To authorize the Secretary of Energy to carry out a program to demonstrate the commercial application of integrated systems for long-term geological storage of carbon dioxide, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MARCH 31, 2011

Mr. Bingaman (for himself, Mr. Barrasso, Mr. Rockefeller, and Ms. Murkowski) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To authorize the Secretary of Energy to carry out a program to demonstrate the commercial application of integrated systems for long-term geological storage of carbon dioxide, and for other purposes.

1 Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

2 SECTION 1. SHORT TITLE.

3 This Act may be cited as the “Department of Energy Carbon Capture and Sequestration Program Amendments Act of 2011”.


SEC. 2. LARGE-SCALE CARBON STORAGE PROGRAM.

(a) In General.—Subtitle F of title IX of the Energy Policy Act of 2005 (42 U.S.C. 16291 et seq.) is amended by inserting after section 963 (42 U.S.C. 16293) the following:

"SEC. 963A. LARGE-SCALE CARBON STORAGE PROGRAM.

“(a) Definitions.—In this section:

“(1) Industrial source.—The term ‘industrial source’ means any source of carbon dioxide that is not naturally occurring.

“(2) Large-scale.—The term ‘large-scale’ means the injection of over 1,000,000 tons of carbon dioxide each year from industrial sources into a geological formation.

“(3) Secretary concerned.—The term ‘Secretary concerned’ means—

“(A) the Secretary of Agriculture (acting through the Chief of the Forest Service), with respect to National Forest System land; and

“(B) the Secretary of the Interior, with respect to land managed by the Bureau of Land Management (including land held for the benefit of an Indian tribe).

“(b) Program.—In addition to the research, development, and demonstration program authorized by section 963, the Secretary shall carry out a program to dem-

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onstrate the commercial application of integrated systems
for the capture, injection, monitoring, and long-term geo-

logical storage of carbon dioxide from industrial sources.

“(c) AUTHORIZED ASSISTANCE.—In carrying out the
program, the Secretary may enter into cooperative agree-
ments to provide financial and technical assistance to up
to 10 demonstration projects.

“(d) PROJECT SELECTION.—The Secretary shall
competitively select recipients of cooperative agreements
under this section from among applicants that—

“(1) provide the Secretary with sufficient geo-

tological site information (including hydrogeological
and geophysical information) to establish that the
proposed geological storage unit is capable of long-
term storage of the injected carbon dioxide, includ-
ing—

“(A) the location, extent, and storage ca-
pacity of the geological storage unit at the site
into which the carbon dioxide will be injected;
“(B) the principal potential modes of
geomechanical failure in the geological storage
unit;
“(C) the ability of the geological storage
unit to retain injected carbon dioxide; and
“(D) the measurement, monitoring, and verification requirements necessary to ensure adequate information on the operation of the geological storage unit during and after the injection of carbon dioxide;

“(2) possess the land or interests in land necessary for—

“(A) the injection and storage of the carbon dioxide at the proposed geological storage unit; and

“(B) the closure, monitoring, and long-term stewardship of the geological storage unit;

“(3) possess or have a reasonable expectation of obtaining all necessary permits and authorizations under applicable Federal and State laws (including regulations); and

“(4) agree to comply with each requirement of subsection (e).

“(e) TERMS AND CONDITIONS.—The Secretary shall condition receipt of financial assistance pursuant to a cooperative agreement under this section on the recipient agreeing to—

“(1) comply with all applicable Federal and State laws (including regulations), including a certification by the appropriate regulatory authority
that the project will comply with Federal and State requirements to protect drinking water supplies;

“(2) in the case of industrial sources subject to the Clean Air Act (42 U.S.C. 7401 et seq.), inject only carbon dioxide captured from industrial sources in compliance with that Act;

“(3) comply with all applicable construction and operating requirements for deep injection wells;

“(4) measure, monitor, and test to verify that carbon dioxide injected into the injection zone is not—

“(A) escaping from or migrating beyond the confinement zone; or

“(B) endangering an underground source of drinking water;

“(5) comply with applicable well-plugging, post-injection site care, and site closure requirements, including—

“(A)(i) maintaining financial assurances during the post-injection closure and monitoring phase until a certificate of closure is issued by the Secretary; and

“(ii) promptly undertaking remediation activities for any leak from the geological storage
unit that would endanger public health or safety or natural resources; and

“(B) complying with subsection (f);

“(6) comply with applicable long-term care requirements;

“(7) maintain financial protection in a form and in an amount acceptable to—

“(A) the Secretary;

“(B) the Secretary with jurisdiction over the land; and

“(C) the Administrator of the Environmental Protection Agency; and

“(8) provide the assurances described in section 963(c)(4)(B).

