

**AMENDMENT TO THE SENATE AMENDMENTS TO
H.R. 22
OFFERED BY MR. UPTON OF MICHIGAN**

Page 1032, after line 4, add the following:

1 DIVISION J—ENERGY SECURITY

2 SEC. 99001. EMERGENCY PREPAREDNESS FOR ENERGY
3 SUPPLY DISRUPTIONS.

4 (a) FINDING.—Congress finds that recent natural
5 disasters have underscored the importance of having resil-
6 ient oil and natural gas infrastructure and effective ways
7 for industry and government to communicate to address
8 energy supply disruptions.

9 (b) AUTHORIZATION FOR ACTIVITIES TO ENHANCE
10 EMERGENCY PREPAREDNESS FOR NATURAL DISAS-
11 TERS.—The Secretary of Energy shall develop and adopt
12 procedures to—

13 (1) improve communication and coordination
14 between the Department of Energy’s energy re-
15 sponse team, Federal partners, and industry;

16 (2) leverage the Energy Information Adminis-
17 tration’s subject matter expertise within the Depart-
18 ment’s energy response team to improve supply
19 chain situation assessments;

1 (3) establish company liaisons and direct com-
2 munication with the Department's energy response
3 team to improve situation assessments;

4 (4) streamline and enhance processes for ob-
5 taining temporary regulatory relief to speed up
6 emergency response and recovery;

7 (5) facilitate and increase engagement among
8 States, the oil and natural gas industry, and the De-
9 partment in developing State and local energy assur-
10 ance plans;

11 (6) establish routine education and training
12 programs for key government emergency response
13 positions with the Department and States; and

14 (7) involve States and the oil and natural gas
15 industry in comprehensive drill and exercise pro-
16 grams.

17 (c) COOPERATION.—The activities carried out under
18 subsection (b) shall include collaborative efforts with State
19 and local government officials and the private sector.

20 (d) REPORT.—Not later than 180 days after the date
21 of enactment of this Act, the Secretary of Energy shall
22 submit to Congress a report describing the effectiveness
23 of the activities authorized under this section.

1 **SEC. 99002. RESOLVING ENVIRONMENTAL AND GRID RELI-**
2 **ABILITY CONFLICTS.**

3 (a) COMPLIANCE WITH OR VIOLATION OF ENVIRON-
4 MENTAL LAWS WHILE UNDER EMERGENCY ORDER.—
5 Section 202(c) of the Federal Power Act (16 U.S.C.
6 824a(c)) is amended—

7 (1) by inserting “(1)” after “(c)”; and

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

9 “(2) With respect to an order issued under this sub-
10 section that may result in a conflict with a requirement
11 of any Federal, State, or local environmental law or regu-
12 lation, the Commission shall ensure that such order re-
13 quires generation, delivery, interchange, or transmission
14 of electric energy only during hours necessary to meet the
15 emergency and serve the public interest, and, to the max-
16 imum extent practicable, is consistent with any applicable
17 Federal, State, or local environmental law or regulation
18 and minimizes any adverse environmental impacts.

19 “(3) To the extent any omission or action taken by
20 a party, that is necessary to comply with an order issued
21 under this subsection, including any omission or action
22 taken to voluntarily comply with such order, results in
23 noncompliance with, or causes such party to not comply
24 with, any Federal, State, or local environmental law or
25 regulation, such omission or action shall not be considered
26 a violation of such environmental law or regulation, or

1 subject such party to any requirement, civil or criminal
2 liability, or a citizen suit under such environmental law
3 or regulation.

4 “(4)(A) An order issued under this subsection that
5 may result in a conflict with a requirement of any Federal,
6 State, or local environmental law or regulation shall expire
7 not later than 90 days after it is issued. The Commission
8 may renew or reissue such order pursuant to paragraphs
9 (1) and (2) for subsequent periods, not to exceed 90 days
10 for each period, as the Commission determines necessary
11 to meet the emergency and serve the public interest.

