116TH CONGRESS
2D SESSION

S. 4725

To establish programs to facilitate the commercial application of clean energy and related technologies in the United States.

IN THE SENATE OF THE UNITED STATES

SEPTEMBER 24, 2020

Mr. COONS (for himself and Mr. CASSIDY) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

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A BILL

To establish programs to facilitate the commercial application of clean energy and related technologies in the United States.

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

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the ''Energizing Technology Transfer Act of 2020''.

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

SEC. 2. DEFINITIONS.

In this Act:

(1) CLEAN ENERGY TECHNOLOGY.—The term ''clean energy technology'' means a technology that, as determined by the Secretary, significantly—

(A) reduces energy use;

(B) increases energy efficiency;

(C) reduces greenhouse gas emissions;

(D) reduces emissions of other pollutants; or

(E) mitigates other negative environmental consequences.

(2) DEPARTMENT.—The term ''Department'' means the Department of Energy.

(3) INSTITUTION OF HIGHER EDUCATION.—The term ''institution of higher education'' has the meaning given the term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).

(4) NATIONAL LABORATORY.—The term ''National Laboratory'' has the meaning given the term in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801).

(5) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

TITLE I—NATIONAL CLEAN ENERGY TECHNOLOGY TRANSFER PROGRAMS

SEC. 101. ENERGY INNOVATION CORPS PROGRAM.

(a) DEFINITIONS.—In this section:

(1) ELIGIBLE PARTICIPANT.—The term ''eligible participant'' means—

(A) an employee of a National Laboratory;

(B) a researcher;

(C) a student; and

(D) a clean energy entrepreneur, as determined by the Secretary.

(2) SECRETARY.—The term ''Secretary'' means the Secretary, acting through the Technology Transfer Coordinator appointed under section 1001(a) of the Energy Policy Act of 2005 (42 U.S.C. 16391(a)).

(b) ESTABLISHMENT.—The Secretary shall carry out a program, to be known as the ''Energy Innovation Corps Program'' (referred to in this section as ''Energy I–Corps''), to support entrepreneurial and commercial application education, training, professional development, and mentorship.

(c) PURPOSES.—The purposes of Energy I–Corps are—

(1) to help eligible participants develop entrepreneurial skills; and

(2) to accelerate the commercial application of clean energy technologies.

(d) ACTIVITIES.—In carrying out Energy I–Corps, the Secretary shall support, including through grants—

(1) market analysis and customer discovery for clean energy technologies;

(2) entrepreneurial and commercial application education, training, and mentoring activities, including workshops, seminars, and short courses;

(3) engagement with private sector entities to identify future research and development activities; and

(4) any other activities that the Secretary determines to be relevant to the purposes described in subsection (c).

(e) STATE AND LOCAL PARTNERSHIPS.—In carrying out Energy I–Corps, the Secretary may engage in partnerships with National Laboratories, State and local governments, economic development organizations, and nonprofit organizations to broaden access to Energy I–Corps and support activities relevant to the purposes described in subsection (c).

(f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out Energy I–Corps—

(1) for eligible participants described in subsection (a)(1)(A), $3,000,000 for each of fiscal years 2021 through 2025; and

(2) for eligible participants described in subparagraphs (B) through (D) of subsection (a)(1), $3,000,000 for each of fiscal years 2021 through 2025.

SEC. 102. CLEAN ENERGY TECHNOLOGY TRANSFER COORDINATION.

(a) IN GENERAL.—The Secretary, acting through the Technology Transfer Coordinator appointed under section 1001(a) of the Energy Policy Act of 2005 (42 U.S.C. 16391(a)), shall support the coordination of relevant technology transfer programs, including programs authorized under this title and section 202, that advance the commercial application of clean energy technologies nationally and across all energy sectors.

(b) ACTIVITIES.—In carrying out subsection (a), the Secretary may—

(1) facilitate the sharing of information on best practices for successful operation of clean energy technology transfer programs;

(2) coordinate resources and improve cooperation among clean energy technology transfer programs;

(3) organize national platforms or events for showcasing innovative companies and entrepreneurs and promoting networking with prospective investors and partners;

(4) facilitate connections between entrepreneurs and startup companies and Department programs related to clean energy technology transfer; and

(5) facilitate the development of metrics to measure the impact of clean energy technology transfer programs on—

(A) advancing the development, demonstration, and commercial application of clean energy technologies;

(B) job creation and workforce development, including in low-income communities;

(C) increasing the competitiveness of the United States in the clean energy sector, including in manufacturing; and

(D) the advancement of clean energy technology companies led by entrepreneurs from underrepresented backgrounds.