“(f) POST INJECTION CLOSURE AND MONITORING ELEMENTS.—In assessing whether a project complies with site closure requirements under subsection (e)(5), the Secretary, in consultation with the Administrator of the Environmental Protection Agency, shall determine whether the recipient of financial assistance has demonstrated continuous compliance with each of the following over a period of not less than 10 consecutive years after the plume of carbon dioxide has stabilized within the geologic formation that comprises the geologic storage unit following the cessation of injection activities:
“(1) The estimated location and extent of the project footprint (including the detectable plume of carbon dioxide and the area of elevated pressure resulting from the project) has not substantially changed and is contained within the geologic storage unit.

“(2) The injection zone formation pressure has ceased to increase following cessation of carbon dioxide injection into the geologic storage unit.

“(3) There is no leakage of either carbon dioxide or displaced formation fluid from the geologic storage unit that is endangering public health and safety, including underground sources of drinking water and natural resources.

“(4) The injected or displaced formation fluids are not expected to migrate in the future in a manner that encounters a potential leakage pathway.

“(5) The injection wells at the site completed into or through the injection zone or confining zone are plugged and abandoned in accordance with the applicable requirements of Federal or State law governing the wells.

“(g) INDEMNIFICATION AGREEMENTS.—
“(1) Definition of Liability.—In this subsection, the term ‘liability’ means any legal liability for—

“(A) bodily injury, sickness, disease, or death;

“(B) loss of or damage to property, or loss of use of property; or

“(C) injury to or destruction or loss of natural resources, including fish, wildlife, and drinking water supplies.

“(2) Agreements.—Not later than 1 year after the date of the receipt by the Secretary of a completed application for a demonstration project, the Secretary may agree to indemnify and hold harmless the recipient of a cooperative agreement under this section from liability arising out of or resulting from a demonstration project in excess of the amount of liability covered by financial protection maintained by the recipient under subsection (e)(7).

“(3) Exception for Gross Negligence and Intentional Misconduct.—Notwithstanding paragraph (1), the Secretary may not indemnify the recipient of a cooperative agreement under this section from liability arising out of conduct of a recipient
that is grossly negligent or that constitutes intentional misconduct.

“(4) COLLECTION OF FEES.—

“(A) IN GENERAL.—The Secretary shall collect a fee from any person with whom an agreement for indemnification is executed under this subsection in an amount that is equal to the net present value of payments made by the United States to cover liability under the indemnification agreement.

“(B) AMOUNT.—The Secretary shall establish, by regulation, criteria for determining the amount of the fee, taking into account—

“(i) the likelihood of an incident resulting in liability to the United States under the indemnification agreement; and

“(ii) other factors pertaining to the hazard of the indemnified project.

“(C) USE OF FEES.—Fees collected under this paragraph shall be deposited in the Treasury and credited to miscellaneous receipts.

“(5) CONTRACTS IN ADVANCE OF APPROPRIATIONS.—

“(A) IN GENERAL.—Subject to subparagraph (B), the Secretary may enter into agree-
ments of indemnification under this subsection
in advance of appropriations and incur obliga-
tions without regard to section 1341 of title 31,
United States Code (commonly known as the
‘Anti-Deficiency Act’), or section 11 of title 41,
United States Code (commonly known as the
‘Adequacy of Appropriations Act’).

“(B) LIMITATION.—The amount of indem-
nification under this subsection shall not exceed
$10,000,000,000 (adjusted not less than once
during each 5-year period following the date of
enactment of this section, in accordance with
the aggregate percentage change in the Con-
sumer Price Index since the previous adjust-
ment under this subparagraph), in the aggre-
gate, for all persons indemnified in connection
with an agreement and for each project, includ-
ing such legal costs as are approved by the Sec-
retary.

