 112 of the
 Public Utility Regulatory Policies Act of 1978 (16
 U.S.C. 2622) is amended by adding at the end the
 following:

5 "(g) PRIOR STATE ACTIONS.—Subsections (b) and 6 (c) of this section shall not apply to the standard estab-7 lished by paragraph (20) of section 111(d) in the case of 8 any electric utility in a State if, before the enactment of 9 this subsection—

"(1) the State has implemented for such utility
the standard concerned (or a comparable standard);
"(2) the State regulatory authority for such
State or relevant nonregulated electric utility has
conducted a proceeding to consider implementation
of the standard concerned (or a comparable standard) for such utility; or

17 "(3) the State legislature has voted on the im18 plementation of such standard (or a comparable
19 standard) for such utility.".

20 sec. 34305. STATE TRANSPORTATION ELECTRIFICATION21PLANNING GRANTS.

(a) STATE ENERGY CONSERVATION PLANS.—Section
362(d) of the Energy Policy and Conservation Act (42
U.S.C. 6322(d)) is amended—

(1) in paragraph (16), by striking "; and" and
 inserting a semicolon;

3 (2) by redesignating paragraph (17) as para4 graph (18); and

5 (3) by inserting after paragraph (16) the fol-6 lowing:

7 "(17) a State energy transportation plan devel8 oped in accordance with section 367; and".

9 (b) STATE ENERGY TRANSPORTATION PLANS.—Part
10 D of title III of the Energy Policy and Conservation Act
11 (42 U.S.C. 6321 et seq.) is amended by adding at the end
12 the following:

13 "SEC. 367. STATE ENERGY TRANSPORTATION PLANS.

14 "(a) IN GENERAL.—The Secretary may provide fi-15 nancial assistance to a State to develop a State energy 16 transportation plan, for inclusion in a State energy con-17 servation plan under section 362(d), to promote the elec-18 trification of the transportation system, reduced consump-19 tion of fossil fuels, and improved air quality.

20 "(b) CONTENTS.—A State developing a State energy
21 transportation plan under this section shall include in such
22 plan a plan to—

23 "(1) deploy a network of electric vehicle supply
24 equipment to ensure access to electricity for electric
25 vehicles; and

1	"(2) promote modernization of the electric grid
2	to accommodate demand for power to operate elec-
3	tric vehicle supply equipment and to utilize energy
4	storage capacity provided by electric vehicles.
5	"(c) COORDINATION.—In developing a State energy
6	transportation plan under this section, a State shall co-
7	ordinate, as appropriate, with—
8	"(1) State regulatory authorities (as defined in
9	section 3 of the Public Utility Regulatory Policies
10	Act of 1978 (16 U.S.C. 2602));
11	"(2) electric utilities;
12	"(3) regional transmission organizations or
13	independent system operators;
14	"(4) private entities that provide electric vehicle
15	charging services;
16	"(5) State transportation agencies, metropoli-
17	tan planning organizations, and local governments;
18	"(6) electric vehicle manufacturers; and
19	"(7) public and private entities that manage ve-
20	hicle fleets.
21	"(d) TECHNICAL ASSISTANCE.—Upon request of the
22	Governor of a State, the Secretary shall provide informa-
23	tion and technical assistance in the development, imple-
24	mentation, or revision of a State energy transportation
25	plan.

1 "(e) ELECTRIC VEHICLE SUPPLY EQUIPMENT DE-2 FINED.—For purposes of this section, the term 'electric vehicle supply equipment' means the conductors, including 3 4 the ungrounded, grounded, and equipment grounding con-5 ductors, the electric vehicle connectors, attachment plugs, 6 all other fittings, devices, power outlets, and -or 7 apparatuses installed specifically for the purpose of deliv-8 ering energy to an electric vehicle.".

9 SEC. 34306. ELECTRIC VEHICLE SUPPLY EQUIPMENT CO10 ORDINATION.

(a) IN GENERAL.—Not later than 90 days after the
date of enactment of this Act, the Secretary, acting
through the Assistant Secretary of the Office of Electricity
Delivery and Energy Reliability (including the Smart Grid
Task Force), shall convene a group to assess progress in
the development of standards necessary to—

- 17 (1) support the expanded deployment of electric18 vehicle supply equipment;
- 19 (2) develop an electric vehicle charging network
 20 to provide reliable charging for electric vehicles na21 tionwide; and

(3) ensure the development of such network will
not compromise the stability and reliability of the
electric grid.