(c) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary to carry out this section $3,000,000 for each of fiscal years 2021 through 2025.

TITLE II—TECHNOLOGY DEVELOPMENT AT NATIONAL LABORATORIES

SEC. 201. LAB PARTNERING SERVICE PILOT PROGRAM.

(a) DEFINITIONS.—In this section:

(1) PILOT PROGRAM.—The term ''pilot program'' means the Lab Partnering Service Pilot Program established under subsection (b).

(2) SECRETARY.—The term ''Secretary'' means the Secretary, acting through the Technology Transfer Coordinator appointed under section 1001(a) of the Energy Policy Act of 2005 (42 U.S.C. 16391(a)).

(b) ESTABLISHMENT.—The Secretary shall establish a pilot program, to be known as the ''Lab Partnering Service Pilot Program''—

(1) to provide services that encourage and support partnerships between the National Laboratories and public and private sector entities; and

(2) to improve communication of research, development, demonstration, and commercial application projects and opportunities at the National Laboratories to potential partners.

(c) EXISTING PROGRAM.—The pilot program may be established within, or as an expansion of, an existing Department program.

(d) ACTIVITIES.—In carrying out the pilot program, the Secretary shall—

(1) conduct outreach to and engage with relevant public and private sector entities;

(2) identify and disseminate best practices for strengthening connections between the National Laboratories and public and private sector entities; and

(3) develop a website to disseminate information on—

(A) different partnering mechanisms for working with the National Laboratories;

(B) National Laboratory experts and research areas; and

(C) National Laboratory facilities and user facilities.

(e) COORDINATION.—In carrying out the pilot program, the Secretary shall coordinate with the Directors and dedicated technology transfer staff of the National Laboratories, with a focus on matchmaking services for individual projects led by the National Laboratories.

(f) METRICS.—The Secretary shall collaborate with program evaluation experts to develop metrics to determine—

(1) the effectiveness of the pilot program in achieving the purposes described in subsection (b); and

(2) the number and types of partnerships established between public and private sector entities and

the National Laboratories compared to historical trends.

(g) FUNDING EMPLOYEE PARTNERING ACTIVITIES.—The Secretary shall delegate to the Directors of the National Laboratories the authority to establish, without regard to title 5, United States Code, or any regulation issued under that title, a mechanism for compensating National Laboratory employees providing services under the pilot program.

(h) DURATION.—Subject to the availability of appropriations, the pilot program shall operate for not less than 3 years.

(i) EVALUATION.—Not later than 180 days after the date on which the pilot program terminates, the Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report that—

(1) evaluates the success of the pilot program in achieving the purposes of the pilot program; and

(2) includes an analysis of the performance of the pilot program based on the metrics developed under subsection (f).

(j) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary to carry

out this section $3,700,000 for each of fiscal years 2021 through 2023, of which $1,700,000 for each fiscal year shall be used to carry out subsection (g).

SEC. 202. LAB-EMBEDDED ENTREPRENEURSHIP PROGRAM.

(a) DEFINITIONS.—In this section:

(1) COVERED PROGRAM.—The term ''covered program'' means a lab-embedded entrepreneurship program established or supported by an eligible entity using a grant awarded under the program.

(2) ELIGIBLE ENTITY.—The term ''eligible entity'' means—

(A) a National Laboratory;

(B) a nonprofit organization;

(C) an institution of higher education; and

(D) a federally owned corporation.

(3) ENTREPRENEURIAL FELLOW.—The term ''entrepreneurial fellow'' means an individual participating in a covered program.

(4) PROGRAM.—The term ''program'' means the Lab-Embedded Entrepreneurship Program authorized under subsection (b).

(b) PROGRAM.—The Secretary shall continue the program within the Office of Energy Efficiency and Renewable Energy known as the ''Lab-Embedded Entrepreneurship Program'', under which the Secretary, or a designee

of the Secretary at a National Laboratory, shall award grants to eligible entities for the purpose of establishing or supporting a covered program.

