

[STAFF WORKING DRAFT]

MARCH 20, 2010

111TH CONGRESS
2^D SESSION

S. _____

To provide financial incentives and a regulatory framework to facilitate the development and early deployment of carbon capture and sequestration technologies, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH _____, 2010

Mr. ROCKEFELLER (for himself and Mr. VOINOVICH) introduced the following bill; which was read twice and referred to the Committee on

A BILL

To provide financial incentives and a regulatory framework to facilitate the development and early deployment of carbon capture and sequestration technologies, 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.**

2 This Act may be cited as the “Carbon Capture and
3 Sequestration Deployment Act of 2010”.

4 **SEC. 2. TABLE OF CONTENTS.**

5 The table of contents for this Act is as follows:

TITLE I—CARBON CAPTURE AND SEQUESTRATION INNOVATION
PROGRAM

Sec. 101. Partnerships for carbon capture and sequestration.
Sec. 102. Annual Department of Energy assessment.

TITLE II—CARBON CAPTURE AND SEQUESTRATION PROJECTS

SUBTITLE A—CARBON CAPTURE AND SEQUESTRATION EARLY
AND EFFECTIVE DEPLOYMENT FUNDING ACT OF 2010

Sec. 201. Short title.
Sec. 202. Definitions.
Sec. 203. Special funding program for development and deployment of carbon
capture, sequestration, and conversion technologies.
Sec. 204. Carbon capture and sequestration program partnership council.
Sec. 205. Functions and administration of the special funding program.
Sec. 206. Assessments and funding.
Sec. 207. ERCOT.
Sec. 208. Determination of fossil fuel-based electricity deliveries.
Sec. 209. Compliance with assessments.
Sec. 210. Midcourse review.
Sec. 211. Recovery of costs.

SUBTITLE B—AMENDMENT OF INTERNAL REVENUE CODE

Sec. 251. Carbon sequestration tax credit amendments.
Sec. 252. Federal financial incentives for additional 10 GW of capacity.

TITLE III—62-GW EARLY ADOPTER PROGRAM

Sec. 301. Tax credit for early adoption of CCS.

TITLE IV—CCS TECHNOLOGY STANDARD FOR POWERPLANTS

Sec. 401. CCS standards for coal-fueled power plants.

TITLE V—TRANSPORT AND STORAGE OF CAPTURED CARBON
DIOXIDE

[TEXT TO BE SUPPLIED]

1 **TITLE I—CARBON CAPTURE AND**
2 **SEQUESTRATION INNOVA-**
3 **TION PROGRAM**

4 **SEC. 101. PARTNERSHIPS FOR CARBON CAPTURE AND SE-**
5 **QUESTRATION.**

6 (a) ESTABLISHMENT OF PROGRAM.—

7 (1) IN GENERAL.—Within 12 months after the
8 date of enactment of this Act, the Secretary of En-
9 ergy shall establish a cooperative industry-govern-
10 ment research and development program to dem-
11 onstrate novel and innovative technologies—

12 (A) to capture or prevent carbon dioxide
13 emissions from carbon-based fuels;

14 (B) to enable the beneficial use of carbon
15 dioxide; or

16 (C) to enable the long-term storage of car-
17 bon dioxide.

18 (2) PARTICIPATION OF NATIONAL LABORA-
19 TORIES AND UNIVERSITIES.—The program shall in-
20 clude the participation of the National Energy Tech-
21 nology Laboratory and may include the participation
22 of other National Laboratories, universities, and
23 other appropriate entities.

24 (b) COST SHARING.—For purposes of developing and
25 demonstrating the technologies or approaches referred to

1 in subsection (a), the Secretary shall provide at least 80
2 percent of the cost of the development projects and the
3 industry participant shall provide not more than 20 per-
4 cent of such cost.

5 (c) AUTHORIZATION OF APPROPRIATIONS.—There
6 are authorized to be appropriated to the Secretary to carry
7 out this section—

8 (1) \$20,000,000 for each of the fiscal years
9 2011 through 2015;

10 (2) \$100,000,000 for each of the fiscal years
11 2016 through 2020; and

12 (3) \$50,000,000 for each of the fiscal years
13 2021 through 2025.

14 **SEC. 102. ANNUAL DEPARTMENT OF ENERGY ASSESSMENT.**

15 (a) IN GENERAL.—

16 (1) DEPARTMENT OF ENERGY REPORT.—With-
17 in 1 year after the date of enactment of this Act and
18 annually thereafter until technology preventing the
19 emission of, capturing, transporting, permanently
20 storing or sequestering, and putting to beneficial use
21 carbon dioxide is available to the commercial mar-
22 ketplace, the Department of Energy shall conduct an
23 assessment in accordance with subsection (b) of this
24 section of the existing Federal programs supporting
25 such technology and submit a report to the Sec-

1 retary of Energy and the appropriate authorizing
2 and appropriating committees of the Congress on
3 the results of the assessment.

4 (2) GOVERNMENT ACCOUNTABILITY OFFICE RE-
5 VIEW.—Within 1 year after the first Department of
6 Energy report is submitted to the Secretary and to
7 the appropriate authorizing and appropriating com-
8 mittees of the Congress and subsequently as needed
9 until technology preventing the emission of, cap-
10 turing, transporting, permanently storing or seques-
11 tering, and putting to beneficial use carbon dioxide
12 is available to the commercial marketplace, the
13 Comptroller General shall conduct a review of the
14 report described in paragraph (1) in accordance with
15 subsection (c) of this section.

16 (b) DEPARTMENT OF ENERGY REPORT REQUIRE-
17 MENTS.—The Department of Energy shall include in the
18 report—

19 (1) a detailed description of the existing pro-
20 grams, including each major program area, that con-
21 ducts or supports research, development, demonstra-
22 tion, and deployment of technology—

23 (A) to prevent the emission of carbon diox-
24 ide or capture of carbon dioxide from sources,
25 including fossil fuel-based power plants;

1 (B) to transport carbon dioxide;

2 (C) to store or sequester captured carbon
3 dioxide permanently; or

4 (D) to put captured carbon dioxide to ben-
5 efcial use;

6 (2) an assessment, based upon government lab-
7 oratory research experience, available industry re-
8 search experience, and such other data and informa-
9 tion as the Department of Energy deems useful and
10 appropriate, to determine whether each major pro-
11 gram area and principal projects within these areas
12 are designed to, and will, advance fundamental
13 knowledge or achieve significant technical advance-
14 ment and materially improve the technology base to
15 effectively address the prevention of carbon dioxide
16 emissions or capture of carbon dioxide or the trans-
17 port, permanent storage, or beneficial use of cap-
18 tured carbon dioxide; and

19 (3) an assessment of the Department of Ener-
20 gy's estimated time frame and costs necessary to
21 reasonably conclude that technology will be available
22 to the commercial marketplace.

23 (c) GOVERNMENT ACCOUNTABILITY OFFICE REVIEW
24 REQUIREMENTS.—The Government Accountability Office
25 shall include in its review—

1 (1) an analysis of the Department of Energy's
2 estimated time frames and costs as reported pursu-
3 ant to subsection (b)(3) of this section;

4 (2) any recommendations that the Comptroller
5 General deems appropriate and useful to improve
6 the likelihood of achieving technological advance-
7 ments to mitigate carbon dioxide emissions or to ex-
8 pedite the availability of carbon capture and seques-
9 tration technology for the commercial marketplace;
10 and

11 (3) any other analyses the Government Ac-
12 countability Office deems necessary or appropriate.