12 “(B) In renewing or reissuing an order under sub-
13 paragraph (A), the Commission shall consult with the pri-
14 mary Federal agency with expertise in the environmental
15 interest protected by such law or regulation, and shall in-
16 clude in any such renewed or reissued order such condi-
17 tions as such Federal agency determines necessary to min-
18 imize any adverse environmental impacts to the extent
19 practicable. The conditions, if any, submitted by such Fed-
20 eral agency shall be made available to the public. The
21 Commission may exclude such a condition from the re-
22 newed or reissued order if it determines that such condi-
23 tion would prevent the order from adequately addressing
24 the emergency necessitating such order and provides in

1 the order, or otherwise makes publicly available, an expla-
2 nation of such determination.

3 “(5) If an order issued under this subsection is subse-
4 quently stayed, modified, or set aside by a court pursuant
5 to section 313 or any other provision of law, any omission
6 or action previously taken by a party that was necessary
7 to comply with the order while the order was in effect,
8 including any omission or action taken to voluntarily com-
9 ply with the order, shall remain subject to paragraph
10 (3).”.

11 (b) TEMPORARY CONNECTION OR CONSTRUCTION BY
12 MUNICIPALITIES.—Section 202(d) of the Federal Power
13 Act (16 U.S.C. 824a(d)) is amended by inserting “or mu-
14 nicipality” before “engaged in the transmission or sale of
15 electric energy”.

16 **SEC. 99003. CRITICAL ELECTRIC INFRASTRUCTURE SECU-**
17 **RITY.**

18 (a) CRITICAL ELECTRIC INFRASTRUCTURE SECU-
19 RITY.—Part II of the Federal Power Act (16 U.S.C. 824
20 et seq.) is amended by adding after section 215 the fol-
21 lowing new section:

22 **“SEC. 215A. CRITICAL ELECTRIC INFRASTRUCTURE SECU-**
23 **RITY.**

24 “(a) DEFINITIONS.—For purposes of this section:

1 “(1) BULK-POWER SYSTEM; ELECTRIC RELI-
2 ABILITY ORGANIZATION; REGIONAL ENTITY.—The
3 terms ‘bulk-power system’, ‘Electric Reliability Or-
4 ganization’, and ‘regional entity’ have the meanings
5 given such terms in paragraphs (1), (2), and (7) of
6 section 215(a), respectively.

7 “(2) CRITICAL ELECTRIC INFRASTRUCTURE.—
8 The term ‘critical electric infrastructure’ means a
9 system or asset of the bulk-power system, whether
10 physical or virtual, the incapacity or destruction of
11 which would negatively affect national security, eco-
12 nomic security, public health or safety, or any com-
13 bination of such matters.

14 “(3) CRITICAL ELECTRIC INFRASTRUCTURE IN-
15 FORMATION.—The term ‘critical electric infrastruc-
16 ture information’ means information related to crit-
17 ical electric infrastructure, or proposed critical elec-
18 trical infrastructure, generated by or provided to the
19 Commission or other Federal agency, other than
20 classified national security information, that is des-
21 ignated as critical electric infrastructure information
22 by the Commission under subsection (d)(2). Such
23 term includes information that qualifies as critical
24 energy infrastructure information under the Com-
25 mission’s regulations.

1 “(4) DEFENSE CRITICAL ELECTRIC INFRA-
2 STRUCTURE.—The term ‘defense critical electric in-
3 frastructure’ means any electric infrastructure lo-
4 cated in the United States (including the territories)
5 that serves a facility designated by the Secretary
6 pursuant to subsection (c), but is not owned or oper-
7 ated by the owner or operator of such facility.

8 “(5) ELECTROMAGNETIC PULSE.—The term
9 ‘electromagnetic pulse’ means 1 or more pulses of
10 electromagnetic energy emitted by a device capable
11 of disabling or disrupting operation of, or destroy-
12 ing, electronic devices or communications networks,
13 including hardware, software, and data, by means of
14 such a pulse.

15 “(6) GEOMAGNETIC STORM.—The term ‘geo-
16 magnetic storm’ means a temporary disturbance of
17 the Earth’s magnetic field resulting from solar activ-
18 ity.

