AMENDMENT NO._____ Calendar No._____

Purpose: To amend the Energy Policy Act of 2005 to repeal certain programs and to establish a coal technology program.

IN THE SENATE OF THE UNITED STATES—114th Cong., 1st Sess.

(no.) _____

To provide for the modernization of the energy policy of the United States, and for other purposes.

Referred to the Committee on _____ and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT intended to be proposed by Mr. MANCHIN (for himself, Mr. PORTMAN, and Mrs. CAPITO)

Viz:

At the end of subtitle E of title III, add the following:

SEC. 34___. ESTABLISHMENT OF COAL TECHNOLOGY PROGRAM.

(a) REPEALS.—

(1) IN GENERAL.—

(A) Sections 962 and 963 of the Energy Policy Act of 2005 (42 U.S.C. 16292, 16293) are repealed.

(B) Subtitle A of title IV of the Energy Policy Act of 2005 (42 U.S.C. 15961 et seq.) is repealed.

(2) SAVINGS CLAUSE.—Notwithstanding the amendments made by paragraph (1), the Secretary shall continue to manage any program activities that are outstanding as of the date of enactment of this Act under the terms and conditions of sections 962 and 963 of the Energy Policy Act of 2005 (42 U.S.C. 16292, 16293) or subtitle A of title IV of the Energy Policy Act of 2005 (42 U.S.C. 15961 et seq.) (as in effect on the day before the date of enactment of this Act), as applicable.

(3) CONFORMING AMENDMENTS.—

(A) Section 703(a)(3) of the Energy Independence and Security Act of 2007 (42 U.S.C. 17251(a)(3)) is amended—

(i) in the matter preceding subparagraph (A), by striking the first and second sentences; and

(ii) in subparagraph (B), by striking ''including'' in the matter preceding clause (i) and all that follows through the period at the end and inserting '', including such geologic sequestration projects as are approved by the Secretary''.

(B) Section 704 of the Energy Independence and Security Act of 2007 (42 U.S.C.

17252) is amended in the first sentence by striking ''under section 963(c)(3) of the Energy Policy Act of 2005 (42 U.S.C. 16293(c)(3)), as added by section 702 of this subtitle, and''.

(b) ESTABLISHMENT OF COAL TECHNOLOGY PROGRAM.—

(1) IN GENERAL.—The Energy Policy Act of 2005 (as amended by subsection (a)) is amended by inserting after section 961 (42 U.S.C. 16291) the following:

''SEC. 962. COAL TECHNOLOGY PROGRAM.

''(a) DEFINITIONS.—In this section:

''(1) LARGE-SCALE PILOT PROJECT.—The term 'large-scale pilot project' means a pilot project that—

''(A) represents the scale of technology development beyond laboratory development and bench scale testing, but not yet advanced to the point of being tested under real operational conditions at commercial scale;

''(B) represents the scale of technology necessary to gain the operational data needed to understand the technical and performance risks of the technology before the application of

that technology at commercial scale or in commercial-scale demonstration; and

"(C) is large enough—

"(i) to validate scaling factors; and

"(ii) to demonstrate the interaction between major components so that control philosophies for a new process can be developed and enable the technology to advance from large-scale pilot plant application to commercial scale demonstration or application.

"(2) PROGRAM.—The term 'program' means the program established under subsection (b).

"(3) TRANSFORMATIONAL TECHNOLOGY.—

"(A) IN GENERAL.—The term 'transformational technology' means a power generation technology that represents an entirely new way to convert energy that will enable a step change in performance, efficiency, and cost of electricity as compared to the technology in existence on the date of enactment of this Act.

"(B) INCLUSIONS.—The term 'transformational technology' includes a broad range of technology improvements, including—

''(i) thermodynamic improvements in energy conversion and heat transfer, including—

''(I) oxygen combustion;

''(II) chemical looping; and

''(III) the replacement of steam cycles with supercritical carbon dioxide cycles;

''(ii) improvements in turbine technology;

''(iii) improvements in carbon capture systems technology; and

''(iv) any other technology the Secretary recognizes as transformational technology.

''(b) COAL TECHNOLOGY PROGRAM.—

''(1) IN GENERAL.—The Secretary shall establish a coal technology program to ensure the continued use of the abundant, domestic coal resources of the United States through the development of technologies that will significantly improve the efficiency, effectiveness, costs, and environmental performance of coal use.

''(2) REQUIREMENTS.—The program shall include—

"(A) a research and development program;

"(B) large-scale pilot projects; and

"(C) demonstration projects.

"(3) PROGRAM GOALS AND OBJECTIVES.—In consultation with the interested entities described in paragraph (4)(C), the Secretary shall develop goals and objectives for the program to be applied to the technologies developed within the program, taking into consideration the following objectives:

"(A) Ensure reliable, low cost power from new and existing coal plants.

"(B) Achieve high conversion efficiencies.

"(C) Address emissions of carbon dioxide through high efficiency platforms and carbon capture from new and existing coal plants.

"(D) Support small-scale and modular technologies to enable incremental capacity additions and load growth and large-scale generation technologies.

"(E) Support flexible baseload operations for new and existing applications of coal generation.

"(F) Further reduce emissions of criteria pollutants and reduce the use and manage the discharge of water in power plant operations.

"(G) Accelerate the development of technologies that have transformational energy conversion characteristics.

"(H) Validate geologic storage of large volumes of anthropogenic sources of carbon dioxide and support the development of the infrastructure needed to support a carbon dioxide use and storage industry.

"(I) Examine methods of converting coal to other valuable products and commodities in addition to electricity.

"(4) CONSULTATIONS REQUIRED.—In carrying out the program, the Secretary shall—

"(A) undertake international collaborations, as recommended by the National Coal Council;

"(B) use existing authorities to encourage international cooperation; and

"(C) consult with interested entities, including –

"(i) coal producers;

"(ii) industries that use coal;

"(iii) organizations that promote coal and advanced coal technologies;

"(iv) environmental organizations;

"(v) organizations representing workers; and

"(vi) organizations representing consumers.

"(c) REPORT.—

"(1) IN GENERAL.—Not later than 18 months after the date of enactment of this Act, the Secretary shall submit to Congress a report describing the performance standards adopted under subsection (b)(3).

"(2) UPDATE.—Once every 2 years after the initial report is submitted under paragraph (1), the Secretary shall submit to Congress a report describing the progress made towards achieving the objectives and performance standards adopted under subsection (b)(3).

"(d) FUNDING.—

"(1) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this Act, to remain available until expended—

"(A) $610,000,000 for each of fiscal years 2017 through 2020; and

"(B) $560,000,000 for fiscal year 2021.

''(2) ALLOCATIONS.—The amounts made available under paragraph (1) shall be allocated as follows:

''(A) For activities under the research and development program component described in subsection (b)(2)(A)—

''(i) $275,000,000 for each of fiscal years 2017 through 2020; and

''(ii) $200,000,000 for fiscal year 2021.

''(B) For activities under the demonstration projects program component described in subsection (b)(2)(C)—

''(i) $50,000,000 for each of fiscal years 2017 through 2020; and

''(ii) $75,000,000 for fiscal year 2021.

''(C) For activities under the large-scale pilot projects program component described in subsection (b)(2)(B), $285,000,000 for each of fiscal years 2017 through 2021.''.

(2) COST SHARING FOR LARGE-SCALE PILOT PROJECTS.—Activities under subsection (b)(2)(B) shall be subject to the cost-sharing requirements of section 988(b) of the Energy Policy Act of 2005 (42 U.S.C. 16352(b)).