1 (b) REPORT TO CONGRESS.—Not later than 1 year 2 after the date of enactment of this Act, the Secretary shall provide to the Committee on Energy and Commerce of the 3 House of Representatives and to the Committee on En-4 5 ergy and Natural Resources of the Senate a report containing the results of the assessment carried out under 6 7 subsection (a) and recommendations to overcome any bar-8 riers to standards development or adoption identified by 9 the group convened under such subsection.

10 SEC. 34307. AUTHORIZATION OF APPROPRIATIONS.

(a) STATE ENERGY CONSERVATION PLANS.—Section
365(f) of the Energy Policy and Conservation Act (42
U.S.C. 6325(f)) is amended to read as follows:

14 "(f) AUTHORIZATION OF APPROPRIATIONS.—

15 "(1) STATE ENERGY CONSERVATION PLANS.—
16 For the purpose of carrying out this part, there is
17 authorized to be appropriated \$100,000,000 for each
18 of fiscal years 2020 through 2024.

19 "(2) STATE ENERGY TRANSPORTATION
20 PLANS.—In addition to the amounts authorized
21 under paragraph (1), for the purpose of carrying out
22 section 367, there is authorized to be appropriated
23 \$25,000,000 for each of fiscal years 2020 through
24 2024.".

10

(b) TRANSPORTATION ELECTRIFICATION.—Section
 131 of the Energy Independence and Security Act of 2007
 (42 U.S.C. 17011) is amended—

- 4 (1) in subsection (b)(6), by striking "2008
 5 through 2012" and inserting "2020 through 2024";
 6 and
- 7 (2) in subsection (c)(4), by striking "2008
 8 through 2013" and inserting "2020 through 2024".

TITLE IV—HEALTH CARE INFRASTRUCTURE

11 Subtitle A—Hospital Infrastructure

12 SEC. 41001. HOSPITAL INFRASTRUCTURE.

13 Section 1610(a) of the Public Health Service Act (42
14 U.S.C. 300r(a)) is amended by striking paragraph (3) and
15 inserting the following paragraphs:

16 "(3) PRIORITY.—In awarding grants under this sub17 section, the Secretary shall give priority to applicants
18 whose projects will include, by design, cybersecurity
19 against cyber threats.

20 "(4) American Iron and Steel Products.—

21 "(A) IN GENERAL.—As a condition on receipt
22 of a grant under this section for a project, an entity
23 shall ensure that all of the iron and steel products
24 used in the project are produced in the United
25 States.

1	"(B) Application.—Subparagraph (A) shall
2	be waived in any case or category of cases in which
3	the Secretary finds that—
4	"(i) applying subparagraph (A) would be
5	inconsistent with the public interest;
6	"(ii) iron and steel products are not pro-
7	duced in the United States in sufficient and
8	reasonably available quantities and of a satis-
9	factory quality; or
10	"(iii) inclusion of iron and steel products
11	produced in the United States will increase the
12	cost of the overall project by more than 25 per-
13	cent.
14	"(C) WAIVER.—If the Secretary receives a re-
15	quest for a waiver under this paragraph, the Sec-
16	retary shall make available to the public, on an in-
17	formal basis, a copy of the request and information
18	available to the Secretary concerning the request,
19	and shall allow for informal public input on the re-
20	quest for at least 15 days prior to making a finding
21	based on the request. The Secretary shall make the
22	request and accompanying information available by
23	electronic means, including on the official public
24	internet site of the Department of Health and
25	Human Services.

"(D) INTERNATIONAL AGREEMENTS.—This
 paragraph shall be applied in a manner consistent
 with United States obligations under international
 agreements.

5 "(E) MANAGEMENT AND OVERSIGHT.—The
6 Secretary may retain up to 0.25 percent of the funds
7 appropriated for this section for management and
8 oversight of the requirements of this paragraph.