19 “(7) GRID SECURITY EMERGENCY.—The term
20 ‘grid security emergency’ means the occurrence or
21 imminent danger of—

22 “(A)(i) a malicious act using electronic
23 communication or an electromagnetic pulse, or
24 a geomagnetic storm event, that could disrupt
25 the operation of those electronic devices or com-

1 munications networks, including hardware, soft-
2 ware, and data, that are essential to the reli-
3 ability of critical electric infrastructure or of de-
4 fense critical electric infrastructure; and

5 “(ii) disruption of the operation of such
6 devices or networks, with significant adverse ef-
7 fects on the reliability of critical electric infra-
8 structure or of defense critical electric infra-
9 structure, as a result of such act or event; or

10 “(B)(i) a direct physical attack on critical
11 electric infrastructure or on defense critical
12 electric infrastructure; and

13 “(ii) significant adverse effects on the reli-
14 ability of critical electric infrastructure or of de-
15 fense critical electric infrastructure as a result
16 of such physical attack.

17 “(8) SECRETARY.—The term ‘Secretary’ means
18 the Secretary of Energy.

19 “(b) AUTHORITY TO ADDRESS GRID SECURITY
20 EMERGENCY.—

21 “(1) AUTHORITY.—Whenever the President
22 issues and provides to the Secretary a written direc-
23 tive or determination identifying a grid security
24 emergency, the Secretary may, with or without no-
25 tice, hearing, or report, issue such orders for emer-

1 gency measures as are necessary in the judgment of
2 the Secretary to protect or restore the reliability of
3 critical electric infrastructure or of defense critical
4 electric infrastructure during such emergency. As
5 soon as practicable but not later than 180 days after
6 the date of enactment of this section, the Secretary
7 shall, after notice and opportunity for comment, es-
8 tablish rules of procedure that ensure that such au-
9 thority can be exercised expeditiously.

10 “(2) NOTIFICATION OF CONGRESS.—Whenever
11 the President issues and provides to the Secretary a
12 written directive or determination under paragraph
13 (1), the President shall promptly notify congres-
14 sional committees of relevant jurisdiction, including
15 the Committee on Energy and Commerce of the
16 House of Representatives and the Committee on En-
17 ergy and Natural Resources of the Senate, of the
18 contents of, and justification for, such directive or
19 determination.

20 “(3) CONSULTATION.—Before issuing an order
21 for emergency measures under paragraph (1), the
22 Secretary shall, to the extent practicable in light of
23 the nature of the grid security emergency and the
24 urgency of the need for action, consult with appro-
25 priate governmental authorities in Canada and Mex-

1 ico, entities described in paragraph (4), the Elec-
2 tricity Sub-sector Coordinating Council, the Commis-
3 sion, and other appropriate Federal agencies regard-
4 ing implementation of such emergency measures.

5 “(4) APPLICATION.—An order for emergency
6 measures under this subsection may apply to—

7 “(A) the Electric Reliability Organization;

8 “(B) a regional entity; or

9 “(C) any owner, user, or operator of crit-
10 ical electric infrastructure or of defense critical
11 electric infrastructure within the United States.

12 “(5) EXPIRATION AND REISSUANCE.—

13 “(A) IN GENERAL.—Except as provided in
14 subparagraph (B), an order for emergency
15 measures issued under paragraph (1) shall ex-
16 pire no later than 15 days after its issuance.

17 “(B) EXTENSIONS.—The Secretary may
18 reissue an order for emergency measures issued
19 under paragraph (1) for subsequent periods,
20 not to exceed 15 days for each such period, pro-
21 vided that the President, for each such period,
22 issues and provides to the Secretary a written
23 directive or determination that the grid security
24 emergency identified under paragraph (1) con-

1 continues to exist or that the emergency measure
2 continues to be required.

3 “(6) COST RECOVERY.—

4 “(A) CRITICAL ELECTRIC INFRASTRUC-
5 TURE.—If the Commission determines that
6 owners, operators, or users of critical electric
7 infrastructure have incurred substantial costs to
8 comply with an order for emergency measures
9 issued under this subsection and that such costs
10 were prudently incurred and cannot reasonably
11 be recovered through regulated rates or market
12 prices for the electric energy or services sold by
13 such owners, operators, or users, the Commis-
14 sion shall, consistent with the requirements of
15 section 205, after notice and an opportunity for
16 comment, establish a mechanism that permits
17 such owners, operators, or users to recover such
18 costs.

