

AMENDMENT NO. \_\_\_\_\_ Calendar No. \_\_\_\_\_

Purpose: In the nature of a substitute.

**IN THE SENATE OF THE UNITED STATES—114th Cong., 1st Sess.**

**S. 1846**

To amend the Homeland Security Act of 2002 to secure critical infrastructure against electromagnetic threats, and for other purposes.

Referred to the Committee on \_\_\_\_\_ and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT IN THE NATURE OF A SUBSTITUTE intended to be proposed by Mr. JOHNSON

Viz:

1 Strike all after the enacting clause and insert the fol-  
2 lowing:

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Critical Infrastructure  
5 Protection Act of 2015” or the “CIPA”.

6 **SEC. 2. EMP AND GMD PLANNING, RESEARCH AND DEVEL-**  
7 **OPMENT, AND PROTECTION AND PREPARED-**  
8 **NESS.**

9 (a) IN GENERAL.—The Homeland Security Act of  
10 2002 (6 U.S.C. 101 et seq.) is amended—

11 (1) in section 2 (6 U.S.C. 101)—

1 (A) by redesignating paragraphs (9)  
2 through (18) as paragraphs (11) through (20),  
3 respectively;

4 (B) by redesignating paragraphs (7) and  
5 (8) as paragraphs (8) and (9), respectively;

6 (C) by inserting after paragraph (6) the  
7 following:

8 “(7) EMP.—The term ‘EMP’ means an electro-  
9 magnetic pulse caused by a nuclear device or non-  
10 nuclear device, including such a pulse caused by an  
11 act of terrorism.”; and

12 (D) by inserting after paragraph (9), as so  
13 redesignated, the following:

14 “(10) GMD.—The term ‘GMD’ means a geo-  
15 magnetic disturbance caused by solar storms or  
16 other naturally occurring phenomena.”;

17 (2) in section 201(d) (6 U.S.C. 121(d)), by  
18 adding at the end the following:

19 “(26)(A) Conduct an intelligence-based review  
20 and comparison of the risk and consequence of  
21 threats and hazards, including GMD and EMP, fac-  
22 ing critical infrastructures, and prepare and submit  
23 to the Committee on Homeland Security and Gov-  
24 ernmental Affairs of the Senate and the Committee

1 on Homeland Security of the House of Representa-  
2 tives—

3 “(i) a recommended strategy to protect  
4 and prepare the critical infrastructure of the  
5 American homeland against threats of EMP  
6 and GMD, including from acts of terrorism;  
7 and

8 “(ii) not less frequently than every 2 years,  
9 updates of the recommended strategy.

10 “(B) The recommended strategy under sub-  
11 paragraph (A) shall—

12 “(i) be based on findings of the research  
13 and development conducted under section 318;

14 “(ii) be developed in consultation with the  
15 relevant Federal sector-specific agencies (as de-  
16 fined under Presidential Policy Directive–21)  
17 for critical infrastructures;

18 “(iii) be developed in consultation with the  
19 relevant sector coordinating councils for critical  
20 infrastructures;

21 “(iv) be informed, to the extent prac-  
22 ticable, by the findings of the intelligence-based  
23 review and comparison of the risk and con-  
24 sequence of threats and hazards, including

1 GMD and EMP, facing critical infrastructures  
2 conducted under subparagraph (A); and

3 “(v) be submitted in unclassified form, but  
4 may include a classified annex.

5 “(C) The Secretary may, if appropriate, incor-  
6 porate the recommended strategy into a broader rec-  
7 ommendation developed by the Department to help  
8 protect and prepare critical infrastructure from ter-  
9 rorism, cyber attacks, and other threats and hazards  
10 if, as incorporated, the recommended strategy com-  
11 plies with subparagraph (B).”;

12 (3) in title III (6 U.S.C. 181 et seq.), by adding  
13 at the end of the following:

14 **“SEC. 318. GMD AND EMP MITIGATION RESEARCH AND DE-**  
15 **VELOPMENT.**

16 “(a) IN GENERAL.—In furtherance of domestic pre-  
17 paredness and response, the Secretary, acting through the  
18 Under Secretary for Science and Technology, and in con-  
19 sultation with other relevant executive agencies and rel-  
20 evant owners and operators of critical infrastructure,  
21 shall, to the extent practicable, conduct research and de-  
22 velopment to mitigate the consequences of threats of EMP  
23 and GMD.

24 “(b) SCOPE.—The scope of the research and develop-  
25 ment under subsection (a) shall include the following:

1 “(1) An objective scientific analysis—

2 “(A) evaluating the risks to critical infra-  
3 structures from a range of threats of EMP and  
4 GMD; and

5 “(B) which shall—

6 “(i) be conducted in conjunction with  
7 the Office of Intelligence and Analysis; and

8 “(ii) include a review and comparison  
9 of the range of threats and hazards facing  
10 critical infrastructure of the electric grid.

