[113H5120EH]

(Original Signature of Member)

114TH CONGRESS 1ST SESSION



To improve management of the National Laboratories, enhance technology commercialization, facilitate public-private partnerships, and for other purposes.

### IN THE HOUSE OF REPRESENTATIVES

Mr. HULTGREN introduced the following bill; which was referred to the Committee on \_\_\_\_\_

### A BILL

- To improve management of the National Laboratories, enhance technology commercialization, facilitate public-private partnerships, and for other purposes.
  - 1 Be it enacted by the Senate and House of Representa-
  - 2 tives of the United States of America in Congress assembled,

### **3** SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

- 4 (a) SHORT TITLE.—This Act may be cited as the 5 "Department of Energy Laboratory Modernization and
- 6 Technology Transfer Act of 2015".
- 7 (b) TABLE OF CONTENTS.—The table of contents of
- 8 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Definitions.
- Sec. 3. Savings clause.

### TITLE I—INNOVATION MANAGEMENT AT DEPARTMENT OF ENERGY

- Sec. 101. Under Secretary for Science and Energy.
- Sec. 102. Technology transfer and transitions assessment.
- Sec. 103. Sense of Congress.
- Sec. 104. Nuclear energy innovation.

### TITLE II—CROSS-SECTOR PARTNERSHIPS AND GRANT COMPETITIVENESS

- Sec. 201. Agreements for Commercializing Technology pilot program.
- Sec. 202. Public-private partnerships for commercialization.
- Sec. 203. Inclusion of early-stage technology demonstration in authorized technology transfer activities.
- Sec. 204. Funding competitiveness for institutions of higher education and other nonprofit institutions.
- Sec. 205. Participation in the Innovation Corps program.

#### TITLE III—ASSESSMENT OF IMPACT

Sec. 301. Report by Government Accountability Office.

### 1 SEC. 2. DEFINITIONS.

2	In	this	Act:

- 3 (1) DEPARTMENT.—The term "Department"
- 4 means the Department of Energy.
- 5 (2) NATIONAL LABORATORY.—The term "Na-
- 6 tional Laboratory" means a Department of Energy

7 nonmilitary national laboratory, including—

- 8 (A) Ames Laboratory;
- 9 (B) Argonne National Laboratory;
- 10 (C) Brookhaven National Laboratory;
- 11 (D) Fermi National Accelerator Labora-

tory;

13 (E) Idaho National Laboratory;

1	(F) Lawrence Berkeley National Labora-
2	tory;
3	(G) National Energy Technology Labora-
4	tory;
5	(H) National Renewable Energy Labora-
6	tory;
7	(I) Oak Ridge National Laboratory;
8	(J) Pacific Northwest National Labora-
9	tory;
10	(K) Princeton Plasma Physics Laboratory;
11	(L) Savannah River National Laboratory;
12	(M) Stanford Linear Accelerator Center;
13	(N) Thomas Jefferson National Accel-
14	erator Facility; and
15	(O) any laboratory operated by the Na-
16	tional Nuclear Security Administration, but
17	only with respect to the civilian energy activities
18	thereof.
19	(3) Secretary.—The term "Secretary" means
20	the Secretary of Energy.
21	SEC. 3. SAVINGS CLAUSE.
22	Nothing in this Act or an amendment made by this
23	Act abrogates or otherwise affects the primary responsibil-
24	ities of any National Laboratory to the Department.

# 1 TITLE I—INNOVATION MANAGE 2 MENT AT DEPARTMENT OF 3 ENERGY

4 SEC. 101. UNDER SECRETARY FOR SCIENCE AND ENERGY.
5 (a) IN GENERAL.—Section 202(b) of the Department
6 of Energy Organization Act (42 U.S.C. 7132(b)) is

7 amended—

8 (1) by striking "Under Secretary for Science"
9 each place it appears and inserting "Under Sec10 retary for Science and Energy"; and

11 (2) in paragraph (4)—

12 (A) in subparagraph (F), by striking
13 "and" at the end;

14 (B) in subparagraph (G), by striking the
15 period at the end and inserting a semicolon;
16 and

17 (C) by inserting after subparagraph (G)18 the following:

19 "(H) establish appropriate linkages be20 tween offices under the jurisdiction of the
21 Under Secretary; and

22 "(I) perform such functions and duties as
23 the Secretary shall prescribe, consistent with
24 this section.".

25 (b) Conforming Amendments.—

 $\mathbf{5}$ 

(1) Section 3164(b)(1) of the Department of
 Energy Science Education Enhancement Act (42
 U.S.C. 7381a(b)(1)) is amended by striking "Under
 Secretary for Science" and inserting "Under Sec retary for Science and Energy".