19 “(B) DEFENSE CRITICAL ELECTRIC INFRA-
20 STRUCTURE.—To the extent the owner or oper-
21 ator of defense critical electric infrastructure is
22 required to take emergency measures pursuant
23 to an order issued under this subsection, the
24 owners or operators of a critical defense facility
25 or facilities designated by the Secretary pursu-

1 ant to subsection (c) that rely upon such infra-
2 structure shall bear the full incremental costs of
3 the measures.

4 “(7) TEMPORARY ACCESS TO CLASSIFIED IN-
5 FORMATION.—The Secretary, and other appropriate
6 Federal agencies, shall, to the extent practicable and
7 consistent with their obligations to protect classified
8 information, provide temporary access to classified
9 information related to a grid security emergency for
10 which emergency measures are issued under para-
11 graph (1) to key personnel of any entity subject to
12 such emergency measures to enable optimum com-
13 munication between the entity and the Secretary and
14 other appropriate Federal agencies regarding the
15 grid security emergency.

16 “(c) DESIGNATION OF CRITICAL DEFENSE FACILI-
17 TIES.—Not later than 180 days after the date of enact-
18 ment of this section, the Secretary, in consultation with
19 other appropriate Federal agencies and appropriate own-
20 ers, users, or operators of infrastructure that may be de-
21 fense critical electric infrastructure, shall identify and des-
22 ignate facilities located in the United States (including the
23 territories) that are—

24 “(1) critical to the defense of the United States;
25 and

1 “(2) vulnerable to a disruption of the supply of
2 electric energy provided to such facility by an exter-
3 nal provider.

4 The Secretary may, in consultation with appropriate Fed-
5 eral agencies and appropriate owners, users, or operators
6 of defense critical electric infrastructure, periodically re-
7 vise the list of designated facilities as necessary.

8 “(d) PROTECTION AND SHARING OF CRITICAL ELEC-
9 TRIC INFRASTRUCTURE INFORMATION.—

10 “(1) PROTECTION OF CRITICAL ELECTRIC IN-
11 FRASTRUCTURE INFORMATION.—Critical electric in-
12 frastructure information—

13 “(A) shall be exempt from disclosure under
14 section 552(b)(3) of title 5, United States Code;
15 and

16 “(B) shall not be made available by any
17 Federal, State, political subdivision or tribal au-
18 thority pursuant to any Federal, State, political
19 subdivision or tribal law requiring public disclo-
20 sure of information or records.

21 “(2) DESIGNATION AND SHARING OF CRITICAL
22 ELECTRIC INFRASTRUCTURE INFORMATION.—Not
23 later than one year after the date of enactment of
24 this section, the Commission, in consultation with

1 the Secretary of Energy, shall promulgate such reg-
2 ulations and issue such orders as necessary to—

3 “(A) designate information as critical elec-
4 tric infrastructure information;

5 “(B) prohibit the unauthorized disclosure
6 of critical electric infrastructure information;

7 “(C) ensure there are appropriate sanc-
8 tions in place for Commissioners, officers, em-
9 ployees, or agents of the Commission who
10 knowingly and willfully disclose critical electric
11 infrastructure information in a manner that is
12 not authorized under this section; and

13 “(D) taking into account standards of the
14 Electric Reliability Organization, facilitate vol-
15 untary sharing of critical electric infrastructure
16 information with, between, and by—

17 “(i) Federal, State, political subdivi-
18 sion, and tribal authorities;

19 “(ii) the Electric Reliability Organiza-
20 tion;

21 “(iii) regional entities;

22 “(iv) information sharing and analysis
23 centers established pursuant to Presi-
24 dential Decision Directive 63;

1 “(v) owners, operators, and users of
2 critical electric infrastructure in the United
3 States; and

4 “(vi) other entities determined appro-
5 priate by the Commission.