13 (d) BUDGET REQUEST REPORT.—Beginning with the
14 budget request for fiscal year 2012 and for each suc-
15 ceeding fiscal year through 2026, the President shall in-
16 clude in his budget request for the Department of Ener-
17 gy's Fossil Energy Program a report that—

18 (1) assesses the Department's progress in im-
19 plementing the recommendations of the Government
20 Accountability Office and compares the estimated
21 costs of completing implementation of these rec-
22 ommendations to the requested budget levels; and

23 (2) an assessment of the progress made in the
24 preceding fiscal year toward achieving the goals of
25 the program for which funding is requested.

1 **TITLE II—CARBON CAPTURE**
2 **AND SEQUESTRATION**
3 **PROJECTS**

4 **SUBTITLE A—CARBON CAPTURE**
5 **AND SEQUESTRATION EARLY**
6 **AND EFFECTIVE DEPLOY-**
7 **MENT FUNDING ACT OF 2010**

8 **SECTION 201. SHORT TITLE.**

9 (a) **SHORT TITLE.**—This subtitle may be cited as the
10 “Carbon Capture and Sequestration Early and Effective
11 Deployment Fund Act of 2010” or the “CC SEED FUND
12 ACT”.

13 **SEC. 202. DEFINITIONS.**

14 (a) **IN GENERAL.**—In this subtitle:

15 (1) **CARBON CAPTURE.**—The term “carbon cap-
16 ture” has the meaning given the term in section
17 963(a) of the Energy Policy Act of 2005 (42 U.S.C.
18 16293(a)).

19 (2) **CARBON SEQUESTRATION.**—The term “car-
20 bon sequestration” has the meaning given the term
21 in section 963(a) of the Energy Policy Act of 2005
22 (42 U.S.C. 16293(a)).

23 (3) **COUNCIL.**—The term “Council” means the
24 Carbon Capture and Sequestration Program Part-
25 nership Council established under section 204(a).

1 (4) ELECTRIC CONSUMER.—The term “electric
2 consumer” has the meaning given that term in sec-
3 tion 3 of the Public Utility Regulatory Policies Act
4 of 1978 (16 U.S.C. 2602).

5 (5) ELECTRIC UTILITY.—The term “electric
6 utility” has the meaning given the term in section
7 3 of the Federal Power Act (16 U.S.C. 796).

8 (6) FOSSIL FUEL-BASED ELECTRICITY.—The
9 term “fossil fuel-based electricity” means electricity
10 that is produced, in whole or in part, from the com-
11 bustion of a fossil fuel.

12 (7) FOSSIL FUEL.—The term “fossil fuel”
13 means coal, petroleum, or natural gas, or any deriv-
14 ative of coal, petroleum, or natural gas.

15 (8) INSTITUTION OF HIGHER EDUCATION.—The
16 term “institution of higher education” has the
17 meaning given the term in section 101(a) of the
18 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

19 (9) NATIONAL LABORATORY.—The term “Na-
20 tional Laboratory” has the meaning given the term
21 in section 2 of the Energy Policy Act of 2005 (42
22 U.S.C. 15801).

23 (10) PROGRAM DIRECTOR.—The term “Pro-
24 gram Director” means the Program Director of the

1 special funding program appointed under section
2 204(g).

3 (11) SECRETARY.—The term “Secretary”
4 means the Secretary of Energy.

5 (12) SPECIAL FUNDING PROGRAM.—The term
6 “special funding program” means the special fund-
7 ing program for development and deployment of car-
8 bon capture, sequestration, and conversion tech-
9 nologies established in accordance with section 203.

10 (13) STATE REGULATORY AUTHORITY.—The
11 term “State regulatory authority” has the meaning
12 given the term in section 3 of the Public Utility Reg-
13 ulatory Policies Act of 1978 (16 U.S.C. 2602).

14 (14) UNITED STATES.—The term “United
15 States” means the States of the United States, the
16 District of Columbia, and the territories and posses-
17 sions of the United States, including the territorial
18 waters of the United States and the exclusive eco-
19 nomic zone.

20 (b) MODIFICATION OF DEFINITIONS INCORPORATED
21 BY REFERENCE.—Section 963 of the Energy Policy Act
22 of 2005 (42 U.S.C. 16293) is amended—

23 (1) by redesignating subsections (a) through (d)
24 as subsections (b) through (e), respectively;

1 (2) by inserting before subsection (b) (as so re-
2 designated) the following:

3 “(a) DEFINITIONS.—In this section:

4 “(1) CARBON CAPTURE.—The term ‘carbon
5 capture’ means the process of capturing anthropo-
6 genic carbon dioxide from a stationary source or the
7 ambient air.

8 “(2) CARBON SEQUESTRATION.—The term ‘car-
9 bon sequestration’ means the act of storing carbon
10 dioxide through physical, chemical, or biological
11 processes that can prevent the carbon dioxide from
12 reaching the atmosphere.”;

13 (3) in subsection (b) (as so redesignated), by
14 striking “In General” and inserting “Program”; and

15 (4) in subsection (c) (as so redesignated), by
16 striking “subsection (a)” and inserting “subsection
17 (b)”.

18 **SEC. 203. SPECIAL FUNDING PROGRAM FOR DEVELOPMENT**
19 **AND DEPLOYMENT OF CARBON CAPTURE, SE-**
20 **QUESTRATION, AND CONVERSION TECH-**
21 **NOLOGIES.**

22 (a) VIEWS OF STATE REGULATORY AUTHORITIES.—

23 (1) IN GENERAL.—Not later than 180 days
24 after the date of enactment of this Act, a State reg-
25 ulatory authority shall notify the Secretary in writ-

1 ing of the views of the State regulatory authority on
2 the creation of the special funding program.

3 (2) NOTICE OF TIMELINE.—As soon as prac-
4 ticable, but no later than 30 days after the date of
5 enactment of this Act, the Secretary shall notify
6 each State regulatory authority of the need to sub-
7 mit its views to the Secretary under paragraph (1)
8 within 180 days after the date of enactment of this
9 Act.

10 (b) ESTABLISHMENT.—The Secretary shall establish
11 the special funding program only if—

12 (1) the State regulatory authorities of at least
13 30 States (treating the District of Columbia and
14 Puerto Rico as States for such purpose) submit writ-
15 ten notices of approval by the deadline established
16 under subsection (a); and

17 (2) it can be established within 1 year after the
18 date of enactment of this Act.

19 (c) TERMINATION.—

20 (1) ASSESSMENTS.—The authority of the Sec-
21 retary to collect assessments shall expire on the date
22 that is 10 years after the date of the establishment
23 of the special funding program.

24 (2) AWARDS.—The authority of the Secretary
25 to make funding awards under this subtitle shall ex-

1 pire on the date that is 15 years after the date of
2 the establishment of the special funding program.

3 (d) ANNUAL REPORT.—Not later than February 1 of
4 each year, the Secretary shall publish and submit to Con-
5 gress and each State regulatory authority a report that—

6 (1) includes an identification and description of
7 all programs and projects undertaken under the spe-
8 cial funding program during the previous fiscal year;
9 and

10 (2) describes the allocation or planned alloca-
11 tion of resources of the special funding program for
12 each program and project in the current and subse-
13 quent fiscal year.

14 **SEC. 204. CARBON CAPTURE AND SEQUESTRATION PRO-**
15 **GRAM PARTNERSHIP COUNCIL.**

16 (a) ESTABLISHMENT.—The Secretary shall establish,
17 and appoint the members of, a Carbon Capture and Se-
18 questration Program Partnership Council to carry out du-
19 ties described in subsection (f).

20 (b) VOTING MEMBERSHIP.—

21 (1) TOTAL VOTING MEMBERSHIP; QUORUM.—
22 The Council shall be composed of not more than 15
23 voting members. A majority of the voting members
24 shall constitute a quorum for official action of the
25 Council.

