

Calendar No. 410

115TH CONGRESS
2D SESSION

S. 79

[Report No. 115–246]

To provide for the establishment of a pilot program to identify security vulnerabilities of certain entities in the energy sector.

IN THE SENATE OF THE UNITED STATES

JANUARY 10, 2017

Mr. KING (for himself, Mr. RISCH, Mr. HEINRICH, Ms. COLLINS, and Mr. CRAPO) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

MAY 10, 2018

Reported by Ms. MURKOWSKI, with an amendment

[Strike out all after the enacting clause and insert the part printed in *italic*]

A BILL

To provide for the establishment of a pilot program to identify security vulnerabilities of certain entities in the energy sector.

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.**

4 ~~This Act may be cited as the “Securing Energy Infra-~~
5 ~~structure Act”.~~

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) **COVERED ENTITY.**—The term “covered en-
4 tity” means an entity identified pursuant to section
5 9(a) of Executive Order 13636 of February 12,
6 2013 (78 Fed. Reg. 11742) relating to identification
7 of critical infrastructure where a cybersecurity inci-
8 dent could reasonably result in catastrophic regional
9 or national effects on public health or safety, eco-
10 nomic security, or national security.

11 (2) **EXPLOIT.**—The term “exploit” means a
12 software tool designed to take advantage of a secu-
13 rity vulnerability.

14 (3) **INDUSTRIAL CONTROL SYSTEM.**—

15 (A) **IN GENERAL.**—The term “industrial
16 control system” means an operational tech-
17 nology used to measure, control, or manage in-
18 dustrial functions.

19 (B) **INCLUSIONS.**—The term “industrial
20 control system” includes supervisory control
21 and data acquisition systems, distributed con-
22 trol systems, and programmable logic or embed-
23 ded controllers.

24 (4) **NATIONAL LABORATORY.**—The term “Na-
25 tional Laboratory” has the meaning given the term

1 in section 2 of the Energy Policy Act of 2005 (42
2 U.S.C. 15801).

3 (5) PROGRAM.—The term “Program” means
4 the pilot program established under section 2.

5 (6) SECRETARY.—The term “Secretary” means
6 the Secretary of Energy.

7 (7) SECURITY VULNERABILITY.—The term “se-
8 curity vulnerability” means any attribute of hard-
9 ware, software, process, or procedure that could en-
10 able or facilitate the defeat of a security control.

11 **SEC. 3. PILOT PROGRAM FOR SECURING ENERGY INFRA-**
12 **STRUCTURE.**

13 Not later than 180 days after the date of enactment
14 of this Act, the Secretary shall establish a 2-year control
15 systems implementation pilot program within the National
16 Laboratories for the purposes of—

17 (1) partnering with covered entities in the en-
18 ergy sector (including critical component manufac-
19 turers in the supply chain) that voluntarily partici-
20 pate in the Program to identify new classes of secu-
21 rity vulnerabilities of the covered entities; and

22 (2) researching, developing, testing, and imple-
23 menting technology platforms and standards, in
24 partnership with covered entities, to isolate and de-
25 fend industrial control systems of covered entities

1 from security vulnerabilities and exploits in the most
 2 critical systems of the covered entities, including—

3 (A) analog and non-digital control systems;

4 (B) purpose-built control systems; and

5 (C) physical controls.

6 **SEC. 4. WORKING GROUP.**

7 (a) **ESTABLISHMENT.**—The Secretary shall establish
 8 a working group—

9 (1) to evaluate the technology platforms and
 10 standards used in the Program under section 3(2);
 11 and

12 (2) to develop a national cyber-informed engi-
 13 neering strategy to isolate and defend covered enti-
 14 ties from security vulnerabilities and exploits in the
 15 most critical systems of the covered entities.

16 (b) **MEMBERSHIP.**—The working group established
 17 under subsection (a) shall be composed of not fewer than
 18 10 members, to be appointed by the Secretary, at least
 19 1 member of which shall represent each of the following:

20 (1) The Department of Energy.