6 “(3) CONSIDERATIONS.—In promulgating regu-
7 lations and issuing orders under paragraph (2), the
8 Commission shall take into consideration the role of
9 State commissions in reviewing the prudence and
10 cost of investments, determining the rates and terms
11 of conditions for electric services, and ensuring the
12 safety and reliability of the bulk-power system and
13 distribution facilities within their respective jurisdic-
14 tions.

15 “(4) PROTOCOLS.—The Commission shall, in
16 consultation with Canadian and Mexican authorities,
17 develop protocols for the voluntary sharing of critical
18 electric infrastructure information with Canadian
19 and Mexican authorities and owners, operators, and
20 users of the bulk-power system outside the United
21 States.

22 “(5) NO REQUIRED SHARING OF INFORMA-
23 TION.—Nothing in this section shall require a person
24 or entity in possession of critical electric infrastruc-
25 ture information to share such information with

1 Federal, State, political subdivision, or tribal au-
2 thorities, or any other person or entity.

3 “(6) SUBMISSION OF INFORMATION TO CON-
4 GRESS.—Nothing in this section shall permit or au-
5 thorize the withholding of information from Con-
6 gress, any committee or subcommittee thereof, or
7 the Comptroller General.

8 “(7) DISCLOSURE OF NONPROTECTED INFOR-
9 MATION.—In implementing this section, the Com-
10 mission shall segregate critical electric infrastructure
11 information or information that reasonably could be
12 expected to lead to the disclosure of the critical elec-
13 tric infrastructure information within documents and
14 electronic communications, wherever feasible, to fa-
15 cilitate disclosure of information that is not des-
16 ignated as critical electric infrastructure informa-
17 tion.

18 “(8) DURATION OF DESIGNATION.—Informa-
19 tion may not be designated as critical electric infra-
20 structure information for longer than 5 years, unless
21 specifically re-designated by the Commission.

22 “(9) REMOVAL OF DESIGNATION.—The Com-
23 mission shall remove the designation of critical elec-
24 tric infrastructure information, in whole or in part,
25 from a document or electronic communication if the

1 Commission determines that the unauthorized disclo-
2 sure of such information could no longer be used to
3 impair the security or reliability of the bulk-power
4 system or distribution facilities.

5 “(10) JUDICIAL REVIEW OF DESIGNATIONS.—
6 Notwithstanding section 313(b), any determination
7 by the Commission concerning the designation of
8 critical electric infrastructure information under this
9 subsection shall be subject to review under chapter
10 7 of title 5, United States Code, except that such re-
11 view shall be brought in the district court of the
12 United States in the district in which the complain-
13 ant resides, or has his principal place of business, or
14 in the District of Columbia. In such a case the court
15 shall examine in camera the contents of documents
16 or electronic communications that are the subject of
17 the determination under review to determine wheth-
18 er such documents or any part thereof were improp-
19 erly designated or not designated as critical electric
20 infrastructure information.

21 “(e) SECURITY CLEARANCES.—The Secretary shall
22 facilitate and, to the extent practicable, expedite the acqui-
23 sition of adequate security clearances by key personnel of
24 any entity subject to the requirements of this section, to
25 enable optimum communication with Federal agencies re-

1 guarding threats to the security of the critical electric infra-
2 structure. The Secretary, the Commission, and other ap-
3 propriate Federal agencies shall, to the extent practicable
4 and consistent with their obligations to protect classified
5 and critical electric infrastructure information, share time-
6 ly actionable information regarding grid security with ap-
7 propriate key personnel of owners, operators, and users
8 of the critical electric infrastructure.

9 “(f) CLARIFICATIONS OF LIABILITY.—

10 “(1) COMPLIANCE WITH OR VIOLATION OF THIS
11 ACT.—Except as provided in paragraph (4), to the
12 extent any action or omission taken by an entity
13 that is necessary to comply with an order for emer-
14 gency measures issued under subsection (b)(1), in-
15 cluding any action or omission taken to voluntarily
16 comply with such order, results in noncompliance
17 with, or causes such entity not to comply with any
18 rule, order, regulation, or provision of this Act, in-
19 cluding any reliability standard approved by the
20 Commission pursuant to section 215, such action or
21 omission shall not be considered a violation of such
22 rule, order, regulation, or provision.