1 (2) MINIMUM REPRESENTATION.—The voting
2 membership of the Council shall include at least 1
3 representative of each of the following:

4 (A) Investor-owned utilities.

5 (B) Utilities owned by a State or unit of
6 local government.

7 (C) Rural electric cooperatives.

8 (D) Fossil fuel producers.

9 (E) Nonprofit organizations.

10 (F) Independent generators or wholesale
11 power providers.

12 (G) Consumer groups.

13 (H) Employee organizations (as defined in
14 section 3(4) of the Employee Retirement In-
15 come Security Act of 1974 (29 U.S.C.
16 1002(4))).

17 (3) REPRESENTATION OF ELECTRIC UTILI-
18 TIES.—A majority of the voting membership of the
19 Council shall be representatives of electric utilities
20 selling fossil fuel-based electricity to electric con-
21 sumers subject to assessment under section 206.

22 (4) NOMINATIONS.—The Secretary shall ap-
23 point the Council members representing entities de-
24 scribed in subparagraphs (A), (B), and (C) of para-
25 graph (2) from slates of nominees, containing at

1 least 2 candidates for each vacancy to be filled, sub-
2 mitted by—

3 (A) the Edison Electric Institute, on behalf
4 of investor-owned utilities;

5 (B) the American Public Power Associa-
6 tion, on behalf of utilities owned by a State
7 agency or unit of local government; and

8 (C) the National Rural Electric Coopera-
9 tive Association, on behalf of rural electric co-
10 operatives.

11 (5) RECUSAL.—A voting member of the Council
12 may not participate in the review or approval of an
13 application from an entity with which the voting
14 member is affiliated.

15 (c) NONVOTING MEMBERSHIP.—The Secretary shall
16 appoint to the Council as nonvoting members—

17 (1) the Under Secretary for Science;

18 (2) the Assistant Secretary with responsibility
19 for research and development of fossil fuels;

20 (3) 2 representatives of State regulatory au-
21 thorities, chosen to represent different transmission
22 interconnections, from a slate of nominees, con-
23 taining at least 2 candidates for each vacancy to be
24 filled, submitted by the National Association of
25 State Regulatory Utility Commissioners; and

1 (4) such additional officers and employees of
2 the Federal Government as the Secretary determines
3 are necessary for the Council to carry out the func-
4 tions of the Council effectively.

5 (d) TERMS.—

6 (1) IN GENERAL.—Except as otherwise pro-
7 vided in this paragraph, a voting member of the
8 Council—

9 (A) shall serve a term of 4 years; and

10 (B) may serve not more than 2 full con-
11 secutive terms.

12 (2) UNEXPIRED TERMS.—A member who fills
13 the unexpired term of a voting member may serve
14 not more than a total of 8 consecutive years.

15 (3) REAPPOINTMENT OF FORMER VOTING MEM-
16 BERS.—A former voting member of the Council may
17 be reappointed if the member has not been a mem-
18 ber of the Council for a period of at least 2 years.

19 (4) INITIAL APPOINTMENT.—The Secretary
20 shall make initial appointments of voting members
21 of the Council for terms of 1, 2, 3, and 4 years,
22 staggered to provide for the selection of 3 members
23 each year, as determined by the Secretary.

24 (5) VACANCIES.—A vacancy on the Council—

1 (A) shall not affect the powers of the
2 Council; and

3 (B) shall be filled in the same manner as
4 the original appointment was made.

5 (e) PERSONNEL MATTERS.—

6 (1) COMPENSATION.—

7 (A) NON-FEDERAL EMPLOYEES.—A mem-
8 ber of the Council who is not an officer or em-
9 ployee of the Federal Government may be com-
10 pensated at a rate equal to the daily equivalent
11 of the annual rate of basic pay prescribed for
12 level IV of the Executive Schedule under section
13 5315 of title 5, United States Code, for each
14 day (including travel time) during which the
15 member is engaged in the performance of the
16 duties of the Council.

17 (B) FEDERAL EMPLOYEES.—A member of
18 the Council who is an officer or employee of the
19 Federal Government shall serve without com-
20 pensation in addition to the compensation re-
21 ceived for the services of the member as an offi-
22 cer or employee of the Federal Government.

23 (2) TRAVEL EXPENSES.—A member of the
24 Council shall be allowed travel expenses, including
25 per diem in lieu of subsistence, at rates authorized

1 for an employee of an agency under subchapter I of
2 chapter 57 of title 5, United States Code, while
3 away from the home or regular place of business of
4 the member in the performance of the duties of the
5 Council.

6 (3) CHAIR.—The Secretary shall appoint a vot-
7 ing member of the Council to serve as the Chair of
8 the Council.

9 (4) EXECUTIVE SECRETARY.—The Secretary
10 shall appoint an Executive Secretary in the Depart-
11 ment of Energy to assist the Council in the conduct
12 of the duties of the Council.

13 (f) COUNCIL DUTIES.—The Council shall—

14 (1) advise, assist, consult with, and make rec-
15 ommendations to the Secretary and the Program Di-
16 rector on matters related to the activities carried out
17 by and through the special funding program;

18 (2)(A) review applications for grants, contracts,
19 cooperative agreements, and other transactions for
20 which the approval of the Council is required under
21 section 5(b); and

22 (B) vote on whether to recommend for approval
23 the applications;

24 (3) review and make recommendations on any
25 intellectual property policies required to advance the

1 purposes of the special funding program and to en-
2 courage individual ingenuity and innovation, and en-
3 sure that inventors, whose contributions to the devel-
4 opment of clean coal technology are not subject to
5 the protections afforded by section 14 of the Steven-
6 son-Wydler Technology Innovation Act of 1980 (15
7 U.S.C. 3710c), are provided protection of their intel-
8 lectual property rights that is not less than that af-
9 farded to inventors provided protection under section
10 14 of that Act;

11 (4) collect information on projects being carried
12 out by other programs to advance the development
13 and deployment of technologies for carbon capture,
14 sequestration, and conversion;

15 (5)(A) approve an annual overall plan for the
16 special funding program and projects to be carried
17 out under the special funding program; and

18 (B) submit to Congress, the Secretary, and
19 each State regulatory authority a copy of the plan;
20 and

21 (6) meet at least 3 times each year, at the call
22 of the Chair or on the request of the Program Direc-
23 tor, at a location subject to the approval of the Pro-
24 gram Director.

1 (g) PROGRAM DIRECTOR AND SENIOR PROGRAM
2 MANAGERS.—

3 (1) APPOINTMENT.—The Secretary, in con-
4 sultation with the Council, shall appoint a Program
5 Director for the special funding program, who shall
6 have a background and qualifications especially ap-
7 propriate to managing the special funding program.

8 (2) COMPENSATION.—The rate of pay for the
9 Program Director shall not exceed the rate payable
10 for level V of the Executive Schedule under section
11 5316 of title 5, United States Code.

12 (3) SENIOR PROGRAM MANAGERS.—

13 (A) IN GENERAL.—Notwithstanding sec-
14 tions 3304 and 3309 through 3318 of title 5,
15 United States Code, the Program Director may
16 recruit and directly appoint up to 5 highly
17 qualified scientists, engineers, or critical tech-
18 nical personnel into the competitive service, to
19 help manage the special funding program.

20 (B) EXCEPTION.—The authority granted
21 by subparagraph (A) shall not apply to posi-
22 tions in the excepted service or the Senior Exec-
23 utive Service.