21 (2) The energy industry, including electric utili-
 22 ties and manufacturers recommended by the Energy
 23 Sector coordinating councils.

24 (3)(A) The Department of Homeland Security;

25 or

1 ~~(B) the Industrial Control Systems Cyber~~
2 ~~Emergency Response Team.~~

3 ~~(4) The North American Electric Reliability~~
4 ~~Corporation.~~

5 ~~(5) The Nuclear Regulatory Commission.~~

6 ~~(6)(A) The Office of the Director of National~~
7 ~~Intelligence; or~~

8 ~~(B) the intelligence community (as defined in~~
9 ~~section 3 of the National Security Act of 1947 (50~~
10 ~~U.S.C. 3003)).~~

11 ~~(7)(A) The Department of Defense; or~~

12 ~~(B) the Assistant Secretary of Defense for~~
13 ~~Homeland Security and America's Security Affairs.~~

14 ~~(8) A State or regional energy agency.~~

15 ~~(9) A national research body or academic insti-~~
16 ~~tution.~~

17 ~~(10) The National Laboratories.~~

18 **SEC. 5. REPORT.**

19 Not later than 2 years after the date on which funds
20 are first disbursed under the Program, the Secretary shall
21 submit to the appropriate committees of Congress a final
22 report that—

23 (1) describes the results of the Program;

24 (2) includes an analysis of the feasibility of
25 each method studied under the Program; and

1 (3) describes the results of the evaluations con-
2 ducted by the working group established under sec-
3 tion 4(a).

4 **SEC. 6. NO NEW REGULATORY AUTHORITY.**

5 Nothing in this Act authorizes the Secretary or the
6 head of any other Federal agency to issue new regulations.

7 **SEC. 7. EXEMPTION FROM DISCLOSURE.**

8 Information shared by or with the Federal Govern-
9 ment or a State, tribal, or local government under this
10 Act shall be—

11 (1) deemed to be voluntarily shared informa-
12 tion; and

13 (2) exempt from disclosure under any provision
14 of Federal, State, tribal, or local freedom of infor-
15 mation law, open government law, open meetings
16 law, open records law, sunshine law, or similar law
17 requiring the disclosure of information or records.

18 **SEC. 8. PROTECTION FROM LIABILITY.**

19 (a) IN GENERAL.—A cause of action against a cov-
20 ered entity for engaging in the voluntary activities author-
21 ized under section 3—

22 (1) shall not lie or be maintained in any court;
23 and

24 (2) shall be promptly dismissed by the applica-
25 ble court.

1 (b) VOLUNTARY ACTIVITIES.—Nothing in this Act
 2 subjects any covered entity to liability for not engaging
 3 in the voluntary activities authorized under section 3.

4 **SEC. 9. AUTHORIZATION OF APPROPRIATIONS.**

5 (a) PILOT PROGRAM.—There is authorized to be ap-
 6 propriated \$10,000,000 to carry out section 3.

7 (b) WORKING GROUP AND REPORT.—There is au-
 8 thorized to be appropriated \$1,500,000 to carry out see-
 9 tions 4 and 5.

10 (c) AVAILABILITY.—Amounts made available under
 11 subsections (a) and (b) shall remain available until ex-
 12 pended.