“(6) CONDITIONS OF AGREEMENTS OF INDEMP-
IFICATION.—

“(A) IN GENERAL.—An agreement of in-
demnification under this subsection may con-
tain such terms as the Secretary considers ap-
appropriate to carry out the purposes of this section.

“(B) ADMINISTRATION.—The agreement shall provide that, if the Secretary makes a determination the United States will probably be required to make indemnity payments under the agreement, the Attorney General—

“(i) shall collaborate with the recipient of an award under this subsection; and

“(ii) may—

“(I) approve the payment of any claim under the agreement of indemnification;

“(II) appear on behalf of the recipient;

“(III) take charge of an action; and

“(IV) settle or defend an action.

“(C) SETTLEMENT OF CLAIMS.—

“(i) IN GENERAL.—The Attorney General shall have final authority on behalf of the United States to settle or approve the settlement of any claim under this subsection on a fair and reasonable basis with
due regard for the purposes of this sub-
section.

“(ii) EXPENSES.—The settlement
shall not include expenses in connection
with the claim incurred by the recipient.

“(h) FEDERAL LAND.—

“(1) IN GENERAL.—The Secretary concerned
may authorize the siting of a project on Federal
land under the jurisdiction of the Secretary con-
cerned in a manner consistent with applicable laws
and land management plans and subject to such
terms and conditions as the Secretary concerned de-
determines to be necessary.

“(2) FRAMEWORK FOR GEOLOGICAL CARBON
SEQUESTRATION ON PUBLIC LAND.—In determining
whether to authorize a project on Federal land, the
Secretary concerned shall take into account the
framework for geological carbon sequestration on
public land prepared in accordance with section 714
of the Energy Independence and Security Act of

“(i) ACCEPTANCE OF TITLE AND LONG-TERM MONI-
TORING.—

“(1) IN GENERAL.—As a condition of a cooper-
ative agreement under this section, the Secretary
may accept title to, or transfer of administrative ju-
risdiction from another Federal agency over, any
land or interest in land necessary for the monitoring,
remediation, or long-term stewardship of a project
site.

“(2) LONG-TERM MONITORING ACTIVITIES.—
After accepting title to, or transfer of, a site closed
in accordance with this section, the Secretary shall
monitor the site and conduct any remediation activi-
ties to ensure the geological integrity of the site and
prevent any endangerment of public health or safety.

“(3) FUNDING.—There is appropriated to the
Secretary, out of funds of the Treasury not other-
wise appropriated, such sums as are necessary to
carry out paragraph (2).”.

(b) CONFORMING AMENDMENTS.—
(1) Section 963 of the Energy Policy Act of
2005 (42 U.S.C. 16293) is amended—
(A) by redesignating subsections (a)
through (d) as subsections (b) through (e), re-
spectively;
(B) by inserting before subsection (b) (as
so redesignated) the following:
“(a) DEFINITIONS.—In this section:
“(1) INDUSTRIAL SOURCE.—The term ‘industrial source’ means any source of carbon dioxide that is not naturally occurring.

“(2) LARGE-SCALE.—The term ‘large-scale’ means the injection of over 1,000,000 tons of carbon dioxide from industrial sources over the lifetime of the project.”;

(C) in subsection (b) (as so redesignated), by striking “IN GENERAL” and inserting “PROGRAM”;

(D) in subsection (c) (as so redesignated), by striking “subsection (a)” and inserting “subsection (b)”; and

(E) in subsection (d)(3) (as so redesignated), by striking subparagraph (D).


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SEC. 3. TRAINING PROGRAM FOR STATE AND TRIBAL AGENCIES.

(a) Establishment.—The Secretary of Energy, in consultation with the Administrator of the Environmental Protection Agency and the Secretary of Transportation, shall establish a program to provide grants for employee training purposes to State and tribal agencies involved in permitting, management, inspection, and oversight of carbon capture, transportation, and storage projects.

(b) Authorization of Appropriations.—There is authorized to be appropriated to the Secretary of Energy to carry out this section $10,000,000 for each of fiscal years 2010 through 2020.