119TH CONGRESS
1ST SESSION

S. 3029

To provide for Department of Energy and National Aeronautics and Space Administration research and development coordination, and for other purposes.

IN THE SENATE OF THE UNITED STATES

OCTOBER 22 (legislative day, OCTOBER 21), 2025

Mr. SULLIVAN (for himself and Mr. SCHIFF) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

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A BILL

To provide for Department of Energy and National Aeronautics and Space Administration research and development coordination, and for other purposes.

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

SECTION 1. SHORT TITLE.

This Act may be cited as the ''DOE and NASA Interagency Research Coordination Act''.

SEC. 2. DEPARTMENT OF ENERGY AND NATIONAL AERONAUTICS AND SPACE ADMINISTRATION RESEARCH AND DEVELOPMENT COORDINATION.

(a) AUTHORIZATION.—

(1) RESEARCH AND DEVELOPMENT ACTIVITIES.—The Secretary of Energy (in this section referred to as the ''Secretary'') and the Administrator of the National Aeronautics and Space Administration (in this section referred to as the ''Administrator'') may carry out, as practicable, cross-cutting and collaborative research and development activities to support the advancement of Department of Energy and National Aeronautics and Space Administration mission requirements and priorities.

(2) COMPETITIVE AWARDS.—The Secretary and the Administrator may make competitive awards, in accordance with subsection (e), to carry out the research and development activities described in paragraph (1).

(b) MEMORANDA OF UNDERSTANDING.—The Secretary and the Administrator shall coordinate the activities under subsection (a) through 1 or more memoranda of understanding or other appropriate interagency agreements.

(c) COORDINATION.—In carrying out the activities under subsection (a), the Secretary and the Administrator may do the following:

(1) Conduct collaborative research and development activities in a variety of focus areas, which may include the following:

(A) Propulsion systems and components, including nuclear thermal and nuclear electric propulsion, radioisotope power systems, thermoelectric generators, advanced nuclear fuels, and heater units.

(B) Modeling and simulation, machine learning, data assimilation, large scale data analytics, and predictive analysis in order to optimize algorithms for mission-related purposes.

(C) Fundamental high energy physics, astrophysics, and cosmology, including the nature of dark energy and dark matter, in accordance with section 305 of the Department of Energy Research and Innovation Act (42 U.S.C. 18643).

(D) Fundamental Earth and environmental sciences, in accordance with section 306 of the Department of Energy Research and In-

novation Act (42 U.S.C. 18644) and section 60501 of title 51, United States Code.

(E) Quantum information sciences, including quantum computing and quantum network infrastructure, in accordance with sections 403 and 404 of the National Quantum Initiative Act (15 U.S.C. 8853 and 8854).

(F) Radiation health effects, in accordance with section 306 of the Department of Energy Research and Innovation Act (42 U.S.C. 18644).

(G) Ground-based and space-based technology necessary for the transmission to the Earth's surface of solar energy collected in space.

(H) Arctic science and infrastructure resilience, including the monitoring of permafrost thaw, sea ice extent, wildfire dynamics, and other Earth system changes that affect energy systems, national security, and climate modeling.

(I) Wildfire mitigation and resilience methods to reduce wildfire risk and the severity of wildfire damages.

(J) Space weather forecasting and geomagnetic storm impact assessment, especially as related to power grids, pipelines, communication systems, aviation, and satellite operations in high-latitude regions.

(K) Satellite data acquisition, processing, and distribution infrastructure (including high-latitude ground stations and data centers) that support Earth observation, synthetic aperture radar data, and space mission telemetry.

(L) STEM workforce development and experiential training programs, particularly in underserved or remote regions such as the Arctic, in fields relevant to agency missions, including aerospace engineering, space physics, Earth system modeling, and remote sensing.

(M) Any other area of potential research and development collaboration the Secretary and the Administrator consider important to achieving agency missions and objectives.

(2) Develop methods to accommodate large voluntary data sets on space and aeronautical information on high-performance computing systems with variable quality and scale.

(3) Promote collaboration and data and information sharing between the Department of Energy, the National Aeronautics and Space Administration, the National Laboratories (as defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801)), and other appropriate entities by providing the necessary access and secure data and information transfer capabilities.

(4) Support access by the National Aeronautics and Space Administration to the research infrastructure and capabilities of the Department of Energy, as practicable.

(d) AGREEMENTS.—In carrying out the activities under subsection (a), the Secretary and the Administrator may—

(1) carry out reimbursable and nonreimbursable agreements between the Department of Energy and the National Aeronautics and Space Administration; and

(2) collaborate with other Federal agencies, as appropriate.