13 **SECTION 1. SHORT TITLE.**

14 *This Act may be cited as the “Securing Energy Infra-*
 15 *structure Act”.*

16 **SEC. 2. DEFINITIONS.**

17 *In this Act:*

18 (1) *APPROPRIATE COMMITTEE OF CONGRESS.*—

19 *The term “appropriate committee of Congress”*
 20 *means—*

21 *(A) the Select Committee on Intelligence, the*
 22 *Committee on Homeland Security and Govern-*
 23 *mental Affairs, and the Committee on Energy*
 24 *and Natural Resources of the Senate; and*

1 (B) *the Permanent Select Committee on In-*
2 *telligence, the Committee on Homeland Security,*
3 *and the Committee on Energy and Commerce of*
4 *the House of Representatives.*

5 (2) *COVERED ENTITY.*—*The term “covered enti-*
6 *ty” means an entity identified pursuant to section*
7 *9(a) of Executive Order 13636 of February 12, 2013*
8 *(78 Fed. Reg. 11742), relating to identification of*
9 *critical infrastructure where a cybersecurity incident*
10 *could reasonably result in catastrophic regional or*
11 *national effects on public health or safety, economic*
12 *security, or national security.*

13 (3) *EXPLOIT.*—*The term “exploit” means a soft-*
14 *ware tool designed to take advantage of a security*
15 *vulnerability.*

16 (4) *INDUSTRIAL CONTROL SYSTEM.*—

17 (A) *IN GENERAL.*—*The term “industrial*
18 *control system” means an operational technology*
19 *used to measure, control, or manage industrial*
20 *functions.*

21 (B) *INCLUSIONS.*—*The term “industrial*
22 *control system” includes supervisory control and*
23 *data acquisition systems, distributed control sys-*
24 *tems, and programmable logic or embedded con-*
25 *trollers.*

1 (5) *NATIONAL LABORATORY.*—The term “Na-
2 tional Laboratory” has the meaning given the term in
3 section 2 of the Energy Policy Act of 2005 (42 U.S.C.
4 15801).

5 (6) *PROGRAM.*—The term “Program” means the
6 pilot program established under section 3.

7 (7) *SECRETARY.*—The term “Secretary” means
8 the Secretary of Energy.

9 (8) *SECURITY VULNERABILITY.*—The term “secu-
10 rity vulnerability” means any attribute of hardware,
11 software, process, or procedure that could enable or fa-
12 cilitate the defeat of a security control.

13 **SEC. 3. PILOT PROGRAM FOR SECURING ENERGY INFRA-**
14 **STRUCTURE.**

15 Not later than 180 days after the date of enactment
16 of this Act, the Secretary shall establish a 2-year control
17 systems implementation pilot program within the National
18 Laboratories for the purposes of—

19 (1) partnering with covered entities in the en-
20 ergy sector (including critical component manufactur-
21 ers in the supply chain) that voluntarily participate
22 in the Program to identify new classes of security
23 vulnerabilities of the covered entities; and

24 (2) evaluating technology and standards, in
25 partnership with covered entities, to isolate and de-

1 *defend industrial control systems of covered entities*
2 *from security vulnerabilities and exploits in the most*
3 *critical systems of the covered entities, including—*

4 *(A) analog and nondigital control systems;*

5 *(B) purpose-built control systems; and*

6 *(C) physical controls.*

7 **SEC. 4. WORKING GROUP TO EVALUATE PROGRAM STAND-**
8 **ARDS AND DEVELOP STRATEGY.**

9 *(a) ESTABLISHMENT.—The Secretary shall establish a*
10 *working group—*

11 *(1) to evaluate the technology and standards*
12 *used in the Program under section 3(2); and*

13 *(2) to develop a national cyber-informed engi-*
14 *neering strategy to isolate and defend covered entities*
15 *from security vulnerabilities and exploits in the most*
16 *critical systems of the covered entities.*

17 *(b) MEMBERSHIP.—The working group established*
18 *under subsection (a) shall be composed of not fewer than*
19 *10 members, to be appointed by the Secretary, at least 1*
20 *member of which shall represent each of the following:*

21 *(1) The Department of Energy.*

22 *(2) The energy industry, including electric utili-*
23 *ties and manufacturers recommended by the Energy*
24 *Sector coordinating councils.*