9 "(F) EFFECTIVE DATE.—This paragraph does 10 not apply with respect to a project if a State agency 11 approves the engineering plans and specifications for 12 the project, in that agency's capacity to approve 13 such plans and specifications prior to a project re-14 questing bids, prior to the date of enactment of this 15 paragraph.

16 "(5) AUTHORIZATION OF APPROPRIATIONS.—To
17 carry out this subsection, there is authorized to be appro18 priated \$400,000,000 for each of fiscal years 2020
19 through 2024.".

Subtitle B—Indian Health Program 1 **Health Care Infrastructure** 2

3 SEC. 42001. 21ST CENTURY INDIAN HEALTH PROGRAM HOS-

4 PITALS AND OUTPATIENT HEALTH CARE FA-5 CILITIES.

6 The Indian Health Care Improvement Act is amended by inserting after section 301 of such Act (25 U.S.C. 7 8 1631) the following:

9 "SEC. 301A. ADDITIONAL FUNDING FOR PLANNING, DESIGN, 10 CONSTRUCTION, MODERNIZATION, AND REN-11 **OVATION OF HOSPITALS AND OUTPATIENT** 12

HEALTH CARE FACILITIES.

13 "(a) ADDITIONAL FUNDING.—For the purpose de-14 scribed in subsection (b), in addition to any other funds 15 available for such purpose, there is authorized to be appropriated to the Secretary \$200,000,000 for each of fiscal 16 vears 2020 through 2024. 17

18 "(b) PURPOSE.—The purpose described in this sub-19 section is the planning, design, construction, modernization, and renovation of hospitals and outpatient health 20 21 care facilities that are funded, in whole or part, by the 22 Service through, or provided for in, a contract or compact 23 with the Service under the Indian Self-Determination and 24 Education Assistance Act (25 U.S.C. 5301 et seq.).".

1Subtitle C—Laboratory2Infrastructure

3 SEC. 43001. PILOT PROGRAM TO IMPROVE LABORATORY IN-

4

FRASTRUCTURE.

5 (a) IN GENERAL.—The Secretary of Health and 6 Human Services may award grants to States and political 7 subdivisions of States to support the improvement, renova-8 tion, or modernization of infrastructure at clinical labora-9 tories (as defined in section 353 of the Public Health Serv-10 ice Act (42 U.S.C. 263a)).

(b) AUTHORIZATION OF APPROPRIATIONS.—To carry
out this section, there is authorized to be appropriated
\$100,000,000, to remain available until expended.

Subtitle D—Community-Based Care Infrastructure

16 SEC. 44001. PILOT PROGRAM TO IMPROVE COMMUNITY-

17 BASED CARE INFRASTRUCTURE.

18 (a) IN GENERAL.—The Secretary of Health and 19 Human Services may award grants to qualified teaching health centers (as defined in section 340H of the Public 20 21 Health Service Act (42 U.S.C. 256h)) and behavioral 22 health care centers (as defined by the Secretary, to include 23 both substance abuse and mental health care facilities) to 24 support the improvement, renovation, or modernization of 25 infrastructure at such centers.

1 (b) AUTHORIZATION OF APPROPRIATIONS.—To carry 2 out this section, there is authorized to be appropriated 3 \$100,000,000, to remain available until expended. Subtitle E—Public Health 4 Infrastructure 5 6 45001. PUBLIC HEALTH DATA SYSTEM SEC. TRANS-7 FORMATION. (a) IN GENERAL.— 8 9 (1) EXPANDING CDC CAPABILITIES.—The Sec-10 retary of Health and Human Services (in this sec-11 tion referred to as the "Secretary") shall expand, 12 enhance, and improve the capabilities of the Centers 13 for Disease Control and Prevention relating to infor-14 mation technology, data, and data systems for pre-15 paring, detecting, and responding effectively to public health events. Activities that may be carried out 16 17 under the preceding sentence include— 18 (A) optimizing public health data collec-19 tion, transmission, exchange, analysis, and vis-20 ualization; 21 (B) exchanging data among the Centers 22 for Disease Control and Prevention, State, 23 local, Tribal, and territorial public health de-24 partments, and health care providers;

(C) enhancing the interoperability of public
 health data systems including with health infor mation technology; and

4 (D) expanding or enhancing the workforce
5 and training of public health data systems and
6 informatics personnel.

