114TH CONGRESS
1ST SESSION

S. 2287

To amend the Department of Energy Organization Act to improve technology transfer at the Department of Energy by reducing bureaucratic barriers to industry, entrepreneurs, and small businesses, as well as ensure that public investments in research and development generate the greatest return on investment for taxpayers, and for other purposes.

IN THE SENATE OF THE UNITED STATES

NOVEMBER 17, 2015

Mr. UDALL 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 amend the Department of Energy Organization Act to improve technology transfer at the Department of Energy by reducing bureaucratic barriers to industry, entrepreneurs, and small businesses, as well as ensure that public investments in research and development generate the greatest return on investment for taxpayers, 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 ''Accelerating Technology Transfer to Advance Innovation for the Nation Act of 2015'' or the ''ATTAIN Act of 2015''.

SEC. 2. DEFINITIONS.

In this Act:

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

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

SEC. 3. OFFICE OF TECHNOLOGY TRANSITIONS.

(a) IN GENERAL.—Title II of the Department of Energy Organization Act (42 U.S.C. 7131 et seq.) is amended by adding at the end the following:

''SEC. 218. OFFICE OF TECHNOLOGY TRANSITIONS.

''(a) IN GENERAL.—There is established an Office of Technology Transitions (referred to in this section as the 'Office'), based in Washington, DC, and under the direction of the Technology Transfer Coordinator appointed under section 1001(a) of the Energy Policy Act of 2005 (42 U.S.C. 16391(a)), to improve the coordination and use of technology transfer resources of the Department.

''(b) DUTIES.—The Office shall—

''(1) improve processes and partnership procedures for technology transfer through—

''(A) within the Department and National Laboratories, the innovative use of existing mechanisms (such as cooperative research and development agreements) and the development of new mechanisms to improve the ability of the Department and National Laboratories to contract and partner with industry and business to implement technology transfer activities;

''(B) the streamlining and improvement of the review and approval process at all levels, for existing and future technology transfer agreements (including cooperative research and development agreements) and the use of best practices and process performance improvement evaluation to reduce the time required to enable the technology transfer activities of the Department and National Laboratories to engage and cooperate with industry and business at the speed of opportunity; and

''(C) in connection with other Federal agencies, other actions that improve the operational efficiency and technology transfer effectiveness of the Department;

''(2) improve the sharing and coordination of technology transfer information and resources

through actions such as the establishment of a single website that can be used for technology transfer within the Department;

''(3) administer Lab-Corps in accordance with section 219;

''(4) administer the technology transfer investment initiative in accordance with section 220;

''(5) improve the effectiveness of small business innovation research programs and small business technology transfer programs by increasing coordination and use of those programs across the Department and National Laboratories;

''(6) coordinate with the Technology Transfer Working Group established under subsection (d) of section 1001 of the Energy Policy Act of 2005 (42 U.S.C. 16391), to carry out the duties of the Technology Transfer Working Group as described in that subsection;

''(7) encourage the use of alternative data rights provisions by improving procurements language to enable the Department and National Laboratories to work with third parties with whom the Department and National Laboratories have issued a subcontract, to enable—

''(A) the third party to have full title, limited title, or partial use of any software or data authored by the Department or National Laboratories, if necessary and applicable; and

''(B) each relevant group to coordinate and cooperate more effectively;

''(8) identify areas to improve processes and cooperation between university, foundation, nonprofit, and industry partners (along with the Department and National Laboratories) to facilitate identification of an effective process that enhances opportunities for technology transfer and commercialization by—

''(A) encouraging and leveraging research and development funds dedicated to complementary projects;

''(B) facilitating streamlined research agreements;

''(C) encouraging cost-effective intellectual property management and fulfilling equal opportunity; and

''(D) minimizing potential for conflicts in a manner that increases the access of participants in Lab-Corps to scientists and engineers of National Laboratories;

''(9) coordinate with the Small Business Innovation Research Program (SBIR) and Small Business Technology Transfer Program (STTR) of the Department—

''(A) to maximize the impact of technology transfer opportunities and activities; and

''(B) to implement strategic changes that are mutually beneficial to the Office and those Programs;

''(10) carry out technology transfer evaluations, measurement, and reporting functions of the Department;

''(11) conduct a biennial evaluation of the progress and impact of the Office that includes information relating to the economic impact of businesses that participated in technology transfer programs, which shall include a description of—

''(A) the number of jobs created at, and the survival and growth rate of, each start-up business that participated in a technology transfer program, covering a period from the inception of the start-up business to the earlier of—

''(i) 5 years after the inception of the start-up business; or

"(ii) the date of the merger of the start-up business or the acquisition of the start-up business by another company;

"(B) the average time required to complete each phase of cooperative research and development agreements and other technology transfer-related processes;