1 (3)(A) *The Department of Homeland Security;*

2 *or*

3 (B) *the Industrial Control Systems Cyber Emer-*
4 *gency Response Team.*

5 (4) *The North American Electric Reliability Cor-*
6 *poration.*

7 (5) *The Nuclear Regulatory Commission.*

8 (6)(A) *The Office of the Director of National In-*
9 *telligence; or*

10 (B) *the intelligence community (as defined in*
11 *section 3 of the National Security Act of 1947 (50*
12 *U.S.C. 3003)).*

13 (7)(A) *The Department of Defense; or*

14 (B) *the Assistant Secretary of Defense for Home-*
15 *land Security and America's Security Affairs.*

16 (8) *A State or regional energy agency.*

17 (9) *A national research body or academic insti-*
18 *tution.*

19 (10) *The National Laboratories.*

20 **SEC. 5. REPORTS ON THE PROGRAM.**

21 (a) *INTERIM REPORT.*—*Not later than 180 days after*
22 *the date on which funds are first disbursed under the Pro-*
23 *gram, the Secretary shall submit to the appropriate com-*
24 *mittees of Congress an interim report that—*

25 (1) *describes the results of the Program;*

1 (2) *includes an analysis of the feasibility of each*
2 *method studied under the Program; and*

3 (3) *describes the results of the evaluations con-*
4 *ducted by the working group established under section*
5 *4(a).*

6 (b) *FINAL REPORT.*—*Not later than 2 years after the*
7 *date on which funds are first disbursed under the Program,*
8 *the Secretary shall submit to the appropriate committees*
9 *of Congress a final report that—*

10 (1) *describes the results of the Program;*

11 (2) *includes an analysis of the feasibility of each*
12 *method studied under the Program; and*

13 (3) *describes the results of the evaluations con-*
14 *ducted by the working group established under section*
15 *4(a).*

16 **SEC. 6. EXEMPTION FROM DISCLOSURE.**

17 *Information shared by or with the Federal Government*
18 *or a State, Tribal, or local government under this Act shall*
19 *be—*

20 (1) *deemed to be voluntarily shared information;*

21 (2) *exempt from disclosure under section 552 of*
22 *title 5, United States Code, or any provision of any*
23 *State, Tribal, or local freedom of information law,*
24 *open government law, open meetings law, open*

1 *records law, sunshine law, or similar law requiring*
2 *the disclosure of information or records; and*

3 *(3) withheld from the public, without discretion,*
4 *under section 552(b)(3) of title 5, United States Code,*
5 *or any provision of a State, Tribal, or local law re-*
6 *quiring the disclosure of information or records.*

7 **SEC. 7. PROTECTION FROM LIABILITY.**

8 *(a) IN GENERAL.—A cause of action against a covered*
9 *entity for engaging in the voluntary activities authorized*
10 *under section 3—*

11 *(1) shall not lie or be maintained in any court;*
12 *and*

13 *(2) shall be promptly dismissed by the applicable*
14 *court.*

15 *(b) VOLUNTARY ACTIVITIES.—Nothing in this Act sub-*
16 *jects any covered entity to liability for not engaging in the*
17 *voluntary activities authorized under section 3.*

18 **SEC. 8. NO NEW REGULATORY AUTHORITY FOR FEDERAL**
19 **AGENCIES.**

20 *Nothing in this Act authorizes the Secretary or the*
21 *head of any other department or agency of the Federal Gov-*
22 *ernment to issue new regulations.*

23 **SEC. 9. AUTHORIZATION OF APPROPRIATIONS.**

24 *(a) PILOT PROGRAM.—There is authorized to be ap-*
25 *propriated \$10,000,000 to carry out section 3.*

1 **(b) WORKING GROUP AND REPORT.**—*There is author-*
2 *ized to be appropriated \$1,500,000 to carry out sections 4*
3 *and 5.*

4 **(c) AVAILABILITY.**—*Amounts made available under*
5 *subsections (a) and (b) shall remain available until ex-*
6 *pendent.*

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