23 “(2) RELATION TO SECTION 202(c).—Except as
24 provided in paragraph (4), an action or omission
25 taken by an owner, operator, or user of critical elec-

1 tric infrastructure or of defense critical electric in-
2 frastructure to comply with an order for emergency
3 measures issued under subsection (b)(1) shall be
4 treated as an action or omission taken to comply
5 with an order issued under section 202(c) for pur-
6 poses of such section.

7 “(3) SHARING OR RECEIPT OF INFORMATION.—
8 No cause of action shall lie or be maintained in any
9 Federal or State court for the sharing or receipt of
10 information under, and that is conducted in accord-
11 ance with, subsection (d).

12 “(4) RULE OF CONSTRUCTION.—Nothing in
13 this subsection shall be construed to require dis-
14 missal of a cause of action against an entity that,
15 in the course of complying with an order for emer-
16 gency measures issued under subsection (b)(1) by
17 taking an action or omission for which they would
18 be liable but for paragraph (1) or (2), takes such ac-
19 tion or omission in a grossly negligent manner.”.

20 (b) CONFORMING AMENDMENTS.—

21 (1) JURISDICTION.—Section 201(b)(2) of the
22 Federal Power Act (16 U.S.C. 824(b)(2)) is amend-
23 ed by inserting “215A,” after “215,” each place it
24 appears.

1 (2) PUBLIC UTILITY.—Section 201(e) of the
2 Federal Power Act (16 U.S.C. 824(e)) is amended
3 by inserting “215A,” after “215,”.

4 **SEC. 99004. STRATEGIC TRANSFORMER RESERVE.**

5 (a) FINDING.—Congress finds that the storage of
6 strategically located spare large power transformers and
7 emergency mobile substations will reduce the vulnerability
8 of the United States to multiple risks facing electric grid
9 reliability, including physical attack, cyber attack, electro-
10 magnetic pulse, geomagnetic disturbances, severe weather,
11 and seismic events.

12 (b) DEFINITIONS.—In this section:

13 (1) BULK-POWER SYSTEM.—The term “bulk-
14 power system” has the meaning given such term in
15 section 215(a) of the Federal Power Act (16 U.S.C.
16 824o(a)).

17 (2) CRITICALLY DAMAGED LARGE POWER
18 TRANSFORMER.—The term “critically damaged large
19 power transformer” means a large power trans-
20 former that—

21 (A) has sustained extensive damage such
22 that—

23 (i) repair or refurbishment is not eco-
24 nomically viable; or

1 (ii) the extensive time to repair or re-
2 furbish the large power transformer would
3 create an extended period of instability in
4 the bulk-power system; and

5 (B) prior to sustaining such damage, was
6 part of the bulk-power system.

7 (3) CRITICAL ELECTRIC INFRASTRUCTURE.—
8 The term “critical electric infrastructure” has the
9 meaning given that term in section 215A of the Fed-
10 eral Power Act.

11 (4) ELECTRIC RELIABILITY ORGANIZATION.—
12 The term “Electric Reliability Organization” has the
13 meaning given such term in section 215(a) of the
14 Federal Power Act (16 U.S.C. 824o(a)).

15 (5) EMERGENCY MOBILE SUBSTATION.—The
16 term “emergency mobile substation” means a mobile
17 substation or mobile transformer that is—

18 (A) assembled and permanently mounted
19 on a trailer that is capable of highway travel
20 and meets relevant Department of Transpor-
21 tation regulations; and

22 (B) intended for express deployment and
23 capable of being rapidly placed into service.

24 (6) LARGE POWER TRANSFORMER.—The term
25 “large power transformer” means a power trans-

1 former with a maximum nameplate rating of 100
2 megavolt-amperes or higher, including related crit-
3 ical equipment, that is, or is intended to be, a part
4 of the bulk-power system.