"(C) the effectiveness of local and regional partnerships; and

"(D) other key metrics determined by the Secretary and the National Nuclear Security Administration;

"(12) collect data regarding the technology transfer activities and programs of the Department (in consultation with the Secretary and the Technology Transfer Working Group established under section 1001(d) of the Energy Policy Act of 2005 (42 U.S.C. 16391(d))), subject to the safeguards, protections, and restrictions on disclosure of information described in section 12 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a);

"(13) submit the information described in paragraphs (10), (11), and (15)(A) to—

"(A) the Secretary for inclusion in appropriate required reports to Congress (including the reports required under section 1001(g)(2) of the Energy Policy Act of 2005 (42 U.S.C. 16391(g)(2))); and

"(B) the Secretary of Commerce for inclusion in appropriate required reports to Congress (including the reports required under sections 5(c)(7), 11(g)(2), and 26(n) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3704(c)(7), 3710(g)(2), 3721(n)));

"(14) consolidate resources and reduce bureaucratic barriers within the Department and become the office responsible for the coordination, planning, monitoring, and implementation of sections 1001, 1002, 1003, and 1004 of title X of the Energy Policy Act of 2005 (42 U.S.C. 16391, 16392, 16393, 16394), to assist the Department and National Laboratories in carrying out technology transfer and small business activities;

"(15) administer the Technology Commercialization Fund established under section 1001(e) of the Energy Policy Act of 2005 (42 U.S.C. 16391(e)), including—

''(A) the development of a multiyear plan for the use of the Fund; and

''(B) the coordination with other agencies of the Department on the use of the Fund;

''(16) except as otherwise provided in this Act, carry out the research, development, demonstration, and commercial application programs, projects, and activities authorized by this Act in accordance with—

''(A) the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.);

''(B) the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901 et seq.);

''(C) the Energy Policy Act of 1992 (42 U.S.C. 13201 et seq.);

''(D) the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.);

''(E) chapter 18 of title 35, United States Code (commonly known as the 'Bayh-Dole Act'); and

''(F) any other Act under which the Secretary is authorized to carry out the programs, projects, and activities;

''(17) recommend to the Secretary changes in policies to better protect information collected by the Department or National Laboratories from recipients of financial assistance awards or technology transfer partners (including parties to cooperative research and development agreements or other similar agreements) including—

''(A) plans for commercialization of technologies developed under an award or agreement;

''(B) business plans;

''(C) technology-to-market plans;

''(D) market studies; and

''(E) cost and performance models;

''(18) connect and coordinate each Office of Research and Technology Applications at the National Laboratories established under section 11(b) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710(b)); and

''(19) perform such other duties as are determined appropriate by the Secretary.

''(c) RESULTS OF EVALUATION AND ANALYSIS.—

''(1) IN GENERAL.—The Secretary shall use the reviews, evaluations, and reports conducted under this section to improve and enhance—

''(A) the technology transfer programs and activities of the Department; and

''(B) each Office of Research and Technology Applications at the National Laboratories and the National Nuclear Security Administration to promote the technology transfer goals of the Department.

''(2) NATIONAL LABORATORIES.—

''(A) IN GENERAL.—The Department shall work with each National Laboratory to incorporate the evaluation and impact of technology transfer activities in the annual performance evaluation and measurement plan of the National Laboratory to enable significant progress to be rewarded and limited progress to be improved annually.

''(B) ADMINISTRATION.—The evaluation process under this paragraph shall—

''(i) focus on the performance of each National Laboratory individually; and

''(ii) compare the performance of each National Laboratory during the applicable and previous year.

''(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this section.''.

(b) CONFORMING CHANGES TO OFFICE OF TECHNOLOGY TRANSITIONS ESTABLISHED BY SECRETARY.—The Secretary shall conform the Office of Technology Transitions of the Department (as in existence on the day before the date of enactment of this Act) with section 218 of the Department of Energy Organization Act (as added by subsection (a)).

SEC. 4. LAB-CORPS.

Title II of the Department of Energy Organization Act (42 U.S.C. 7131 et seq.) (as amended by section 3(a)) is amended by adding at the end the following:

''SEC. 219. LAB-CORPS.

''(a) ESTABLISHMENT.—

''(1) IN GENERAL.—The Secretary shall establish a Lab-Corps, modeled after the I-Corps of the National Science Foundation, to support investments in entrepreneurs, mentors, and principal investigators.

''(2) GOALS.—The goal of the Lab-Corps is to invest in—

''(A) market assessment; and

''(B) increasing industry and small business access to intellectual property and core capabilities of the Department and National Laboratories.