24 (C) REQUIREMENTS.—In exercising the
25 authority granted by subparagraph (A), the

1 Secretary shall ensure that any action taken by
2 the Secretary—

3 (i) is consistent with the merit prin-
4 ciples of section 2301 of title 5, United
5 States Code; and

6 (ii) complies with the public notice re-
7 quirements of section 3327 of title 5,
8 United States Code.

9 (h) TECHNICAL ADVISORY COMMITTEE.—

10 (1) IN GENERAL.—The Secretary, acting
11 through the Program Director, and in consultation
12 with the Council, shall appoint a technical advisory
13 committee to provide independent scientific review of
14 applications for grants, contracts, cooperative agree-
15 ments, and other transactions to be funded under
16 the special funding program.

17 (2) MEMBERSHIP.—The technical advisory
18 committee shall be composed of not less than 7
19 members appointed from among—

20 (A) institutions of higher education;

21 (B) National Laboratories;

22 (C) independent research institutions;

23 (D) the National Energy Technology Lab-
24 oratory; and

25 (E) other qualified institutions;

1 (3) CONFLICTS OF INTEREST.—Members of the
2 technical advisory committee may not be affiliated
3 with, or employed by, any organization represented
4 by voting members of the Council.

5 (4) DUTIES.—

6 (A) PEER REVIEW.—The technical advi-
7 sory committee shall provide independent as-
8 sessments and technical evaluations, and make
9 recommendations to the Council, on all applica-
10 tions for funding under the special funding pro-
11 gram.

12 (B) PROGRAMMATIC ASSESSMENTS.—

13 (i) IN GENERAL.—The technical advi-
14 sory committee may provide an inde-
15 pendent review of other technical matters
16 relating to the special funding program, in-
17 cluding—

18 (I) approaches to prioritizing
19 technologies;

20 (II) appropriateness of engineer-
21 ing techniques;

22 (III) monitoring and verification
23 technologies for sequestration;

24 (IV) geological site selection; and

1 (V) cost control measures for
2 projects.

3 (ii) RECOMMENDATIONS.—The tech-
4 nical advisory committee may make rec-
5 ommendations to the Secretary concerning
6 the types of investments, scientific re-
7 search, or engineering practices that would
8 best further the purposes of this subtitle.

9 (C) PUBLIC AVAILABILITY.—Except for in-
10 formation exempt from disclosure under para-
11 graphs (4) and (6) of section 552(b) of title 5,
12 United States Code, all reports and evaluations
13 made by the technical advisory committee shall
14 be made available to the public when the re-
15 ports and evaluations are received by the Coun-
16 cil.

17 (5) TRAVEL EXPENSES.—A member of the
18 technical advisory committee shall be allowed travel
19 expenses, including per diem in lieu of subsistence,
20 at rates authorized for an employee of an agency
21 under subchapter I of chapter 57 of title 5, United
22 States Code, while away from the home or regular
23 place of business of the member in the performance
24 of the duties of the committee.

1 **SEC. 205. FUNCTIONS AND ADMINISTRATION OF THE SPE-**
2 **CIAL FUNDING PROGRAM.**

3 (a) IN GENERAL.—The special funding program shall
4 support projects to accelerate the commercial availability
5 of carbon capture and sequestration technologies and
6 methods, including technologies that capture and seques-
7 ter, or capture and convert, carbon dioxide. In making
8 awards under the program, the Program Director shall
9 give priority to projects that include cost sharing.

10 (b) PROJECT APPROVAL.—The Program Director
11 shall make awards for grants, contracts, cooperative
12 agreements, and other transactions under this subtitleAct
13 only if the award is—

14 (1) recommended to the Council by the tech-
15 nical advisory committee established under section
16 204(h), after scientific and technical peer review;

17 (2) approved by the voting members of the
18 Council;

19 (3) for a project to be carried out in the United
20 States; and

21 (4) prioritized in regions of the country with a
22 high probability of carbon capture and sequestration
23 development and deployment potential.

24 (c) SPECIFIC PURPOSES.—In making awards, the
25 Program Director shall ensure, to the maximum extent
26 practicable, that grants, contracts, cooperative agree-

1 ments, and other transactions funded under the special
2 funding program support commercial-scale demonstra-
3 tions of carbon capture and sequestration technology
4 projects that—

5 (1) are capable of advancing the technologies to
6 commercial readiness;

7 (2) encompass each of the different coal types
8 and other fossil fuel varieties;

9 (3) are geographically diverse;

10 (4) involve diverse sequestration media;

11 (5) employ capture and sequestration, or cap-
12 ture and conversion, technologies potentially suitable
13 for new or retrofit applications; and

14 (6) result in a capture of emissions from the
15 generation of at least 10 gigawatts.

16 (d) ELIGIBLE ENTITIES.—Entities eligible for fund-
17 ing under this subtitle include—

18 (1) electric utilities selling fossil fuel-based elec-
19 tricity to electric consumers;

20 (2) institutions of higher education;

21 (3) National Laboratories;

22 (4) Federal research agencies;

23 (5) State research agencies;

24 (6) nonprofit organizations; and

1 (7) consortiums of 2 or more entities described
2 in paragraphs (1) through (6).

3 (e) PURCHASE OF CARBON DIOXIDE.—A grant, con-
4 tract, cooperative agreement, or other transaction under
5 this subtitle may be used—

6 (1) in the case of established projects that are
7 sequestering carbon dioxide emissions, to purchase
8 carbon dioxide if necessary to conduct tests of car-
9 bon sequestration sites; or

10 (2) for other purposes consistent with this sub-
11 title.

12 (f) ORGANIZATION OF FUNDING INTO TRANCHES.—

13 (1) IN GENERAL.—The Program Director, with
14 the approval of the Council, may divide available
15 funds into a series of tranches, each supporting the
16 deployment of a specified quantity of electric gener-
17 ating capacity using carbon capture, sequestration,
18 or conversion technologies.

19 (2) FORM OF FUNDING.—If the Program Direc-
20 tor and the Council agree to distribute funds by
21 tranche under this subsection, the Program Director
22 shall distribute funds—

23 (A) in the form of a payment per ton of
24 carbon captured and sequestered or converted
25 by the project;

1 (B) based on a sliding scale that provides
2 higher payments per ton for projects achieving
3 higher levels of capture and sequestration or
4 capture and conversion;

5 (C) taking in account the cost of electricity
6 used per ton captured;

7 (D) in a manner that provides for decreas-
8 ing payments per ton of carbon dioxide for suc-
9 cessive tranches; and

10 (E) taking into account the reasonable in-
11 cremental capital and operating costs associated
12 with implementation of the carbon capture and
13 sequestration or carbon capture and conversion
14 technologies.

15 (g) WAGE RATE ASSURANCES.—

16 (1) IN GENERAL.—The Program Director shall
17 require recipients of awards under this subtitle to
18 provide assurances that all laborers and mechanics
19 employed by contractors and subcontractors in the
20 construction, repair, or alteration of new or existing
21 facilities performed in order to carry out a develop-
22 ment or deployment activity authorized under this
23 subtitle shall be paid wages at rates not less than
24 those prevailing on similar construction in the local-
25 ity, as determined by the Secretary of Labor in ac-

1 cordance with subchapter IV of chapter 31 of title
2 40, United States Code.

3 (2) AUTHORITY AND FUNCTIONS.—With re-
4 spect to the labor standards in this subsection, the
5 Secretary of Labor shall have the authority and
6 functions set forth in Reorganization Plan Num-
7 bered 14 of 1950 (15 Fed. Reg. 3176; 5 U.S.C. Ap-
8 pendix) and section 3145 of title 40, United States
9 Code.