(2) CONSULTATION.—In carrying out para-7 8 graph (1), the Secretary shall consult with appro-9 priate State and local health departments, health 10 professionals, health information technology experts, 11 and other appropriate public or private entities as 12 determined appropriate by the Secretary to develop 13 technical and reporting standards (including stand-14 ards for interoperability) for public health data sys-15 tems.

16 (b) GRANTS.—The Secretary, acting through the Di-17 rector of the Centers for Disease Control and Prevention, shall award grants to State, local, Tribal, and territorial 18 19 public health departments that meet such criteria as the 20Director determines appropriate, for public health data 21 systems, including systems for electronic case reporting. 22 (c) REPORT TO CONGRESS.—The Secretary shall 23 submit a report to the Committee on Energy and Com-24 merce of the House of Representatives and the Committee

on Health, Education, Labor, and Pensions of the Senate
 on the activities carried out under this section.

3 (d) AUTHORIZATION OF APPROPRIATIONS.—To carry
4 out this section, there is authorized to be appropriated
5 \$100,000,000 for each of fiscal years 2020 through 2024.
6 SEC. 45002. CORE PUBLIC HEALTH INFRASTRUCTURE FOR
7 STATE, LOCAL, AND TRIBAL HEALTH DEPART8 MENTS.

9 (a) PROGRAM.—The Secretary of Health and Human 10 Services acting through the Director of the Centers for 11 Disease Control and Prevention (in this section referred 12 to as the "Secretary") shall establish a core public health 13 infrastructure program consisting of awarding grants 14 under subsection (b).

15 (b) GRANTS.—

- 16 (1) AWARD.—For the purpose of addressing
 17 core public health infrastructure needs, the Sec18 retary—
- 19 (A) shall award a grant to each State20 health department; and

(B) may award grants on a competitive
basis to State, local, or Tribal health departments.

1	(2) Allocation.—Of the total amount of
2	funds awarded as grants under this subsection for a
3	fiscal year—
4	(A) not less than 50 percent shall be for
5	grants to State health departments under para-
6	graph $(1)(A)$; and
7	(B) not less than 30 percent shall be for
8	grants to State, local, or Tribal health depart-
9	ments under paragraph (1)(B).
10	(c) USE OF FUNDS.—The Secretary may award a
11	grant to an entity under subsection $(b)(1)$ only if the enti-
12	ty agrees to use the grant to address core public health
13	infrastructure needs, including those identified in the ac-
14	creditation process under subsection (g).
15	(d) Formula Grants to State Health Depart-
16	MENTS.—In making grants under subsection (b)(1)(A),
17	the Secretary shall award funds to each State health de-
18	partment in accordance with—
19	(1) a formula based on population size; burden
20	of preventable disease and disability; and core public
21	health infrastructure gaps, including those identified
22	in the accreditation process under subsection (g);
23	and
24	(2) application requirements established by the
25	Secretary, including a requirement that the State

submit a plan that demonstrates to the satisfaction
 of the Secretary that the State's health department
 will—

4 (A) address its highest priority core public
5 health infrastructure needs; and

6 (B) as appropriate, allocate funds to local
7 health departments within the State.

8 (e) COMPETITIVE GRANTS TO STATE, LOCAL, AND 9 TRIBAL HEALTH DEPARTMENTS.—In making grants 10 under subsection (b)(1)(B), the Secretary shall give pri-11 ority to applicants demonstrating core public health infra-12 structure needs identified in the accreditation process 13 under subsection (g).