6 (2) Section 641(h)(2) of the United States En7 ergy Storage Competitiveness Act of 2007 (42
8 U.S.C. 17231(h)(2)) is amended by striking "Under
9 Secretary for Science" and inserting "Under Sec10 retary for Science and Energy".

### 11 SEC. 102. TECHNOLOGY TRANSFER AND TRANSITIONS AS12 SESSMENT.

Not later than 1 year after the date of enactment
of this Act, and annually thereafter, the Secretary shall
transmit to the Committee on Science, Space, and Technology of the House of Representatives and the Committee
on Energy and Natural Resources of the Senate a report
which shall include—

(1) an assessment of the Department's current
ability to carry out the goals of section 1001 of the
Energy Policy Act of 2005 (42 U.S.C. 16391), including an assessment of the role and effectiveness
of the Director of the Office of Technology Transitions; and

(2) recommended departmental policy changes
 and legislative changes to section 1001 of the En ergy Policy Act of 2005 (42 U.S.C. 16391) to im prove the Department's ability to successfully trans fer new energy technologies to the private sector.

### 6 SEC. 103. SENSE OF CONGRESS.

7 It is the sense of the Congress that the Secretary
8 should encourage the National Laboratories and federally
9 funded research and development centers to inform small
10 businesses of the opportunities and resources that exist
11 pursuant to this Act.

### 12 SEC. 104. NUCLEAR ENERGY INNOVATION.

13 Not later than 180 days after the date of enactment of this Act, the Secretary, in consultation with the Na-14 15 tional Laboratories, relevant Federal agencies, and other stakeholders, shall transmit to the Committee on Science, 16 Space, and Technology of the House of Representatives 17 18 and the Committee on Energy and Natural Resources of the Senate a report assessing the Department's capabili-19 ties to authorize, host, and oversee privately funded fusion 20 21 and non-light water reactor prototypes and related dem-22 onstration facilities at Department-owned sites. For pur-23 poses of this report, the Secretary shall consider the De-24 partment's capabilities to facilitate privately-funded proto-

types up to 20 megawatts thermal output. The report shall
 address the following:

- 3 (1) The Department's safety review and over-4 sight capabilities.
- 5 (2) Potential sites capable of hosting research,
  6 development, and demonstration of prototype reac7 tors and related facilities for the purpose of reducing
  8 technical risk.
- 9 (3) The Department's and National Labora10 tories' existing physical and technical capabilities
  11 relevant to research, development, and oversight.
- (4) The efficacy of the Department's available
  contractual mechanisms, including cooperative research and development agreements, work for others
  agreements, and agreements for commercializing
  technology.
- 17 (5) Potential cost structures related to physical
  18 security, decommissioning, liability, and other long19 term project costs.

20 (6) Other challenges or considerations identified
21 by the Secretary, including issues related to poten22 tial cases of demonstration reactors up to 2
23 gigawatts of thermal output.

## TITLE II—CROSS-SECTOR PART NERSHIPS AND GRANT COM PETITIVENESS

4 SEC. 201. AGREEMENTS FOR COMMERCIALIZING TECH-5 NOLOGY PILOT PROGRAM.

6 (a) IN GENERAL.—The Secretary shall carry out the
7 Agreements for Commercializing Technology pilot pro8 gram of the Department, as announced by the Secretary
9 on December 8, 2011, in accordance with this section.

10 (b) TERMS.—Each agreement entered into pursuant 11 to the pilot program referred to in subsection (a) shall 12 provide to the contractor of the applicable National Lab-13 oratory, to the maximum extent determined to be appro-14 priate by the Secretary, increased authority to negotiate 15 contract terms, such as intellectual property rights, payment structures, performance guarantees, and multiparty 16 collaborations. 17

18 (c) ELIGIBILITY.—

(1) IN GENERAL.—Any director of a National
Laboratory may enter into an agreement pursuant
to the pilot program referred to in subsection (a).