10 (h) RELATION TO EXISTING AUTHORITIES.—
11 Projects funded under this subtitle to inject carbon dioxide
12 into geological formations shall be carried out in accord-
13 ance with this subtitle and section 963 of the Energy Pol-
14 icy Act of 2005 (42 U.S.C. 16293) and related provisions
15 of that Act.

16 (i) RESTRICTIONS ON FUNDING.—

17 (1) NO SMALL-SCALE PROJECTS.—A pilot-scale
18 project, or similar small-scale project, under 100
19 megawatts shall not be eligible for support under the
20 special funding program.

21 (2) MID-SCALE PROJECTS.—Mid-scale projects,
22 of not less than 100 megawatts and not more than
23 300 megawatts, shall be eligible for up to 20 percent
24 of the total funds awarded.

1 (3) DEDICATION OF FUNDS.—Except as pro-
2 vided in subsection (j), the special funding program
3 shall use all funds derived from assessments under
4 section 6 to fund grants, contracts, cooperative
5 agreements, and other transactions under this sub-
6 title.

7 (j) ADMINISTRATIVE EXPENSES.—Not more than 5
8 percent of the funds collected for any fiscal year under
9 section 6 may be used for the administrative expenses of
10 carrying out the special funding program.

11 **SEC. 206. ASSESSMENTS AND FUNDING.**

12 (a) AMOUNT.—

13 (1) IN GENERAL.—For each fiscal year fol-
14 lowing the establishment of the special funding pro-
15 gram, the Secretary shall collect an assessment on
16 electric utilities for all fossil fuel-based electricity
17 sold to electric consumers, as determined under sec-
18 tion 208.

19 (2) FUEL TYPE RATE.—The assessments de-
20 scribed in paragraph (1) shall—

21 (A) reflect the relative carbon dioxide emis-
22 sion rates of different fossil fuel-based elec-
23 tricity; and

24 (B) initially shall be not less than the fol-
25 lowing amounts for coal, natural gas, and oil:

Fuel type rate of assessment per kilowatt hour

Coal	\$0.00145
Natural Gas	\$0.00074
Oil	\$0.00108

1 (3) ADJUSTMENTS.—The Secretary may adjust
2 the amount of assessments on fossil fuel-based elec-
3 tricity to reflect changes in the expected quantities
4 of the electricity from different fuel types so that the
5 assessments generate not less than \$2,000,000,000
6 and not more than \$2,100,000,000 for each fiscal
7 year.

8 (4) RESIDENTIAL EXEMPTION.—Nothing in
9 this subtitle may be construed to authorize the Sec-
10 retary to collect an assessment under paragraph (1)
11 from individual consumers with respect to electricity
12 used for their residences.

13 (b) TREATMENT OF ASSESSMENTS.—Notwith-
14 standing section 3302 of title 31, United States Code, all
15 amounts collected by the Secretary under this section
16 shall—

17 (1) be credited as offsetting collections to carry
18 out activities authorized under section 205;

19 (2) be available for expenditure only to pay the
20 costs of carrying out the activities authorized under
21 section 205;

22 (3) be available only to the extent provided for
23 in advance in an appropriations Act; and

1 (4) remain available until expended.

2 (c) FEE TITLE.—The Secretary may vest fee title or
3 other property interests acquired under projects conducted
4 under this subtitle in any entity, including the United
5 States.

6 (d) DATA PROTECTION.—For a period not exceeding
7 5 years after completion of the operations phase of a
8 grant, contract, cooperative agreement, or other trans-
9 action under this subtitle the Secretary may provide ap-
10 propriate protections (including exemptions from sub-
11 chapter II of chapter 5 of title 5, United States Code)
12 against the dissemination of information that—

13 (1) results from demonstration activities carried
14 out under this subtitle; and

15 (2) would be a trade secret or commercial or fi-
16 nancial information that is privileged or confidential
17 if the information had been obtained from and first
18 produced by a non-Federal party participating in the
19 project.

20 (e) REVERSION OF UNUSED FUNDS.—Effective be-
21 ginning on the date that is 7 years after the establishment
22 of the special funding program, if the Secretary, acting
23 through the Program Director, does not obligate at least
24 75 percent of the available proceeds of the assessed fees
25 for any fiscal year due to an absence of qualified projects

1 or similar circumstances, the Secretary, without further
2 appropriation, shall reimburse the remaining unobligated
3 balance of the fees, less administrative and other expenses
4 authorized by this subtitle, to the electric utilities on which
5 the fees were assessed, in proportion to the collected as-
6 sessments of the electric utilities.

7 **SEC. 207. ERCOT.**

8 (a) DEFINITIONS.—In this section:

9 (1) ERCOT.—The term “ERCOT” means the
10 Electric Reliability Council of Texas.

11 (2) LOAD-SERVING ENTITY.—The term “load-
12 serving entity” has the meaning given the term in
13 ERCOT Protocols in effect on the date of enactment
14 of this Act.

15 (3) QUALIFIED SCHEDULING ENTITY.—The
16 term “qualified scheduling entity” has the meaning
17 given the term in ERCOT Protocols in effect on the
18 date of enactment of this Act.

19 (4) RENEWABLE ENERGY CREDIT.—The term
20 “renewable energy credit” has the meaning given the
21 term by the Public Utility Commission of Texas pur-
22 suant to section 39.904(b) of the State of Texas’s
23 Public Utility Regulatory Act of 1999 as in effect on
24 the date of enactment of this Act.

1 (b) ASSESSMENT, COLLECTION, AND REMIT-
2 TANCE.—

3 (1) IN GENERAL.—Notwithstanding any other
4 provision of this subtitle, within ERCOT, the assess-
5 ment required under section 206 shall be—

6 (A) levied directly on qualified scheduling
7 entities, or successor entities of the qualified
8 scheduling entities;

9 (B) charged in an amount that is con-
10 sistent with other charges imposed on qualified
11 scheduling entities as a fee on energy used by
12 the load-serving entities; and

13 (C) collected and remitted by ERCOT to
14 the Secretary in the amounts and in the same
15 manner as described in section 205.

16 (2) REQUIREMENTS.—The assessment amounts
17 referred to in paragraph (1) shall—

18 (A) be determined by the quantity and
19 types of fossil fuel-based electricity delivered di-
20 rectly to all electric consumers in the prior cal-
21 endar year beginning with the year ending im-
22 mediately prior to the beginning of the period
23 described in section 203(e); and

24 (B) take into account the number of re-
25 newable energy credits retired by the load-serv-

1 ing entities represented by a qualified sched-
2 uling entity within the prior calendar year.

3 (c) ADMINISTRATION EXPENSES.—Not more than 1
4 percent of the funds collected for any fiscal year by
5 ERCOT under this section may be used for the adminis-
6 trative expenses incurred in the determination, collection,
7 and remittance of the assessments to the Secretary.

8 (d) AUDIT.—ERCOT shall submit to the Secretary
9 a copy of the annual audit of ERCOT relating to the ad-
10 ministration of this section.

11 **SEC. 208. DETERMINATION OF FOSSIL FUEL-BASED ELEC-**
12 **TRICITY DELIVERIES.**

13 (a) FINDINGS.—Congress finds that—

14 (1) the assessments under section 206 are to be
15 collected based on the quantity of fossil fuel-based
16 electricity sold by each electric utility to electric con-
17 sumers;

18 (2) because many electric utilities purchase all
19 or part of the electricity needed by the electric con-
20 sumers of the utilities from other entities, it may not
21 be practicable to determine the precise fuel mix for
22 the power sold by each individual electric utility; and

23 (3) it may be necessary to use average data,
24 often on a regional basis with reference to Regional
25 Transmission Organization or North American Elec-

1 tric Reliability Corporation regions, to make the de-
2 terminations necessary for making the assessments.