(c) PURPOSE.—The purpose of a covered program is to provide entrepreneurial fellows with access to National Laboratory research facilities, expertise, and mentorship—

(1) to perform research and development; and

(2) to gain expertise that may be required or beneficial for the commercial application of research ideas.

(d) ENTREPRENEURIAL FELLOWS.—

(1) IN GENERAL.—In participating in a covered program, an entrepreneurial fellow shall be provided—

(A) by the Secretary or an eligible entity, with—

(i) opportunities for entrepreneurial training, professional development, and networking through exposure to leaders from academia, industry, government, and finance, who may serve as advisors to or partners of an entrepreneurial fellow;

(ii) financial and technical support for research, development, and commercial application activities;

(iii) fellowship awards to cover costs of living, health insurance, and travel stipends for the duration of the fellowship; and

(iv) any other resources determined appropriate by the Secretary; and

(B) by an eligible entity with—

(i) access to the facilities and expertise of staff of a National Laboratory;

(ii) engagement with external stakeholders; and

(iii) market and customer development opportunities.

(2) PRIORITY.—In carrying out a covered program, an eligible entity shall give priority to supporting entrepreneurial fellows with respect to professional development and development of a relevant technology.

(e) METRICS.—The Secretary shall support the development of short-term and long-term metrics to assess the effectiveness of covered programs in achieving the purposes of the program.

(f) COORDINATION; INTERAGENCY COLLABORATION.—The Secretary shall—

(1) oversee the planning and coordination of grants awarded under the program; and

(2) collaborate with other Federal agencies, including the Department of Defense, regarding opportunities for Federal agencies to partner with covered programs.

(g) BEST PRACTICES.—The Secretary shall identify and disseminate to eligible entities best practices for achieving the purposes of the program.

(h) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary to carry out this section $25,000,000 for each of fiscal years 2021 through 2025.

SEC. 203. SMALL BUSINESS VOUCHER PROGRAM.

Section 1003 of the Energy Policy Act of 2005 (42 U.S.C. 16393) is amended—

(1) in subsection (a)—

(A) by redesignating paragraphs (1) through (5) as subparagraphs (A) through (E), respectively, and indenting appropriately;

(B) in the matter preceding subparagraph (A) (as so redesignated)—

(i) by striking ''and may require the Director of a single-purpose research facility'' and inserting ''the Director of each single-purpose research facility, and the Director of each covered facility''; and

(ii) by striking ''The Secretary'' and inserting the following:

''(1) DEFINITION OF COVERED FACILITY.—In this subsection, the term 'covered facility' means a national security laboratory or nuclear weapons production facility (as those terms are defined in section 4002 of the Atomic Energy Defense Act (50 U.S.C. 2501)) that the Administrator of the National Nuclear Security Administration determines is within the mission of a program established under subsection (b) or (c).

''(2) RESPONSIBILITIES.—The Secretary''; and

(C) in paragraph (2) (as so designated)—

(i) in subparagraph (A) (as so redesignated)—

(I) by striking ''increase'' and inserting ''encourage'';

(II) by striking ''collaborative research,'' and inserting ''research, development, demonstration, commercial

application activities, including product development,''; and

(III) by striking ''Laboratory or single-purpose research facility'' and inserting ''Laboratory, single-purpose research facility, or covered facility, as applicable'';

(ii) in subparagraph (B) (as so redesignated)—

(I) by striking ''Laboratory or single-purpose research facility'' and inserting ''Laboratory, single-purpose research facility, or covered facility, as applicable,''; and

(II) by striking ''procurement and collaborative research along with'' and inserting ''the activities described in subparagraph (A) and'';

(iii) in subparagraph (C) (as so redesignated)—

(I) by inserting ''facilities,'' before ''training''; and

(II) by striking ''procurement and collaborative research activities''

and inserting ''the activities described in subparagraph (A)'';

(iv) in subparagraph (D) (as so redesignated), by striking ''Laboratory or single-purpose research facility'' and inserting ''Laboratory, single-purpose research facility, or covered facility, as applicable,''; and

(v) in subparagraph (E) (as so redesignated)—

(I) by striking ''for the program under subsection (b)'' and inserting ''and metrics for the programs under subsections (b) and (c)''; and