(2) AGREEMENTS WITH NON-FEDERAL ENTITIES.—To carry out paragraph (1) and subject to
paragraph (3), the Secretary shall permit the directors of the National Laboratories to execute agree-

1	ments with a non-Federal entity, including a non-
2	Federal entity already receiving Federal funding
3	that will be used to support activities under agree-
4	ments executed pursuant to paragraph (1), provided
5	that such funding is solely used to carry out the
6	purposes of the Federal award.
7	(3) RESTRICTION.—The requirements of chap-
8	ter 18 of title 35, United States Code (commonly
9	known as the "Bayh-Dole Act") shall apply if—
10	(A) the agreement is a funding agreement
11	(as that term is defined in section 201 of that
12	title); and
13	(B) at least 1 of the parties to the funding
14	agreement is eligible to receive rights under
15	that chapter.
16	(d) SUBMISSION TO SECRETARY.—Each affected di-
17	rector of a National Laboratory shall submit to the Sec-
18	retary, with respect to each agreement entered into under
19	this section—
20	(1) a summary of information relating to the
21	relevant project;
22	(2) the total estimated costs of the project;
23	(3) estimated commencement and completion
24	dates of the project; and

	10
1	(4) other documentation determined to be ap-
2	propriate by the Secretary.
3	(e) CERTIFICATION.—The Secretary shall require the
4	contractor of the affected National Laboratory to certify
5	that each activity carried out under a project for which
6	an agreement is entered into under this section—
7	(1) is not in direct competition with the private
8	sector; and
9	(2) does not present, or minimizes, any appar-
10	ent conflict of interest, and avoids or neutralizes any
11	actual conflict of interest, as a result of the agree-
12	ment under this section.
13	(f) EXTENSION.—The pilot program referred to in
14	subsection (a) shall be extended until October 31, 2017.
15	(g) Reports.—
16	(1) Overall assessment.—Not later than 60
17	days after the date described in subsection (f), the
18	Secretary, in coordination with directors of the Na-
19	tional Laboratories, shall submit to the Committee

on Science, Space, and Technology of the House of

21 Representatives and the Committee on Energy and
22 Natural Resources of the Senate a report that—
23 (A) assesses the overall effectiveness of the
24 pilot program referred to in subsection (a);

1	(B) identifies opportunities to improve the
2	effectiveness of the pilot program;
3	(C) assesses the potential for program ac-
4	tivities to interfere with the responsibilities of
5	the National Laboratories to the Department;
6	and
7	(D) provides a recommendation regarding
8	the future of the pilot program.
9	(2) TRANSPARENCY.—The Secretary, in coordi-
10	nation with directors of the National Laboratories,
11	shall submit to the Committee on Science, Space,
12	and Technology of the House of Representatives and
13	the Committee on Energy and Natural Resources of
14	the Senate an annual report that accounts for all
15	incidences of, and provides a justification for, non-
16	Federal entities using funds derived from a Federal
17	contract or award to carry out agreements pursuant
18	to this section.
19	SEC. 202. PUBLIC-PRIVATE PARTNERSHIPS FOR COMMER-
20	CIALIZATION.
21	(a) IN GENERAL.—Subject to subsections (b) and (c),
22	the Secretary shall delegate to directors of the National
23	Laboratories signature authority with respect to any
24	agreement described in subsection (b) the total cost of

	1 -
1	which (including the National Laboratory contributions
2	and project recipient cost share) is less than \$1,000,000.
3	(b) AGREEMENTS.—Subsection (a) applies to—
4	(1) a cooperative research and development
5	agreement;
6	(2) a non-Federal work-for-others agreement;
7	and
8	(3) any other agreement determined to be ap-
9	propriate by the Secretary, in collaboration with the
10	directors of the National Laboratories.
11	(c) Administration.—
12	(1) ACCOUNTABILITY.—The director of the af-
13	fected National Laboratory and the affected con-
14	tractor shall carry out an agreement under this sec-
15	tion in accordance with applicable policies of the De-
16	partment, including by ensuring that the agreement
17	does not compromise any national security, eco-
18	nomic, or environmental interest of the United
19	States.
20	(2) CERTIFICATION.—The director of the af-
21	fected National Laboratory and the affected con-
22	tractor shall certify that each activity carried out
23	under a project for which an agreement is entered
24	into under this section does not present, or mini-
25	mizes, any apparent conflict of interest, and avoids

or neutralizes any actual conflict of interest, as a re sult of the agreement under this section.

3 (3) AVAILABILITY OF RECORDS.—On entering
4 an agreement under this section, the director of a
5 National Laboratory shall submit to the Secretary
6 for monitoring and review all records of the National
7 Laboratory relating to the agreement.

8 (4) RATES.—The director of a National Lab-9 oratory may charge higher rates for services per-10 formed under a partnership agreement entered into 11 pursuant to this section, regardless of the full cost 12 of recovery, if such funds are used exclusively to 13 support further research and development activities 14 at the respective National Laboratory.