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

7 (8) SPARE LARGE POWER TRANSFORMER.—The
8 term “spare large power transformer” means a large
9 power transformer that is stored within the Stra-
10 tegic Transformer Reserve to be available to tempo-
11 rarily replace a critically damaged large power trans-
12 former.

13 (c) STRATEGIC TRANSFORMER RESERVE PLAN.—

14 (1) PLAN.—Not later than one year after the
15 date of enactment of this Act, the Secretary, acting
16 through the Office of Electricity Delivery and En-
17 ergy Reliability, shall, in consultation with the Fed-
18 eral Energy Regulatory Commission, the Electricity
19 Sub-sector Coordinating Council, the Electric Reli-
20 ability Organization, and owners and operators of
21 critical electric infrastructure and defense and mili-
22 tary installations, prepare and submit to Congress a
23 plan to establish a Strategic Transformer Reserve
24 for the storage, in strategically located facilities, of
25 spare large power transformers and emergency mo-

1 bile substations in sufficient numbers to temporarily
2 replace critically damaged large power transformers
3 and substations that are critical electric infrastruc-
4 ture or serve defense and military installations.

5 (2) INCLUSIONS.—The Strategic Transformer
6 Reserve plan shall include a description of—

7 (A) the appropriate number and type of
8 spare large power transformers necessary to
9 provide or restore sufficient resiliency to the
10 bulk-power system, critical electric infrastruc-
11 ture, and defense and military installations to
12 mitigate significant impacts to the electric grid
13 resulting from—

- 14 (i) physical attack;
15 (ii) cyber attack;
16 (iii) electromagnetic pulse attack;
17 (iv) geomagnetic disturbances;
18 (v) severe weather; or
19 (vi) seismic events;

20 (B) other critical electric grid equipment
21 for which an inventory of spare equipment, in-
22 cluding emergency mobile substations, is nec-
23 essary to provide or restore sufficient resiliency
24 to the bulk-power system, critical electric infra-

1 structure, and defense and military installa-
2 tions;

3 (C) the degree to which utility sector ac-
4 tions or initiatives, including individual utility
5 ownership of spare equipment, joint ownership
6 of spare equipment inventory, sharing agree-
7 ments, or other spare equipment reserves or ar-
8 rangements, satisfy the needs identified under
9 subparagraphs (A) and (B);

10 (D) the potential locations for, and feasi-
11 bility and appropriate number of, strategic stor-
12 age locations for reserve equipment, including
13 consideration of—

14 (i) the physical security of such loca-
15 tions;

16 (ii) the protection of the confiden-
17 tiality of such locations; and

18 (iii) the proximity of such locations to
19 sites of potentially critically damaged large
20 power transformers and substations that
21 are critical electric infrastructure or serve
22 defense and military installations, so as to
23 enable efficient delivery of equipment to
24 such sites;

1 (E) the necessary degree of flexibility of
2 spare large power transformers to be included
3 in the Strategic Transformer Reserve to con-
4 form to different substation configurations, in-
5 cluding consideration of transformer—

6 (i) power and voltage rating for each
7 winding;

8 (ii) overload requirements;

9 (iii) impedance between windings;

10 (iv) configuration of windings; and

11 (v) tap requirements;

12 (F) an estimate of the direct cost of the
13 Strategic Transformer Reserve, as proposed, in-
14 cluding—

15 (i) the cost of storage facilities;

16 (ii) the cost of the equipment; and

17 (iii) management, maintenance, and
18 operation costs;

19 (G) the funding options available to estab-
20 lish, stock, manage, and maintain the Strategic
21 Transformer Reserve, including consideration of
22 fees on owners and operators of bulk-power sys-
23 tem facilities, critical electric infrastructure,
24 and defense and military installations relying on
25 the Strategic Transformer Reserve, use of Fed-

1 eral appropriations, and public-private cost-
2 sharing options;

3 (H) the ease and speed of transportation,
4 installation, and energization of spare large
5 power transformers to be included in the Stra-
6 tegic Transformer Reserve, including consider-
7 ation of factors such as—

8 (i) transformer transportation weight;

9 (ii) transformer size;

10 (iii) topology of critical substations;