''(b) TEAMS.—

''(1) IN GENERAL.—The Secretary shall establish in the Lab-Corps teams composed of—

''(A) entrepreneurs who possess relevant technical knowledge and a commitment to investigate the commercial applications of technology innovation;

''(B) mentors who are experienced entrepreneurs, with technology, marketing, commercialization, or other relevant expertise to assist teams in the development of the team and throughout the learning process in a manner similar to the Senior Corps; and

''(C) principal investigators who serve as technical lead and project managers.

''(2) COMPETITIVE PROCESS.—Each team shall be selected and assembled through a competitive process.

''(3) OFFICES OF RESEARCH AND TECHNOLOGY APPLICATIONS.—

''(A) IN GENERAL.—Each team shall be hosted by an Office of Research and Technology Applications at the National Laboratories established under section 11(b) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710(b)).

''(B) DUTIES.—Each applicable Office of Research and Technology Applications shall monitor and administer participation in the program in accordance with this section.

''(4) DIVERSITY.—The Secretary shall ensure, to the maximum extent practicable, the diversity of teams established under this subsection.

''(c) TECHNOLOGY COMMERCIALIZATION CHALLENGES.—

''(1) IN GENERAL.—The Secretary may establish and participate in technology commercialization challenges.

''(2) ADMINISTRATION.—The Secretary may use a technology commercialization challenge—

''(A) to leverage the core strengths of a National Laboratory and allow the National Laboratory to focus on a specific topic; and

''(B) to create collaborative public-private partnerships that address challenges identified

by the industry or National Laboratory technology transfer working groups.

''(C) SMALL ENTERPRISES.—The Secretary and the Administrator of the Small Business Administration shall ensure that at least 80 percent of the businesses participating in the Lab-Corps are smaller enterprises (as defined by the Administrator) that are located in diverse regional geographic areas established under section 220(d)(3).

''(d) COORDINATION.—

''(1) IN GENERAL.—The Office of Technology Transitions established by section 218 (referred to in this subsection as the 'Office') shall work with each Office of Research and Technology Applications at the National Laboratories—

''(A) to develop information sharing and coordinate resources to enable coordination and competition between members of Lab-Corps teams, including a coordination platform that leverages existing elements of social media and networking to connect individuals and teams in the exchange of information and ideas; and

''(B) to connect follow on-funding and other resources with successful start-ups through actions such as—

''(i) inviting successful teams or projects to participate in an alumni network to reinvest in the next generation of start-ups; and

''(ii) arranging opportunities for successful start-ups to connect with programs that are not administered by the Department or the Small Business Administration to promote the growth of business.

''(2) NONPROFIT ENTITIES.—

''(A) IN GENERAL.—The Office shall partner with foundations and nonprofit entities with similar technology transfer and entrepreneurship priorities and goals to assist in carrying out this section.

''(B) ACTIVITIES.—The partnerships may be established to carry out—

''(i) coordination, planning, and volunteer activities that do not involve the transfer of funding between partners; or

''(ii) competitively solicited partnership agreements—

''(I) to enable foundations and nonprofit entities to apply for funding to assist in carrying out Department activities; or

''(II) to provide funding to augment existing Department activities relating specifically to common technology transfer and entrepreneurship priorities and goals.

''(e) FUNDING.—The Secretary may use to carry out this section—

''(1) funding made available to carry out—

''(A) the Small Business Act (15 U.S.C. 631 et seq.); or

''(B) section 1001 of the Energy Policy Act of 2005 (42 U.S.C. 16391); and

''(2) any other funds that are made available to carry out this section.''.

SEC. 5. TECHNOLOGY TRANSFER INVESTMENT INITIATIVE.

Title II of the Department of Energy Organization Act (42 U.S.C. 7131 et seq.) (as amended by section 4) is amended by adding at the end the following:

"SEC. 220. TECHNOLOGY TRANSFER INVESTMENT INITIATIVE.

''(a) IN GENERAL.—The Secretary and the Administrator of the Small Business Administration (referred to in this section as the 'Administrator') shall jointly establish and carry out a Technology Transfer Investment Initiative (referred to in this section as the 'Initiative').

''(b) PARTNERSHIP.—To carry out the Initiative, the Secretary shall enter into a memorandum of understanding with the Administrator to coordinate a partnership program carried out by—

''(1) the Office of Technology Transitions established by section 218 (referred to in this section as the 'Office'); and

''(2) the Small Business Investment Company (referred to in this section as 'SBIC') Program of the Small Business Administration.

''(c) GOAL.—The goal of the partnership program shall be to leverage the strengths of the SBIC program to benefit the Lab-Corps established under section 219(a) completing the Department program.

''(d) TECHNOLOGY TRANSFER INVESTMENT INITIATIVE.—

''(1) SELECTION.—The Administrator, in consultation with the Secretary, shall solicit SBIC participation in the technology transfer investment ini-

tiative of the Small Business Administration and the Department.