15 (d) CONFORMING AMENDMENT.—Section 12 of the
16 Stevenson-Wydler Technology Innovation Act of 1980 (15
17 U.S.C. 3710a) is amended—

18 (1) in subsection (a)—

(A) by redesignating paragraphs (1) and
(2) as subparagraphs (A) and (B), respectively,
and indenting the subparagraphs appropriately;
(B) by striking "Each Federal agency"
and inserting the following:
"(1) IN GENERAL.—Except as provided in para-

25 graph (2), each Federal agency"; and

1	(C) by adding at the end the following:
2	"(2) EXCEPTION.—Notwithstanding paragraph
3	(1), in accordance with section 202(a) of the Depart-
4	ment of Energy Laboratory Modernization and
5	Technology Transfer Act of 2015, approval by the
6	Secretary of Energy shall not be required for any
7	technology transfer agreement proposed to be en-
8	tered into by a National Laboratory of the Depart-
9	ment of Energy, the total cost of which (including
10	the National Laboratory contributions and project
11	recipient cost share) is less than \$1,000,000."; and
12	(2) in subsection (b), by striking "subsection
13	(a)(1)" each place it appears and inserting "sub-
14	section (a)(1)(A)".
15	SEC. 203. INCLUSION OF EARLY-STAGE TECHNOLOGY DEM-
16	ONSTRATION IN AUTHORIZED TECHNOLOGY
17	TRANSFER ACTIVITIES.
18	Section 1001 of the Energy Policy Act of 2005 (42 $$
19	U.S.C. 16391) is amended by—
20	(1) redesignating subsection $(g)$ as subsection
21	(h); and
22	(2) inserting after subsection (f) the following:
23	"(g) Early-Stage Technology Demonstra-
24	TION.—The Secretary shall permit the directors of the Na-
25	tional Laboratories to use funds authorized to support

technology transfer within the Department to carry out
 early-stage and pre-commercial technology demonstration
 activities to remove technology barriers that limit private
 sector interest and demonstrate potential commercial ap plications of any research and technologies arising from
 National Laboratory activities.".

7 SEC. 204. FUNDING COMPETITIVENESS FOR INSTITUTIONS

## 8 OF HIGHER EDUCATION AND OTHER NON9 PROFIT INSTITUTIONS.

Section 988(b) of the Energy Policy Act of 2005 (42
U.S.C. 16352(b)) is amended—

(1) in paragraph (1), by striking "Except as
provided in paragraphs (2) and (3)" and inserting
"Except as provided in paragraphs (2), (3), and
(4)"; and

16 (2) by adding at the end the following:

17 "(4) EXEMPTION FOR INSTITUTIONS OF HIGH18 ER EDUCATION AND OTHER NONPROFIT INSTITU19 TIONS.—

"(A) IN GENERAL.—Paragraph (1) shall
not apply to a research or development activity
performed by an institution of higher education
or nonprofit institution (as defined in section 4
of the Stevenson-Wydler Technology Innovation
Act of 1980 (15 U.S.C. 3703)).

1 "(B) TERMINATION DATE.—The exemp-2 tion under subparagraph (A) shall apply during 3 the 6-year period beginning on the date of en-4 actment of this paragraph.". 5 SEC. 205. PARTICIPATION IN THE INNOVATION CORPS PRO-6 GRAM. 7 The Secretary may enter into an agreement with the 8 Director of the National Science Foundation to enable re-9 searchers funded by the Department to participate in the National Science Foundation Innovation Corps program. 10 TITLE III—ASSESSMENT OF 11

**IMPACT** 12

#### SEC. 301. REPORT BY GOVERNMENT ACCOUNTABILITY OF-13 14 FICE.

15 Not later than 3 years after the date of enactment 16 of this Act, the Comptroller General of the United States 17 shall submit to Congress a report—

18 (1) describing the results of the projects devel-19 oped under sections 201, 202, and 203, including in-20 formation regarding—

21 (A) partnerships initiated as a result of 22 those projects and the potential linkages pre-23 sented by those partnerships with respect to na-24 tional priorities and other taxpayer-funded re-25 search; and

1	(B) whether the activities carried out
2	under those projects result in—
3	(i) fiscal savings;
4	(ii) expansion of National Laboratory
5	capabilities;
6	(iii) increased efficiency of technology
7	transfers; or
8	(iv) an increase in general efficiency
9	of the National Laboratory system; and
10	(2) assess the scale, scope, efficacy, and impact
11	of the Department's efforts to promote technology
12	transfer and private sector engagement at the Na-
13	tional Laboratories, and make recommendations on
14	how the Department can improve these activities.