(II) by striking ''Laboratory or single-purpose research facility'' and inserting ''Laboratory, single-purpose research facility, or covered facility, as applicable'';

(2) by redesignating subsections (c) and (d) as subsections (d) and (e), respectively;

(3) by inserting after subsection (b) the following:

''(c) SMALL BUSINESS VOUCHER PROGRAM.—

''(1) DEFINITIONS.—In this subsection:

''(A) COVERED FACILITY.—The term 'covered facility' means a national security laboratory or nuclear weapons production facility (as those terms are defined in section 4002 of the Atomic Energy Defense Act (50 U.S.C. 2501)) that the Administrator of the National Nuclear Security Administration determines is within the mission of the program.

''(B) DIRECTOR.—The term 'Director' means—

''(i) the Director of a National Laboratory;

''(ii) the Director of a single-purpose research facility; and

''(iii) the Director of a covered facility.

''(C) PROGRAM.—The term 'program' means the program established under paragraph (2).

''(2) ESTABLISHMENT.—The Secretary, acting through the Technology Transfer Coordinator appointed under section 1001(a), and in consultation with the Directors, shall establish a program to provide small business concerns with vouchers—

"(A) to achieve the goal described in subsection (a)(1)(A); and

"(B) to improve the products, services, and capabilities of small business concerns in the mission space of the Department.

"(3) VOUCHERS.—Vouchers provided under the program shall be used at National Laboratories, single-purpose research facilities, and covered facilities for—

"(A) research, development, demonstration, technology transfer, or commercial application activities; or

"(B) any other activity that the applicable Director determines appropriate.

"(4) EXPEDITED CONTRACTING.—The Secretary, in collaboration with the Directors, shall establish a streamlined approval process for expedited contracting between—

"(A) a small business concern selected to receive a voucher under the program; and

"(B) a National Laboratory, single-purpose research facility, or covered facility.

"(5) COST-SHARING REQUIREMENT.—In carrying out the program, the Secretary shall require cost-sharing in accordance with section 988.

''(6) ANNUAL REPORT.—The Secretary shall include in the annual report required under section 1001(h)(2) a description of the implementation and progress of the program, including, for the year covered by the report, the number and locations of small business concerns that have received vouchers under the program.''; and

(4) in subsection (e) (as so redesignated), by striking ''this section'' and all that follows through the period at the end and inserting ''subsection (c) $25,000,000 for each of fiscal years 2021 through 2025.''.

SEC. 204. ENTREPRENEURIAL LEAVE PROGRAM.

(a) IN GENERAL.—The Secretary shall delegate to each Director of a National Laboratory the authority to carry out an entrepreneurial leave program (referred to in this section as a ''leave program'') to allow employees of the National Laboratory to take, for the purpose of advancing the commercial application of energy and related technologies relevant to the mission of the Department, and notwithstanding any provision of title 5, United States Code, or any regulation issued under that title—

(1) a full leave of absence, with the option to return to the same or comparable position not more

than 3 years after the date on which the full leave of absence begins; or

(2) a partial leave of absence.

(b) TERMINATION AUTHORITY.—Notwithstanding any provision of title 5, United States Code, or any regulation issued under that title, each Director of a National Laboratory may remove any National Laboratory employee who participates in a leave program if the employee is found to violate the terms by which that employee is employed.

(c) LICENSING.—To reduce barriers to participation in a leave program, the Secretary shall require each Director of a National Laboratory to establish streamlined mechanisms for facilitating the licensing of technology that is the focus of a National Laboratory employee who participates in a leave program.

(d) REPORT.—The Secretary shall include in each updated technology transfer execution plan submitted under section 1001(h)(2) of the Energy Policy Act of 2005 (42 U.S.C. 16391(h)(2)) information on the implementation of the leave program, including, for the year covered by the report—

(1) the number of employees that have participated in the program at each National Laboratory; and

(2) the number of employees that have taken a permanent leave of absence.

SEC. 205. OUTSIDE EMPLOYMENT AND ACTIVITIES FOR NATIONAL LABORATORY EMPLOYEES.

