## SEC. 968. METHANE HYDRATE RESEARCH.

- (a) In General- The Methane Hydrate Research and Development Act of 2000 (30 U.S.C. 1902 note; Public Law 106-193) is amended to read as follows:
- `SECTION 1. SHORT TITLE.
- `This Act may be cited as the `Methane Hydrate Research and Development Act of 2000'. `SEC. 2. FINDINGS.
- `Congress finds that--
- `(1) in order to promote energy independence and meet the increasing demand for energy, the United States will require a diversified portfolio of substantially increased quantities of electricity, natural gas, and transportation fuels;
- `(2) according to the report submitted to Congress by the National Research Council entitled `Charting the Future of Methane Hydrate Research in the United States', the total United States resources of gas hydrates have been estimated to be on the order of 200,000 trillion cubic feet;
- `(3) according to the report of the National Commission on Energy Policy entitled `Ending the Energy Stalemate--A Bipartisan Strategy to Meet America's Energy Challenge', and dated December 2004, the United States may be endowed with over onefourth
- of the methane hydrate deposits in the world;
- `(4) according to the Energy Information Administration, a shortfall in natural gas supply from conventional and unconventional sources is expected to occur in or about 2020; and `(5) the National Academy of Sciences states that methane hydrate may have the
- potential to alleviate the projected shortfall in the natural gas supply.
- `SEC. 3. DEFINITIONS.
- `In this Act:
- `(1) CONTRACT- The term `contract' means a procurement contract within the meaning of section 6303 of title 31, United States Code.
- `(2) COOPERATIVE AGREEMENT- The term `cooperative agreement' means a cooperative agreement within the meaning of section 6305 of title 31, United States Code.
- `(3) DIRECTOR- The term `Director' means the Director of the National Science Foundation.
- `(4) GRANT- The term `grant' means a grant awarded under a grant agreement (within the meaning of section 6304 of title 31, United States Code).
- `(5) INDUSTRIAL ENTERPRISE- The term `industrial enterprise' means a private, nongovernmental enterprise that has an expertise or capability that relates to methane hydrate research and development.
- `(6) INSTITUTION OF HIGHER EDUCATION- The term `institution of higher education' means an institution of higher education (as defined in section 102 of the Higher Education Act of 1965 (20 U.S.C. 1002)).
- `(7) SECRETARY- The term `Secretary' means the Secretary of Energy, acting through the Assistant Secretary for Fossil Energy.
- `(8) SECRETARY OF COMMERCE- The term `Secretary of Commerce' means the Secretary of Commerce, acting through the Administrator of the National Oceanic and Atmospheric Administration.
- `(9) SECRETARY OF DEFENSE- The term `Secretary of Defense' means the Secretary

- of Defense, acting through the Secretary of the Navy.
- `(10) SECRETARY OF THE INTERIOR- The term `Secretary of the Interior' means the Secretary of the Interior, acting through the Director of the United States Geological Survey, the Director of the Bureau of Land Management, and the Director of the Minerals Management Service.
- `SEC. 4. METHANE HYDRATE RESEARCH AND DEVELOPMENT PROGRAM.
- `(a) In General-
- `(1) COMMENCEMENT OF PROGRAM- Not later than 90 days after the date of enactment of the Energy Research, Development, Demonstration, and Commercial Application Act of 2005, the Secretary, in consultation with the Secretary of Commerce, the Secretary of Defense, the Secretary of the Interior, and the Director, shall commence a program of methane hydrate research and development in accordance with this section.
- `(2) DESIGNATIONS- The Secretary, the Secretary of Commerce, the Secretary of Defense, the Secretary of the Interior, and the Director shall designate individuals to carry out this section.
- `(3) COORDINATION- The individual designated by the Secretary shall coordinate all activities within the Department of Energy relating to methane hydrate research and development.
- `(4) MEETINGS- The individuals designated under paragraph (2) shall meet not later than 180 days after the date of enactment of the Energy Research, Development, Demonstration, and Commercial Application Act of 2005 and not less frequently than every 180 days thereafter to--
- `(A) review the progress of the program under paragraph (1); and
- `(B) coordinate interagency research and partnership efforts in carrying out the program.
- `(b) Grants, Contracts, Cooperative Agreements, Interagency Funds Transfer Agreements, and Field Work Proposals-
- `(1) ASSISTANCE AND COORDINATION- In carrying out the program of methane hydrate research and development authorized by this section, the Secretary may award grants to, or enter into contracts or cooperative agreements with, institutions of higher education, oceanographic institutions, and industrial enterprises to--
- `(A) conduct basic and applied research to identify, explore, assess, and develop methane hydrate as a commercially viable source of energy;
- `(B) identify methane hydrate resources through remote sensing;
- `(C) acquire and reprocess seismic data suitable for characterizing methane hydrate accumulations;
- `(D) assist in developing technologies required for efficient and environmentally sound development of methane hydrate resources;
- `(E) promote education and training in methane hydrate resource research and resource development through fellowships or other means for graduate education and training;
- `(F) conduct basic and applied research to assess and mitigate the environmental impact of hydrate degassing (including both natural degassing and degassing associated with commercial development);
- `(G) develop technologies to reduce the risks of drilling through methane hydrates; and
- `(H) conduct exploratory drilling, well testing, and production testing operations on permafrost and non-permafrost gas hydrates in support of the activities authorized by this

paragraph, including drilling of one or more full-scale production test wells.