3 (b) PROPOSED REGULATION.—

4 (1) IN GENERAL.—The Secretary, in consulta-
5 tion with the Energy Information Administration,
6 shall issue for notice and comment a proposed regu-
7 lation to determine the level and type of fossil fuel-
8 based electricity delivered to electric consumers by
9 each electric utility in the United States during the
10 most recent calendar year or other period deter-
11 mined by the Secretary to be most appropriate.

12 (2) BALANCING.—The proposed regulation shall
13 balance the need to be efficient, reasonably precise
14 and timely, taking into account the nature and cost
15 of data currently available and the nature of mar-
16 kets and regulations in effect in various regions of
17 the United States.

18 (3) VARYING METHODOLOGIES.—The Secretary
19 may apply different methodologies in different re-
20 gions of the United States if appropriate to obtain
21 the best balance of factors described in paragraph
22 (2).

23 (c) FINAL REGULATION.—

24 (1) IN GENERAL.—Not later than 180 days
25 after the date of enactment of this Act, and after

1 opportunity for comment, the Secretary shall pro-
2 mulgate a final regulation under this section for de-
3 termining the level and type of fossil fuel-based elec-
4 tricity delivered to electric consumers by each elec-
5 tric utility in the United States during the appro-
6 priate period, as determined by the Secretary.

7 (2) NEW DATA SOURCES.—In promulgating the
8 final regulation, the Secretary may—

9 (A) consider opportunities and costs to de-
10 velop new data sources in the future; and

11 (B) issue recommendations for the Energy
12 Information Administration or other agencies to
13 collect the data.

14 (3) UPDATES.—After notice and opportunity
15 for comment, the Secretary may, by regulation, up-
16 date and modify the methodology for making deter-
17 minations under this section.

18 (d) ANNUAL DETERMINATIONS.—

19 (1) IN GENERAL.—In accordance with the final
20 regulation promulgated under subsection (c), the
21 Secretary shall—

22 (A) make annual determinations of the
23 quantities and types for each electric utility;
24 and

1 (B) publish the determinations in the Fed-
2 eral Register.

3 (2) USE.—Determinations described in para-
4 graph (1) shall be used—

5 (A) to conduct the referendum under sec-
6 tion 203(a); and

7 (B) by the Secretary in applying any as-
8 sessment under this subtitle.

9 (e) REHEARING AND JUDICIAL REVIEW.—

10 (1) IN GENERAL.—The owner or operator of
11 any electric utility that believes that the Secretary
12 has misapplied the methodology in the final regula-
13 tion in determining the quantity and types of fossil
14 fuel-based electricity delivered by the electric utility
15 may seek a rehearing of the determination not later
16 than 30 days after publication of the determination
17 in the Federal Register.

18 (2) DEADLINE.—Not later than 30 days after
19 a rehearing petition is formally requested, the Sec-
20 retary shall rule on the rehearing petition.

21 (3) JUDICIAL REVIEW.—A determination of the
22 Secretary under paragraph (2) shall be final and
23 subject to judicial review in the United States Court
24 of Appeals for the District of Columbia Circuit.

1 **SEC. 209. COMPLIANCE WITH ASSESSMENTS.**

2 (a) IN GENERAL.—The Secretary may bring an ac-
3 tion in the appropriate court of the United States to com-
4 pel compliance with an assessment levied by the Secretary
5 under this subtitle.

6 (b) PAYMENT.—A successful action for compliance
7 under this section may require payment by the defendant
8 of the costs incurred by the Secretary in bringing the ac-
9 tion.

10 **SEC. 210. MIDCOURSE REVIEW.**

11 Not later than 5 years after the establishment of the
12 special funding program, the Comptroller General of the
13 United States shall submit to Congress a report that—

14 (1) evaluates the activities of the special fund-
15 ing program, including—

16 (A) project selection and methods of dis-
17 bursement of assessed fees;

18 (B) impacts on the prospects for commer-
19 cialization of carbon capture and sequestration
20 technologies; and

21 (C) the extent to which assessed fees sup-
22 port the qualified projects received by the Sec-
23 retary; and

24 (2) makes such recommendations as the Comp-
25 troller General of the United States considers to be
26 appropriate in each of those areas.

1 **SEC. 211. RECOVERY OF COSTS.**

2 (a) IN GENERAL.—An electric utility, the trans-
3 mission, delivery, or sales of electric energy of which are
4 subject to any form of rate regulation, may not be denied
5 an opportunity to recover the full amount of the prudently
6 incurred costs associated with complying with this subtitle,
7 consistent with applicable State or Federal law.

8 (b) RATEPAYER REBATES.—Regulatory authorities
9 that approve cost recovery pursuant to subsection (a) may
10 order rebates to ratepayers to the extent that electric utili-
11 ties selling fossil fuel-based electricity to electric con-
12 sumers are reimbursed undedicated or unassigned bal-
13 ances in accordance with section 206(c).

14 **SUBTITLE B—AMENDMENT OF**
15 **INTERNAL REVENUE CODE**

16 **SEC. 251. CARBON SEQUESTRATION TAX CREDIT AMEND-**
17 **MENTS.**

18 (a) IN GENERAL.—Section 45Q of the Internal Rev-
19 enue Code of 1986 is amended—

20 (1) by striking the words “by the taxpayer”
21 each place they appear in subsection (a);

22 (2) by striking “would otherwise” in subsection
23 (b)(1)(A) and inserting “would, but for the capture
24 and use or sequestration,”;

1 (3) by striking paragraph (1) of subsection (c)
2 and redesignating paragraphs (2) and (3) as para-
3 graphs (1) and (2), respectively;

4 (4) by striking paragraph (5) of subsection (d)
5 and inserting the following:

6 “(5) CREDIT ATTRIBUTABLE TO TAXPAYER.—
7 Any credit under this section shall be attributable to
8 the person that disposes of, or uses as a tertiary
9 injectant, the qualified carbon dioxide, except to the
10 extent provided in regulations prescribed by the Sec-
11 retary.”;

12 (5) by adding at the end of subsection (d) the
13 following:

14 “(8) PLACED IN SERVICE.—Carbon capture
15 equipment is placed in service on the date qualified
16 carbon dioxide is first captured at a qualified facility
17 and—

18 “(A) injected in secure geologic storage, or

19 “(B) used as a tertiary injectant in a
20 qualified enhanced hydrocarbon recovery
21 project.”; and

22 (6) by striking subsection (e) and inserting the
23 following:

24 “(e) APPLICATION OF SECTION.—The credit under
25 this section shall apply with respect to qualified carbon

1 dioxide captured at a qualified facility at which carbon
2 capture equipment is placed in service prior to January
3 1, 2017. The taxpayer may claim the credit for a 10-year
4 period commencing with the date the carbon capture
5 equipment is placed in service.”.

6 (b) EFFECTIVE DATE.—The amendments made by
7 subsection (a) shall apply to carbon dioxide captured after
8 the date of enactment of this Act.