(a) IN GENERAL.—The Secretary shall delegate to each Director of a National Laboratory the authority to allow an employee of that National Laboratory, notwithstanding any provision of title 5, United States Code, or any regulation issued under that title—

(1) to engage in and receive compensation for outside employment, including providing consulting services, relating to licensing technologies developed at a National Laboratory or an area of expertise of the employee at the National Laboratory;

(2) to engage in other outside activities related to the area of expertise of the employee at the National Laboratory; and

(3) in the course of that outside employment or activity, to access the National Laboratories under the same contracting mechanisms as nonlaboratory employees and entities, in accordance with appropriate conflict of interest protocols.

(b) REQUIREMENTS.—If a Director of National Laboratory elects to use the authority delegated under subsection (a), the Director, or a designee, shall—

(1) require employees to obtain approval from the Director or the designee prior to engaging in the outside employment or activity described in that subsection;

(2) develop and require appropriate conflict of interest protocols for employees that engage in that outside employment or activity; and

(3) maintain the authority to terminate an employee engaging in that outside employment or activity if the employee is found to violate the applicable terms of employment, including conflict of interest protocols.

(c) RESTRICTIONS.—An employee of a National Laboratory engaging in outside employment or activity permitted under subsection (a) may not, in the course of or due to that outside employment or activity—

(1) sacrifice, hamper, or impede the duties of the employee at the National Laboratory;

(2) use National Laboratory equipment, property, or resources unless that use is in accordance with a National Laboratory contracting mechanism, such as a cooperative research and development agreement or a strategic partnership project, under which all relevant conflict of interest requirements apply; or

(3) use the position of the employee at a National Laboratory to provide an unfair competitive advantage to an outside employer or startup activity.

(d) REPORT.—The Secretary shall include in each updated technology transfer execution plan submitted under section 1001(h)(2) of the Energy Policy Act of 2005 (42 U.S.C. 16391(h)(2)) information on the use of the authority delegated under this section.

TITLE III—DEPARTMENT OF ENERGY MODERNIZATION

SEC. 301. MANAGEMENT OF LARGE DEMONSTRATION PROJECTS.

(a) DEFINITION OF COVERED PROJECT.—In this section, the term ''covered project'' means a Department demonstration project that receives or is eligible to receive not less than $50,000,000 in funding from the Department.

(b) ESTABLISHMENT.—The Secretary, in coordination with the heads of relevant Department program offices, shall establish a program to conduct project management and oversight of covered projects, including by—

(1) conducting evaluations of covered project proposals prior to selection of a project for funding;

(2) conducting independent oversight of the execution of a covered project after funding has been awarded for that project; and

(3) ensuring a balanced portfolio of investments in clean energy technology demonstration projects.

(c) DUTIES.—The head of the program established under subsection (b), in coordination with the heads of relevant Department program offices, shall—

(1) evaluate covered project proposals, including scope, technical specifications, maturity of design, funding profile, estimated costs, proposed schedule, proposed technical and financial milestones, and potential for commercial success based on economic and policy projections;

(2) develop independent cost estimates of covered project proposals, if appropriate;

(3) recommend to the Director of a program office whether to fund a covered project proposal, as appropriate;

(4) oversee the execution of covered projects, including reconciling estimated costs compared to actual costs;

(5) conduct reviews of ongoing covered projects, including—

(A) evaluating the progress of a covered project based on the proposed schedule and technical and financial milestones; and

(B) providing those evaluations to the Secretary; and

(6) assess lessons learned and implement improvements to evaluate and oversee covered projects.

(d) PROJECT TERMINATION.—Notwithstanding any other provision of law, if a covered project receives an unfavorable review under subsection (c)(5), the Director of the Department program office funding that project, or a designee of that Director, may cease funding the project and reallocate the remaining funds to a new or existing covered project carried out by that program office.

(e) EMPLOYEES.—To carry out the program established under subsection (b), the Secretary—

(1) shall appoint at least 2 full-time employees; and

(2) may hire personnel pursuant to section 306.

(f) COORDINATION.—In carrying out the program established under subsection (b), the Secretary shall coordinate with—

(1) project management and acquisition management entities within the Department, including the Office of Project Management; and

(2) professional organizations in project management, construction, cost estimation, and other relevant fields.

(g) REPORT BY SECRETARY.—The Secretary shall include in each updated technology transfer execution plan submitted under section 1001(h)(2) of the Energy Policy Act of 2005 (42 U.S.C. 16391(h)(2)) information on the implementation of and progress made under the program established under subsection (b), including, for the year covered by the report—

(1) the covered projects under the purview of the program; and

(2) the review of each covered project under subsection (c)(5).