11 “(2) Determination of the critical utilities and  
12 national security assets and infrastructures that are  
13 at risk from threats of EMP and GMD.

14 “(3) An evaluation of emergency planning and  
15 response technologies that would address the find-  
16 ings and recommendations of experts, including  
17 those of the Commission to Assess the Threat to the  
18 United States from Electromagnetic Pulse Attack,  
19 which shall include a review of the feasibility of—

20 “(A) rapidly isolating 1 or more portions  
21 of the electrical grid from the main electrical  
22 grid; and

23 “(B) training utility and transmission op-  
24 erators to deactivate transmission lines within

1           seconds of an event constituting a threat of  
2           EMP or GMD.

3           “(4) An analysis of technology options that are  
4           available to improve the resiliency of critical infra-  
5           structure to threats of EMP and GMD, which shall  
6           include an analysis of neutral current blocking de-  
7           vices that may protect high-voltage transmission  
8           lines.

9           “(5) The restoration and recovery capabilities  
10          of critical infrastructure under differing levels of  
11          damage and disruption from various threats of EMP  
12          and GMD, as informed by the objective scientific  
13          analysis conducted under paragraph (1).

14          “(6) An analysis of the feasibility of a real-time  
15          alert system to inform electric grid operators and  
16          other stakeholders within milliseconds of a high-alti-  
17          tude nuclear explosion.”; and

18          (4) in title V (6 U.S.C. 311 et seq.), by adding  
19          at the end the following:

20       **“SEC. 526. NATIONAL PLANNING AND EDUCATION.**

21          “(a) IN GENERAL.—The Secretary shall, to the ex-  
22          tent practicable—

23               “(1) develop an incident annex or similar re-  
24               sponse and planning strategy that guides the re-  
25               sponse to a major GMD or EMP event; and

1           “(2) conduct outreach to educate owners and  
2 operators of critical infrastructure, emergency plan-  
3 ners, and emergency response providers at all levels  
4 of government regarding threats of EMP and GMD.

5           “(b) EXISTING ANNEXES AND PLANS.—The incident  
6 annex or response and planning strategy developed under  
7 subsection (a)(1) may be incorporated into existing inci-  
8 dent annexes or response plans.”.

9           (b) TECHNICAL AND CONFORMING AMENDMENTS.—

10           (1) The table of contents in section 1(b) of the  
11 Homeland Security Act of 2002 is amended—

12                   (A) by inserting after the item relating to  
13 section 317 the following:

“Sec. 318. GMD and EMP mitigation research and development.”; and

14                   (B) by inserting after the item relating to  
15 section 525 the following:

“Sec. 526. National planning and education.”.

16           (2) Section 501(13) of the Homeland Security  
17 Act of 2002 (6 U.S.C. 311(13)) is amended by strik-  
18 ing “section 101(11)(B)” and inserting “section  
19 101(13)(B)”.

20           (3) Section 712(a) of title 14, United States  
21 Code, is amended by striking “section 2(16) of the  
22 Homeland Security Act of 2002 (6 U.S.C. 101(16))”  
23 and inserting “section 2 of the Homeland Security  
24 Act of 2002 (6 U.S.C. 101)”.

1           (c) DEADLINE FOR INITIAL RECOMMENDED STRAT-  
2 EGY.—Not later than 1 year after the date of enactment  
3 of this Act, the Secretary of Homeland Security shall sub-  
4 mit the recommended strategy required under paragraph  
5 (26) of section 201(d) of the Homeland Security Act of  
6 2002 (6 U.S.C. 121(d)), as added by this Act.

7           (d) REPORT.—Not later than 180 days after the date  
8 of enactment of this Act, the Secretary of Homeland Secu-  
9 rity shall submit to Congress a report describing the  
10 progress made in, and an estimated date by which the De-  
11 partment of Homeland Security will have completed—

12           (1) including threats of EMP and GMD (as  
13 those terms are defined in section 2 of the Home-  
14 land Security Act of 2002, as amended by this Act)  
15 in national planning, as described in section 526 of  
16 the Homeland Security Act of 2002, as added by  
17 this Act;

18           (2) research and development described in sec-  
19 tion 318 of the Homeland Security Act of 2002, as  
20 added by this Act;

21           (3) development of the recommended strategy  
22 required under paragraph (26) of section 201(d) of  
23 the Homeland Security Act of 2002 (6 U.S.C.  
24 121(d)), as added by this Act; and



1           (4) beginning to conduct outreach to educate  
2           emergency planners and emergency response pro-  
3           viders at all levels of government regarding threats  
4           of EMP and GMD events.

5 **SEC. 3. NO REGULATORY AUTHORITY.**

6           Nothing in this Act, including the amendments made  
7 by this Act, shall be construed to grant any regulatory  
8 authority.

9 **SEC. 4. NO NEW AUTHORIZATION OF APPROPRIATIONS.**

10          This Act, including the amendments made by this  
11 Act, may be carried out only by using funds appropriated  
12 under the authority of other laws.