(f) MAINTENANCE OF EFFORT.—The Secretary may
award a grant to an entity under subsection (b) only if
the entity demonstrates to the satisfaction of the Secretary that—

(1) funds received through the grant will be expended only to supplement, and not supplant, nonFederal and Federal funds otherwise available to the
entity for the purpose of addressing core public
health infrastructure needs; and

(2) with respect to activities for which the grant
is awarded, the entity will maintain expenditures of
non-Federal amounts for such activities at a level

1	not less than the level of such expenditures main-
2	tained by the entity for the fiscal year preceding the
3	fiscal year for which the entity receives the grant.
4	(g) Establishment of a Public Health Accred-
5	ITATION PROGRAM.—
6	(1) IN GENERAL.—The Secretary shall—
7	(A) develop, and periodically review and
8	update, standards for voluntary accreditation of
9	State, local, and Tribal health departments and
10	public health laboratories for the purpose of ad-
11	vancing the quality and performance of such de-
12	partments and laboratories; and
13	(B) implement a program to accredit such
14	health departments and laboratories in accord-
15	ance with such standards.
16	(2) COOPERATIVE AGREEMENT.—The Secretary
17	may enter into a cooperative agreement with a pri-
18	vate nonprofit entity to carry out paragraph (1).
19	(h) REPORT.—The Secretary shall submit to the Con-
20	gress an annual report on progress being made to accredit
21	entities under subsection (g), including—
22	(1) a strategy, including goals and objectives,
23	for accrediting entities under subsection (g) and
24	achieving the purpose described in subsection
25	(g)(1)(A); and

(2) identification of gaps in research related to
 core public health infrastructure and recommenda tions of priority areas for such research.

4 (i) DEFINITION.—In this section, the term "core pub-5 lie health infrastructure" includes workforce capacity and 6 competency; laboratory systems; health information, 7 health information systems, and health information anal-8 ysis; communications; financing; other relevant compo-9 nents of organizational capacity; and other related activi-10 ties.

(j) AUTHORIZATION OF APPROPRIATIONS.—To carry
out this section, there are authorized to be appropriated—

13 (1) for fiscal year 2020, \$300,000,000;

14 (2) for fiscal year 2021, \$350,000,000;

- 15 (3) for fiscal year 2022, \$400,000,000;
- 16 (4) for fiscal year 2023, \$450,000,000; and

17 (5) for fiscal year 2024, \$500,000,000.

18 SEC. 45003. CORE PUBLIC HEALTH INFRASTRUCTURE AND

19 **ACTIVITIES FOR CDC.**

(a) IN GENERAL.—The Secretary acting through the
Director of the Centers for Disease Control and Prevention (in this section referred to as the "Secretary") shall
expand and improve the core public health infrastructure
and activities of the Centers for Disease Control and Pre-

vention to address unmet and emerging public health
 needs.

3 (b) REPORT.—The Secretary shall submit to the Con4 gress an annual report on the activities funded through
5 this section.

6 (c) DEFINITION.—In this section, the term "core
7 public health infrastructure" has the meaning given to
8 such term in section 45002.

9 (d) AUTHORIZATION OF APPROPRIATIONS.—To carry
10 out this section, there is authorized to be appropriated
11 \$350,000,000 for each of fiscal years 2020 through 2024.

12 TITLE V—BROWNFIELDS 13 REDEVELOPMENT

14 SEC. 50001. AUTHORIZATION OF APPROPRIATIONS.

15 Section 104(k)(13) of the Comprehensive Environ16 mental Response, Compensation, and Liability Act of
17 1980 (42 U.S.C. 9604(k)(13)) is amended to read as fol18 lows:

19 "(13) AUTHORIZATION OF APPROPRIATIONS.—
20 There is authorized to be appropriated to carry out
21 this subsection—

2020

22	"(A) \$350,000,000 for fiscal year 2020;
23	"(B) \$400,000,000 for fiscal year 2021;
24	"(C) \$450,000,000 for fiscal year 2022;

~ ~

"(D) \$500,000,000 for fiscal year 2023; 1 2 and 3 "(E) \$550,000,000 for fiscal year 2024.". 4 SEC. 50002. STATE RESPONSE PROGRAMS. 5 Section 128(a)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act of 6 1980 (42 U.S.C. 9628(a)(3)) is amended to read as fol-7 8 lows: 9 "(3) FUNDING.—There is authorized to be ap-10 propriated to carry out this subsection— "(A) \$70,000,000 for fiscal year 2020; 11 "(B) \$80,000,000 for fiscal year 2021; 12 13 "(C) \$90,000,000 for fiscal year 2022; "(D) \$100,000,000 for fiscal year 2023; 14 15 and "(E) \$110,000,000 for fiscal year 2024.". 16