(h) REPORT BY COMPTROLLER GENERAL.—Not later than 3 years after the date of enactment of this Act, the Comptroller General of the United States shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science, Space, and Technology of the House of Representatives an evaluation of the operation of the program established under subsection (b), including—

(1) the processes and procedures used to evaluate covered project proposals and oversee covered projects; and

(2) any recommended changes to the program, including to—

(A) the processes and procedures described in paragraph (1); and

(B) the structure of the program, for the purpose of better carrying out the program.

SEC. 302. STREAMLINING PRIZE COMPETITIONS.

Section 1008 of the Energy Policy Act of 2005 (42 U.S.C. 16396) is amended—

(1) by redesignating subsections (e) and (f) as subsections (g) and (f), respectively, and moving those subsections so as to appear in alphabetical order; and

(2) by inserting after subsection (d) the following:

''(e) COORDINATION.—In carrying out a program under subsection (a), and for any prize competition carried out under section 24 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3719), the Secretary shall—

''(1) designate at least 1 full-time employee to serve as a Department-wide point of contact for the program or prize competition, as applicable;

''(2) issue Department-wide guidance on the design, development, and implementation of a prize competition;

''(3) collect and disseminate best practices on the design and administration of a prize competition;

''(4) streamline contracting mechanisms for the implementation of a prize competition; and

''(5) provide training and prize competition design support, as necessary, to Department staff to develop prize competitions and challenges.

''(f) REPORT.—The Secretary shall include in the annual report required under section 1001(h)(2) a description of, with respect to the programs carried out under subsection (a) and prize competitions carried out under section 24 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3719), for each year covered by the report—

''(1) each program and prize competition carried out;

''(2) the total amount of prizes awarded and the total amount of private sector contributions, if applicable;

''(3) the methods used for solicitation and evaluation; and

''(4) the manner in which each prize competition advances the mission of the Department.''.

SEC. 303. EXTENSION OF OTHER TRANSACTION AUTHORITY.

Section 646(g)(10) of the Department of Energy Organization Act (42 U.S.C. 7256(g)(10)) is amended by striking ''2020'' and inserting ''2030''.

SEC. 304. MILESTONE-BASED DEMONSTRATION PROJECTS.

(a) IN GENERAL.—Pursuant to section 646(g) of the Department of Energy Organization Act (42 U.S.C. 7256(g)), the Secretary shall establish a program under which the Secretary shall award funds to eligible entities, as determined by the Secretary, to carry out milestone-based demonstration projects that require technical and financial milestones to be met before the eligible entity is awarded funds.

(b) PROPOSALS.—An eligible entity shall submit to the Secretary a proposal to carry out a milestone-based demonstration project at such time, in such manner, and containing such information as the Secretary may require, including—

(1) a business plan, which may include a plan for scalable manufacturing;

(2) a plan for raising private sector investment; and

(3) proposed technical and financial milestones, including estimated project timelines and total costs.

(c) AWARDS.—

(1) IN GENERAL.—The Secretary shall award funds of a predetermined amount under subsection (a)—

(A) for projects that successfully meet project milestones; and

(B) for expenses determined reimbursable by the Secretary, in accordance with terms negotiated for the award of funds.

(2) COST RESPONSIBILITY.—An eligible entity that receives funds under subsection (a) shall be responsible for the costs of the milestone-based demonstration project until—

(A) the applicable technical and financial milestones are achieved; or

(B) reimbursable expenses are reviewed and verified by the Department.

(3) FAILURE TO MEET MILESTONES.—If an eligible entity that receives funds under subsection (a) does not meet the milestones of the milestone-based demonstration project, the Secretary or a designee may cease funding the project and reallocate the re-

maining funds to new or existing milestone-based demonstration projects.

(d) PROJECT MANAGEMENT.—In carrying out the program established under subsection (a), including in assessing the completion of milestones in each milestone-based demonstration project awarded funds under the program, the Secretary—

(1) shall consult with experts that represent diverse perspectives and professional experiences, including experts from the private sector, to ensure a complete and thorough review;

(2) shall communicate regularly with selected eligible entities; and

(3) may allow for flexibilities in adjusting the technical and financial milestones of a milestone-based demonstration project as the demonstration project matures.