(e) MERIT-REVIEW PROCESS.—The Secretary and the Administrator shall ensure that any competitive award made to carry out the activities under subsection (a) fol-

lows all appropriate laws and agency policies, including the following:

(1) Selection by merit-review-based processes.

(2) Consideration of applications from Federal agencies, the National Laboratories, institutions of higher education, nonprofit institutions, and other appropriate entities.

(f) REPORT.—Not later than 2 years after the date of the enactment of this Act, the Secretary and the Administrator shall submit to the Committee on Energy and Natural Resources and the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report detailing the following:

(1) Interagency research and development coordination activities between the Department of Energy and the National Aeronautics and Space Administration carried out under this Act.

(2) The manner in which such coordination activities expand the technical capabilities of the Department of Energy and the National Aeronautics and Space Administration.

(3) Collaborative research and development achievements.

(4) Areas of future mutually beneficial activities, including potential applications of clean energy technologies, such as marine energy, and collaborative initiatives to advance Arctic science, wildfire resilience, space weather resilience, and the STEM workforce pipeline in high-need regions.

(5) Continuation of coordination activities between the Department of Energy and the National Aeronautics and Space Administration.

(g) RESEARCH SECURITY.—Any activity carried out under subsection (a) shall be applied in a manner consistent with subtitle D of title VI of the Research and Development, Competition, and Innovation Act (enacted as division B of Public Law 117–167; 42 U.S.C. 19231 et seq.).

(h) AUTHORIZATION FOR TRANSFER TO NASA OF FUNDS FROM OTHER AGENCIES FOR SCIENTIFIC OR ENGINEERING RESEARCH OR EDUCATION.—

(1) IN GENERAL.—Section 20113(f) of title 51, United States Code, is amended—

(A) by striking ''In the performance of its functions'' and inserting the following:

''(1) IN GENERAL.—In the performance of its functions''; and

(B) by adding at the end the following new paragraph:

''(2) TREATMENT.—Funds available to any department or agency of the Federal Government for scientific or engineering research or education, or the provision of facilities for such research or education, shall, subject to the approval of the head of such department or agency or as delegated pursuant to a regulation of such department or agency, be available for transfer, in whole or in part, to the Administration exclusively for activities directly related to space exploration and its associated science, technology, or engineering research or education activities. Funds so transferred shall be merged with the appropriation to which transferred, except that such transferred funds shall be limited to the awarding of grants or cooperative agreements for scientific or engineering research or education.''.

(2) ANNUAL INFORMATION ON FUNDS TRANSFERRED.—

(A) IN GENERAL.—Not later than 2 years after the date of the enactment of this Act, the Administrator shall include in the budget justification materials of the National Aeronautics and Space Administration submitted to Con-

gress in support of the budget of the President submitted pursuant to section 1105 of title 31, United States Code, information describing the activities conducted under section 20113(f) of title 51, United States Code, during the fiscal year immediately preceding such submission.

(B) CONTENTS.—The information required to be submitted under subparagraph (A) shall contain a description of each transfer of funds under the authority provided in section 20113(f)(2) of title 51, United States Code, during the fiscal year immediately preceding such submission, including the following:

(i) An identification of the department or agency of the Federal Government from which such funds were transferred.

(ii) The total amount of funds so transferred, disaggregated by each such department or agency.

(iii) The purposes for which such funds were appropriated to each such agency or department.

(iv) An identification of the program or activity of the National Aeronautics and

Space Administration to which such funds were made available by each such transfer.

(v) The purposes of each such National Aeronautics and Space Administration program or activity, and the amount of funding appropriated to the National Aeronautics and Space Administration for such purposes.

(3) REPORT.—Not later than 3 years after the date of the enactment of this Act, the Administrator shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report that includes the following:

(A) A summary of the value of the authority provided in section 20113(f)(2) of title 51, United States Code, including the extent to which such authority has benefitted—

(i) the National Aeronautics and Space Administration; and

(ii) the ability of the National Aeronautics and Space Administration to meet its needs, achieve its missions, or more effectively conduct interagency collaborations

specifically in pursuit of space exploration and related scientific and engineering objectives.

(B) An identification of any barriers or challenges to implementing such authority, or otherwise to managing the funding required to conduct joint programs and award jointly funded grants and cooperative agreements by the National Aeronautics and Space Administration with other Federal departments and agencies so as to contribute to the missions of each such department and agency to advance the shared objectives of space exploration and related research and education.

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