- `(2) COMPETITIVE PEER REVIEW- Funds made available under paragraph (1) shall be made available based on a competitive process using external scientific peer review of proposed research.
- `(c) Methane Hydrates Advisory Panel-
- `(1) IN GENERAL- The Secretary shall establish an advisory panel (including the hiring of appropriate staff) consisting of representatives of industrial enterprises, institutions of higher education, oceanographic institutions, State agencies, and environmental organizations with knowledge and expertise in the natural gas hydrates field, to--
- `(A) assist in developing recommendations and broad programmatic priorities for the methane hydrate research and development program carried out under subsection (a)(1);
- `(B) provide scientific oversight for the methane hydrates program, including assessing progress toward program goals, evaluating program balance, and providing recommendations to enhance the quality of the program over time; and
- `(C) not later than 2 years after the date of enactment of the Energy Research, Development, Demonstration, and Commercial Application Act of 2005, and at such later dates as the panel considers advisable, submit to Congress--
- `(i) an assessment of the methane hydrate research program; and
- `(ii) an assessment of the 5-year research plan of the Department of Energy.
- `(2) CONFLICTS OF INTEREST- In appointing each member of the advisory panel established under paragraph (1), the Secretary shall ensure, to the maximum extent practicable, that the appointment of the member does not pose a conflict of interest with respect to the duties of the member under this Act.
- `(3) MEETINGS- The advisory panel shall--
- `(A) hold the initial meeting of the advisory panel not later than 180 days after the date of establishment of the advisory panel; and
- `(B) meet biennially thereafter.
- `(4) COORDINATION- The advisory panel shall coordinate activities of the advisory panel with program managers of the Department of Energy at appropriate National Laboratories.
- `(d) Construction Costs- None of the funds made available to carry out this section may be used for the construction of a new building or the acquisition, expansion, remodeling, or alteration of an existing building (including site grading and improvement and architect fees).
- `(e) Responsibilities of the Secretary- In carrying out subsection (b)(1), the Secretary shall--
- `(1) facilitate and develop partnerships among government, industrial enterprises, and institutions of higher education to research, identify, assess, and explore methane hydrate resources;
- `(2) undertake programs to develop basic information necessary for promoting long-term interest in methane hydrate resources as an energy source;
- `(3) ensure that the data and information developed through the program are accessible and widely disseminated as needed and appropriate;
- `(4) promote cooperation among agencies that are developing technologies that may hold promise for methane hydrate resource development;
- `(5) report annually to Congress on the results of actions taken to carry out this Act; and

- `(6) ensure, to the maximum extent practicable, greater participation by the Department of Energy in international cooperative efforts.
- `SEC. 5. NATIONAL RESEARCH COUNCIL STUDY.
- `(a) Agreement for Study- The Secretary shall offer to enter into an agreement with the National Research Council under which the National Research Council shall--
- `(1) conduct a study of the progress made under the methane hydrate research and development program implemented under this Act; and
- `(2) make recommendations for future methane hydrate research and development needs.
- `(b) Report- Not later than September 30, 2009, the Secretary shall submit to Congress a report containing the findings and recommendations of the National Research Council under this section.
- SEC. 6. REPORTS AND STUDIES FOR CONGRESS.
- The Secretary shall provide to the Committee on Science of the House of Representatives and the Committee on Energy and Natural Resources of the Senate copies of any report or study that the Department of Energy prepares at the direction of any committee of Congress relating to the methane hydrate research and development program implemented under this Act.
- `SEC. 7. AUTHORIZATION OF APPROPRIATIONS.
- `There are authorized to be appropriated to the Secretary to carry out this Act, to remain available until expended--
- `(1) \$15,000,000 for fiscal year 2006;
- `(2) \$20,000,000 for fiscal year 2007;
- `(3) \$30,000,000 for fiscal year 2008;
- `(4) \$40,000,000 for fiscal year 2009; and
- `(5) \$50,000,000 for fiscal year 2010.'.
- (b) Reclassification- The Law Revision Counsel shall reclassify the Methane Hydrate Research and Development Act of 2000 (30 U.S.C. 1902 note; Public Law 106-193) to a new chapter at the end of title 30, United States Code.