11 (iv) availability of appropriate trans-
12 former mounting pads;

13 (v) flexibility of the spare large power
14 transformers as described in subparagraph
15 (E); and

16 (vi) ability to rapidly transition a
17 spare large power transformer from stor-
18 age to energization;

19 (I) eligibility criteria for withdrawal of
20 equipment from the Strategic Transformer Re-
21 serve;

22 (J) the process by which owners or opera-
23 tors of critically damaged large power trans-
24 formers or substations that are critical electric
25 infrastructure or serve defense and military in-

1 stallations may apply for a withdrawal from the
2 Strategic Transformer Reserve;

3 (K) the process by which equipment with-
4 drawn from the Strategic Transformer Reserve
5 is returned to the Strategic Transformer Re-
6 serve or is replaced;

7 (L) possible fees to be paid by users of
8 equipment withdrawn from the Strategic Trans-
9 former Reserve;

10 (M) possible fees to be paid by owners and
11 operators of large power transformers and sub-
12 stations that are critical electric infrastructure
13 or serve defense and military installations to
14 cover operating costs of the Strategic Trans-
15 former Reserve;

16 (N) the domestic and international large
17 power transformer supply chain;

18 (O) the potential reliability, cost, and oper-
19 ational benefits of including emergency mobile
20 substations in any Strategic Transformer Re-
21 serve established under this section; and

22 (P) other considerations for designing, con-
23 structing, stocking, funding, and managing the
24 Strategic Transformer Reserve.

1 (d) ESTABLISHMENT.—The Secretary may establish
2 a Strategic Transformer Reserve in accordance with the
3 plan prepared pursuant to subsection (c) after the date
4 that is 6 months after the date on which such plan is sub-
5 mitted to Congress.

6 (e) DISCLOSURE OF INFORMATION.—Any informa-
7 tion included in the Strategic Transformer Reserve plan,
8 or shared in the preparation and development of such
9 plan, the disclosure of which could cause harm to critical
10 electric infrastructure, shall be exempt from disclosure
11 under section 552(b)(3) of title 5, United States Code, and
12 any State, tribal, or local law requiring disclosure of infor-
13 mation or records.

14 **SEC. 99005. ENERGY SECURITY VALUATION.**

15 (a) ESTABLISHMENT OF ENERGY SECURITY VALU-
16 ATION METHODS.—Not later than one year after the date
17 of enactment of this Act, the Secretary of Energy, in col-
18 laboration with the Secretary of State, shall develop and
19 transmit, after public notice and comment, to the Com-
20 mittee on Energy and Commerce and the Committee on
21 Foreign Affairs of the House of Representatives and the
22 Committee on Energy and Natural Resources and the
23 Committee on Foreign Relations of the Senate a report
24 that develops recommended United States energy security
25 valuation methods. In developing the report, the Secre-

1 taries may consider the recommendations of the Adminis-
2 tration's Quadrennial Energy Review released on April 21,
3 2015. The report shall—

4 (1) evaluate and define United States energy
5 security to reflect modern domestic and global en-
6 ergy markets and the collective needs of the United
7 States and its allies and partners;

8 (2) identify transparent and uniform or coordi-
9 nated procedures and criteria to ensure that energy-
10 related actions that significantly affect the supply,
11 distribution, or use of energy are evaluated with re-
12 spect to their potential impact on energy security,
13 including their impact on—

14 (A) consumers and the economy;

15 (B) energy supply diversity and resiliency;

16 (C) well-functioning and competitive en-
17 ergy markets;

18 (D) United States trade balance; and

19 (E) national security objectives; and

20 (3) include a recommended implementation
21 strategy that identifies and aims to ensure that the
22 procedures and criteria referred to in paragraph (2)
23 are—

24 (A) evaluated consistently across the Fed-
25 eral Government; and

1 (B) weighed appropriately and balanced
2 with environmental considerations required by
3 Federal law.

4 (b) PARTICIPATION.—In developing the report re-
5 ferred to in subsection (a), the Secretaries may consult
6 with relevant Federal, State, private sector, and inter-
7 national participants, as appropriate and consistent with
8 applicable law.