''(2) PARTICIPATION.—A SBIC that agrees or is selected to participate in technology transfer investment initiative shall—

''(A) regularly review proposals created by Lab-Corps teams for possible investment;

''(B) assess each proposal against the criteria established by the SBIC; and

''(C) comply with all provisions of law applicable to the Small Business Administration (including regulations).

''(3) REGIONAL GEOGRAPHIC AREAS.—

''(A) IN GENERAL.—The Office, in coordination with the Lab-Corps established by the Secretary under section 219, shall establish and coordinate regional geographic areas to carry out the Initiative.

''(B) LEVERAGE.—The Office and SBICs shall leverage, to the maximum extent practicable, the experience and expertise of local, State, and regional partners to efficiency and effectively implement the Initiative.''.

SEC. 6. REGIONAL ENGAGEMENT AND RESEARCH.

(a) REGIONAL FUNDING PARTNERSHIPS.—

(1) DEFINITIONS.—In this subsection:

(A) ECONOMIC DEVELOPMENT AGENCY.—The term ''economic development agency'' has the meaning given the term in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).

(B) REGIONAL ENTITY.—The term ''regional entity'' means a State, local government, economic development agency, or small- or medium-sized business.

(2) IN GENERAL.—The Secretary, after identifying barriers to the access of regional entities to cooperative research and development agreements, shall establish policies to increase that access.

(b) POST-GRADUATE RESEARCH PILOT PROGRAM.—

(1) ESTABLISHMENT.—The Secretary shall establish a pilot program, to be administered through the Office of Technology Transitions (in coordination with the Office of Energy Efficiency and Renewable Energy), to award grants to post-graduate researchers for the purpose of spinning off and licensing technology.

(2) GRANTS.—

(A) IN GENERAL.—The Secretary may award grants under the program established under paragraph (1).

(B) APPLICATION.—To be eligible for a grant under this paragraph, an applicant shall submit to the Secretary an application at such time, in such form, and containing such information as the Secretary may require.

(c) UNIVERSITY PARTNERSHIPS IN MANAGEMENT AND OPERATING CONTRACTS.—

(1) IN GENERAL.—The Secretary may include, in a management and operating contract for a National Laboratory, partnership agreements with institutions of higher education.

(2) PURPOSE.—The purpose of a partnership described in paragraph (1) is—

(A) to provide incentives to the National Laboratories (in coordination with technology transfer offices within the Department and the National Laboratories) to use technology transfer capabilities within an institution of higher education that enter into a partnership agreement under paragraph (1); and

(B) to support graduate and post-graduate researchers at the National Laboratories par-

ticipating in technology commercialization and entrepreneurship.

(3) CERTAIN COSTS ALLOWED.—The Secretary may pay to the contractor of a management and operating contract described in paragraph (1)—

(A) compensation for entering into the partnership agreement described in that paragraph; and

(B) the costs of the partnership described in that paragraph.

SEC. 7. CONFORMING AMENDMENTS TO THE ENERGY POLICY ACT OF 2005.

(a) COST SHARING.—Section 988(f) of the Energy Policy Act of 2005 (42 U.S.C. 16352(f)) is amended—

(1) in paragraph (2), by striking ''or'' after the semicolon;

(2) in paragraph (3)(B), by striking the period at the end and inserting ''; or''; and

(3) by adding at the end the following:

''(4) activities funded by the Energy Technology Commercialization Fund under section 1001(e)(1)(A).''.

(b) IMPROVED TECHNOLOGY TRANSFER OF ENERGY TECHNOLOGIES.—Section 1001(e) of the Energy Policy Act of 2005 (42 U.S.C. 16391(e)) is amended—

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

''(1) IN GENERAL.—The Secretary'';

(2) in paragraph (1) (as so designated), by striking ''used to provide'' and inserting ''used—

''(A) to fund the Lab-Corps established under section 219 of the Department of Energy Organization Act; and

''(B) to provide''; and

(3) by adding at the end the following:

''(2) COST SHARING.—The cost-sharing requirements of section 988—

''(A) do not apply to activities funded by the Energy Technology Commercialization Fund under paragraph (1)(A); and

''(B) apply to matching funds provided by the Energy Technology Commercialization Fund under paragraph (1)(B).''.

SEC. 8. GOVERNMENT ACCOUNTABILITY OFFICE REPORT.

Not later than 3 years after the date of enactment of this Act, the Comptroller General of the United States shall submit to Congress a report describing—

(1) the results of the projects developed under this Act or amendments made by this Act, including

information regarding whether activities carried out under those projects resulted in—

(A) expansion of capabilities at the National Laboratories;

(B) increased efficiency of technology transfers; or

(C) an increase in general efficiency of the National Laboratory system;

(2) efforts of the Secretary to promote technology transfer and private sector engagement at the National Laboratories; and

(3) recommendations on ways in which the Department could improve the activities described in paragraphs (1) and (2).

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