9 **SEC. 252. FEDERAL FINANCIAL INCENTIVES FOR ADDI-**
10 **TIONAL 10 GW OF CAPACITY.**

11 (a) ADDITIONAL AUTHORIZATION.—Section 1704 of
12 the Energy Policy Act of 2005 (42 U.S.C. 16514) is
13 amended—

14 (1) by adding the following at the end of sub-
15 section (a): “In addition to other amounts made
16 available under this section, there are authorized
17 \$20,000,000,000 to be used only for guarantees
18 under this title for—

19 “(1) the construction of new commercial scale
20 electric generation units, or industrial facility units,
21 that are eligible units utilizing carbon capture and
22 sequestration technology;

23 “(2) the retrofit of existing commercial scale
24 electric generation units, or industrial facility units,

1 that are eligible units providing for carbon capture
2 and sequestration; and

3 “(3) the construction of carbon dioxide trans-
4 mission pipelines to transport carbon dioxide to se-
5 questration sites or to sites where such carbon diox-
6 ide will be used for hydrocarbon recovery.”; and

7 (2) by adding at the end thereof the following:

8 “(c) DEFINITIONS.—In this section:

9 “(1) COMMERCIAL SCALE.—The term ‘commer-
10 cial scale’ means, with respect to an electric genera-
11 tion unit, that the unit is designed to generate and
12 sell electric power directly to consumers, or for re-
13 sale, with a carbon dioxide capture system having a
14 useful life of at least 15 years.

15 “(2) PERMANENT GEOLOGIC STORAGE SITE.—
16 The term ‘permanent geologic storage site’ means a
17 site that the Secretary determines is capable of stor-
18 ing carbon dioxide in saline or other deep geologic
19 storage structures.

20 “(3) ELIGIBLE UNIT.—The term ‘eligible unit’
21 means an electric generation unit or industrial facil-
22 ity unit located in the United States that—

23 “(A) uses coal or petroleum coke for at
24 least 75 percent of the fuel used by the unit;

1 “(B) uses carbon capture technology to
2 treat at least 25 percent of the carbon dioxide
3 emissions of the unit and captures at least 50
4 percent of the carbon dioxide emissions from
5 the treated emissions;

6 “(C) transports such captured carbon diox-
7 ide to a permanent geologic storage site in the
8 United States or to a site for use for hydro-
9 carbon recovery;

10 “(D) provides for the permanent storage of
11 such carbon dioxide in such site; and

12 “(E) has been approved by the Secretary
13 as eligible under this subsection.

14 “(d) ELIGIBLE UNITS.—

15 “(1) CERTIFICATION.—No unit shall be an eli-
16 gible unit under subsection (c) unless the Secretary
17 has certified such unit as meeting the requirements
18 of such subsection (c) pursuant to a certification
19 process established by the Secretary by rule.

20 “(2) LIMITATION.—The Secretary may certify
21 eligible units under this subsection which total in the
22 aggregate no more than 10 gigawatts of treated gen-
23 erating capacity, of which not more than the equiva-
24 lent of 5 gigawatts of capacity may be for industrial
25 units. For purposes of determining equivalency

1 under this subsection, an industrial unit with uncon-
2 trolled carbon dioxide emissions equal to the uncon-
3 trolled carbon dioxide emissions of a 500 megawatt
4 electric generation unit shall be treated as having in-
5 stalled capacity equivalent to such 500 megawatt
6 unit.”.

7 (b) TAX CREDITS.—

8 (1) IN GENERAL.—Subpart E of part IV of
9 subchapter A of chapter 1 of the Internal Revenue
10 Code of 1986 is amended by adding at the end
11 thereof the following:

12 **“SEC. 48D. PIONEER CCS FACILITIES.**

13 “(a) ADDITIONAL QUALIFYING ADVANCED COAL
14 PROJECT CREDIT.—For purposes of section 46, in the
15 case of each project which has been approved by the Sec-
16 retary of Energy as an eligible unit under section 1704
17 of the Energy Policy Act of 2005 (as amended by section
18 252 of the Carbon Capture and Sequestration Deployment
19 Act of 2010), the qualifying advanced coal project credit
20 for any taxable year shall also include an additional
21 amount equal to 30 percent of the incremental cost for
22 carbon capture and sequestration systems, determined as
23 follows:

24 “(1) For an eligible unit that is a new electric
25 generation unit, the incremental costs shall be the

1 amount by which the costs incurred by the taxpayer
2 for the unit exceed the costs of construction of a
3 comparable supercritical pulverized coal unit without
4 carbon capture and sequestration technology.

5 “(2) For an eligible unit that is a new indus-
6 trial unit, the incremental costs shall be the amount
7 by which the costs incurred by the taxpayer for the
8 unit exceed the costs of construction of a comparable
9 industrial unit without carbon capture and seques-
10 tration.

11 “(3) For an eligible unit that retrofits a carbon
12 capture and sequestration system on an existing
13 generation or industrial unit, the incremental cost
14 shall be the construction costs incurred by the tax-
15 payer for the carbon capture and sequestration sys-
16 tem.

17 “(b) DEFINITIONS.—For purposes of this section, the
18 terms ‘commercial scale’ and ‘eligible unit’ have meanings
19 given those terms by section 1704 of the Energy Policy
20 Act of 2005 (as amended by section 252 of the Carbon
21 Capture and Sequestration Deployment Act of 2010).

22 “(c) ELECTION.—No costs for which a project that
23 has been awarded funds under the Carbon Capture and
24 Sequestration Early and Effective Deployment Fund Act
25 of 2010, or for which a credit has been provided under

1 section 48A or section 48B, shall be eligible for a credit
2 under this section.”.

3 (2) CLERICAL AMENDMENT.—The table of con-
4 tents for such subpart E is amended by adding at
5 the end thereof the following:

“48D. Pioneer CCS facilities.”.

6 (3) EFFECTIVE DATE.—The amendments made
7 by this subsection shall apply with respect to—

8 (A) new facilities placed in service after
9 December 31, 2010, and before January 1,
10 2025; and

11 (B) the retrofit of existing facilities that
12 commence operation with such retrofit after De-
13 cember 31, 2010, and before January 1, 2025.

14 **TITLE III—62-GW EARLY**
15 **ADOPTER PROGRAM**

16 **SEC. 301. TAX CREDIT FOR EARLY ADOPTION OF CCS.**

17 Subpart D of part IV of subchapter A of chapter 1
18 of the Internal Revenue Code of 1986 is amended by add-
19 ing at the end thereof the following:

20 **“SEC. 45R. CREDIT FOR EARLY ADOPTION OF CCS.**

21 “(a) EARLY ADOPTION CREDIT.—For purposes of
22 section 38, the carbon dioxide sequestration credit for any
23 taxable year shall be the amount set forth in subsection
24 (b), in the case of certified new or retrofit electric utility
25 units or certified new or retrofit industrial units in pro-

1 viding for carbon capture and sequestration in secure geo-
2 logic storage, adjusted as provided in subsection (c).

3 “(b) DETERMINATION OF AMOUNT.—

4 “(1) 65 PERCENT CAPTURE RATE.—The
5 amount of the credit under subsection (a) for a cer-
6 tified new or retrofit electric utility unit or a cer-
7 tified new or retrofit industrial unit that is placed in
8 service before January 1, 2025, and that provides
9 for the capture and sequestration of at least 65 per-
10 cent of carbon dioxide emissions, shall be \$67 per
11 ton of carbon dioxide captured and sequestered, in-
12 creased as provided in paragraph (2).

13 “(2) HIGHER CAPTURE RATE.—The amount of
14 such credit shall be increased by \$1.15 per ton for
15 each percent of additional carbon dioxide emissions
16 captured and sequestered above such 65 percent
17 capture rate, up to a maximum credit of \$96 per ton
18 for a capture and sequestration rate of 90 percent
19 or more.

20 “(c) ADJUSTMENT FOR LATER COMMENCEMENT.—

21 The amount of the credit determined under subsection (b)
22 shall be reduced by \$1 per ton of carbon dioxide for each
23 year after the calendar year 2024 in which the carbon cap-
24 ture and sequestration equipment is placed in service.