(e) COST-SHARING.—Each milestone-based demonstration project awarded funds under subsection (a) shall require cost-sharing in accordance with section 988 of the Energy Policy Act of 2005 (42 U.S.C. 16352).

(f) REPORT.—The Secretary shall include in each updated technology transfer execution plan submitted under section 1001(h)(2) of the Energy Policy Act of 2005 (42 U.S.C. 16391(h)(2)) information on the implementation

of and progress made under the program established under subsection (a), including, for the year covered by the report, each milestone-based demonstration project awarded funds under the program.

SEC. 305. COST-SHARING.

(a) TERMINATION DATE EXTENSION FOR INSTITUTIONS OF HIGHER EDUCATION AND OTHER NONPROFIT INSTITUTIONS.—Section 988(b)(4)(B) of the Energy Policy Act of 2005 (42 U.S.C. 16352(b)(4)(B)) is amended by striking ''this paragraph'' and inserting ''the Energizing Technology Transfer Act of 2020''.

(b) REPORTS.—Section 108(b) of the Department of Energy Research and Innovation Act (Public Law 115–246; 132 Stat. 3134) is amended by striking ''this Act'' each place it appears and inserting ''the Energizing Technology Transfer Act of 2020''.

SEC. 306. SPECIAL HIRING AUTHORITY FOR SCIENTIFIC, ENGINEERING, AND PROJECT MANAGEMENT PERSONNEL.

(a) IN GENERAL.—Without regard to the civil service laws, the Secretary may—

(1) make appointments of scientific, engineering, and professional personnel to assist the Department in meeting specific project or research needs;

(2) fix the basic pay of an employee appointed under paragraph (1) at a rate to be determined by the Secretary, but not in excess of the rate of pay for level II of the Executive Schedule under section 5313 of title 5, United States Code; and

(3) pay an employee appointed under paragraph (1) payments in addition to basic pay, except that the total amount of additional payments for any 12-month period shall not exceed the lesser of—

(A) $25,000;

(B) the amount equal to 25 percent of the annual rate of basic pay of that employee; and

(C) the amount of the limitation in a calendar year under section 5307(a)(1) of title 5, United States Code.

(b) TERM.—With respect to an employee appointed under subsection (a)(1)—

(1) the term of such an employee shall be for a period that is not longer than 3 years, unless a longer term is explicitly authorized under law; and

(2) notwithstanding any provision of title 5, United States Code, or any regulation issued under that title, the Secretary may remove any such employee at any time based on—

(A) the performance of the employee; or

(B) changing project or research needs of the Department.

TITLE IV—REPORTS

SEC. 401. UPDATED TECHNOLOGY TRANSFER EXECUTION PLAN REPORT.

Section 1001(h)(2) of the Energy Policy Act of 2005 (42 U.S.C. 16391(h)(2)) is amended by striking ''Congress'' and all that follows through the period at the end and inserting the following: ''Congress—

''(A) an updated execution plan; and

''(B) a report that, for the year covered by the report—

''(i) describes progress toward meeting the goals set forth in the execution plan;

''(ii) describes the funds expended under subsection (e); and

''(iii) contains any other information required to be included in the report—

''(I) under this title; and

''(II) under the Energizing Technology Transfer Act of 2020.''.

SEC. 402. REPORT ON SHORT- AND LONG-TERM METRICS.

Not later than 3 years after the date of enactment of this Act, and every 3 years thereafter, the Secretary

shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report that, with respect to each program established under sections 101 and 202—

(1) includes an evaluation of the program; and

(2) describes the extent to which the program is achieving the purposes of the program, based on relevant short-term and long-term metrics, including any metrics developed under the program, if applicable.

SEC. 403. REPORT ON TECHNOLOGY TRANSFER GAPS.

Not later than 3 years after the date of enactment of this Act, the Secretary shall—

(1) seek to enter into an agreement with the National Academies of Sciences, Engineering, and Medicine to study existing programmatic gaps in the commercial application of technologies among National Laboratories under programs supported by the Department; and

(2) submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Science, Space, and Technology of the House of

Representatives a report on the findings of the study under paragraph (1).

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