1 “(d) PLACED IN SERVICE.—For purposes of this sec-
2 tion, the term ‘placed in service’ with respect to a certified
3 new or retrofit electric utility unit or a certified new or
4 retrofit industrial unit is the date on which such unit first
5 captures and sequesters carbon dioxide in secure geologic
6 storage.

7 “(e) CERTIFICATION OF 62 GW.—No credit shall be
8 allowed under this section unless the electric utility unit
9 or industrial unit with respect to which a credit is applied
10 has been certified by the Secretary. Upon application of
11 any taxpayer for certification under this section, the Sec-
12 retary shall certify the unit in accordance with the certifi-
13 cation program under subsection (g).

14 “(f) LIMITATION.—The Secretary shall certify eligi-
15 ble new or retrofit units under this subsection which total
16 in the aggregate no more than 62 gigawatts of treated
17 generating capacity, of which not more than the equivalent
18 of 5 gigawatts of capacity may be for industrial units. For
19 purposes of determining gigawatt equivalency under this
20 subsection, 6 million metric tonnes per year of captured
21 and sequestered carbon dioxide emissions from industrial
22 units shall be treated as having the capacity equivalent
23 of 1 gigawatt of treated generating capacity.

24 “(g) CERTIFICATION PROGRAM.—

1 “(1) The Secretary shall establish a program
2 for the certification of new or retrofit electric units
3 and new or retrofit industrial units utilizing carbon
4 capture and sequestration technology eligible to
5 apply for a credit under this section. A facility shall
6 be certified only if the owner or operator of the
7 unit—

8 “(A) specifies the capacity of the unit sub-
9 ject to carbon capture and sequestration, and

10 “(B) commits to place the unit, or equip-
11 ment in the case of a retrofit, in service within
12 5 years after the date of the certification and
13 to comply with such interim development mile-
14 stones (including the issuance of all necessary
15 Federal, State, and local permits) as the Sec-
16 retary shall, by rule, prescribe.

17 “(2) Failure to comply with the 5-year date set
18 forth in this subsection or with any significant mile-
19 stone or other requirement established by the Sec-
20 retary under paragraph (1) shall result in the termi-
21 nation of the certification. The 5-year date shall be
22 extended by the period of any delay caused by chal-
23 lenges or litigation related to permits required for
24 the facility. No unit for which a certification has

1 been terminated shall be eligible for a new certifi-
2 cation under this section.

3 “(h) APPLICATION OF SECTION.—The credit under
4 this section shall apply to carbon dioxide captured and se-
5 questered in secure geologic storage from a certified new
6 or retrofit electric utility unit or from a certified new or
7 retrofit industrial unit. The taxpayer may claim the credit
8 for a 10-year period commencing on the date the unit is
9 placed in service.

10 “(i) OTHER CREDITS.—Carbon dioxide from equip-
11 ment for which carbon dioxide storage credit has been al-
12 lowed under section 45Q or an investment credit has been
13 allowed under section 48D shall not be eligible for a credit
14 under this section.

15 “(j) DEFINITIONS.—In this section:

16 “(1) RETROFIT.—The term ‘retrofit’ means the
17 application of carbon capture and sequestration
18 technology to an existing unit.

19 (2) INDUSTRIAL UNIT.—The term ‘industrial
20 unit’ means a unit that—

21 “(A) is not a qualifying electric generating
22 unit;

23 “(B) uses coal or petroleum coke for at
24 least 75 percent of the fuel used by the unit;
25 and

1 “(C) absent carbon capture and sequestra-
2 tion, would emit greater than 500,000 tons per
3 year of carbon dioxide.

4 “(3) TREATED GENERATING CAPACITY.—The
5 term ‘treated generating capacity’ means the portion
6 of the total generating capacity of an electric gener-
7 ating unit (or, in the case of an industrial unit, an
8 equivalent capacity) for which the flue gas or fuel
9 gas is treated by carbon capture and sequestration
10 technology.”.

11 **TITLE IV—CCS TECHNOLOGY**
12 **STANDARD FOR POWERPLANTS**

13 **SEC. 401. CCS STANDARDS FOR COAL-FUELED POWER**
14 **PLANTS.**

15 (a) IN GENERAL.—Title I of the Clean Air Act (42
16 U.S.C. 7401 et seq.) is amended by after section 111 the
17 following:

18 **“SEC. 111A. CCS STANDARDS FOR NEW COAL-FIRED POWER**
19 **PLANTS.**

20 “(a) DEFINITIONS.—In this section:

21 “(1) COVERED UNITS.—The term ‘covered unit’
22 means an electric utility generating unit that derives
23 50 percent of its annual heat input from coal, petro-
24 leum coke, or any combination of these fuels.

1 “(2) INITIALLY PERMITTED.—The term ‘ini-
2 tially permitted’ means, with respect to an electric
3 utility generating unit, that the owner or operator of
4 a unit has received a preconstruction approval or
5 permit under this Act, for the covered unit as a new
6 (not a modified) source, but administrative review or
7 appeal of such approval or permit has not been ex-
8 hausted. A subsequent modification of any such ap-
9 proval or permit, ongoing administrative or court re-
10 view, appeals, or challenges, or the existence or toll-
11 ing of any time to pursue further review, appeals, or
12 challenges shall not affect the date on which a unit
13 is considered to be initially permitted.

14 “(3) TREATED GENERATING CAPACITY.—The
15 term ‘treated generating capacity’ means the portion
16 of the total generating capacity of an electric gener-
17 ating unit (or, in the case of an industrial unit, an
18 equivalent capacity) for which the flue gas or fuel
19 gas is treated by carbon capture and sequestration
20 technology.”.

21 “(b) STANDARDS.—

22 “(1) EMISSION LIMIT.—A covered unit that is
23 initially permitted on or after the date of the enact-
24 ment of the Carbon Capture and Sequestration De-
25 ployment Act of 2010 and before January 1, 2020,

1 shall achieve, by the compliance date set forth in
2 paragraph (2), an emission limit for carbon dioxide
3 that reflects 50 percent reduction from the carbon
4 content of the fuel used by the unit, as measured on
5 an annual basis.

6 “(2) COMPLIANCE.—Compliance with the re-
7 quirement set forth in paragraph (1) shall be re-
8 quired by the earlier of the following:

9 “(A) Four years after the date the Admin-
10 istrator has published a report that there are in
11 commercial operation in the United States elec-
12 tric generating units or other stationary sources
13 equipped with carbon capture and sequestration
14 technology that, in the aggregate—

15 “(i) have a total of at least 10
16 gigawatts of treated generating capacity;
17 and

18 “(ii) include electric generating units
19 with at least 4 gigawatts of treated gener-
20 ating capacity which units are capturing
21 and sequestering in deep geologic saline
22 formations the aggregate at least 24 mil-
23 lion tons of carbon dioxide per year, cal-
24 culated on an aggregate annualized basis;
25 or

1 “(B) the later of—
2 “(i) January 1, 2030; or
3 “(ii) the date by which the assessment
4 under section 102(b) determines that it is
5 reasonable to conclude that technology will
6 be available to the commercial market-
7 place.

8 “(c) REGULATIONS.—Not later than 2 years after the
9 date of enactment of the Carbon Capture and Sequestra-
10 tion Deployment Act of 2010, the Administrator shall pro-
11 mulgate regulations to carry out the requirements of this
12 section.”.

13 (b) COMPLIANCE AND JUDICIAL REVIEW.—Sections
14 114 and 307 of such Act are each amended by striking
15 “section 111” in each place it appears and inserting “sec-
16 tion 111 or section 111A”.

17 **TITLE V—TRANSPORT AND**
18 **STORAGE OF CAPTURED CAR-**
19 **BON DIOXIDE**

20 **[TEXT TO BE SUPPLIED]**

