

1 frastructure’ means any infrastructure located in the
2 United States (including the territories) used for the
3 generation, transmission, or distribution of electric
4 energy that—

5 “(A) is not part of the bulk-power system;
6 and

7 “(B) serves a facility designated by the
8 President pursuant to subsection (d)(1), but is
9 not owned or operated by the owner or operator
10 of such facility.

11 “(3) DEFENSE CRITICAL ELECTRIC INFRA-
12 STRUCTURE VULNERABILITY.—The term ‘defense
13 critical electric infrastructure vulnerability’ means a
14 weakness in defense critical electric infrastructure
15 that, in the event of a malicious act using electronic
16 communication or an electromagnetic pulse, would
17 pose a substantial risk of disruption of those elec-
18 tronic devices or communications networks, includ-
19 ing hardware, software, and data, that are essential
20 to the reliability of defense critical electric infra-
21 structure.

22 “(4) ELECTROMAGNETIC PULSE.—The term
23 ‘electromagnetic pulse’ means 1 or more pulses of
24 electromagnetic energy emitted by a device capable

1 of disabling, disrupting, or destroying electronic
2 equipment by means of such a pulse.

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

7 “(6) GRID SECURITY THREAT.—The term ‘grid
8 security threat’ means a substantial likelihood of—

9 “(A)(i) a malicious act using electronic
10 communication or an electromagnetic pulse, or
11 a geomagnetic storm event, that could disrupt
12 the operation of those electronic devices or com-
13 munications networks, including hardware, soft-
14 ware, and data, that are essential to the reli-
15 ability of the bulk-power system or of defense
16 critical electric infrastructure; and

17 “(ii) disruption of the operation of such
18 devices or networks, with significant adverse ef-
19 fects on the reliability of the bulk-power system
20 or of defense critical electric infrastructure, as
21 a result of such act or event; or

22 “(B)(i) a direct physical attack on the
23 bulk-power system or on defense critical electric
24 infrastructure; and

1 “(ii) significant adverse effects on the reli-
2 ability of the bulk-power system or of defense
3 critical electric infrastructure as a result of
4 such physical attack.

5 “(7) GRID SECURITY VULNERABILITY.—The
6 term ‘grid security vulnerability’ means a weakness
7 that, in the event of a malicious act using electronic
8 communication or an electromagnetic pulse, would
9 pose a substantial risk of disruption to the operation
10 of those electronic devices or communications net-
11 works, including hardware, software, and data, that
12 are essential to the reliability of the bulk-power sys-
13 tem.

14 “(8) LARGE TRANSFORMER.—The term ‘large
15 transformer’ means an electric transformer that is
16 part of the bulk-power system.

17 “(9) PROTECTED INFORMATION.—The term
18 ‘protected information’ means information, other
19 than classified national security information, des-
20 ignated as protected information by the Commission
21 under subsection (e)(2)—

22 “(A) that was developed or submitted in
23 connection with the implementation of this sec-
24 tion;

1 “(B) that specifically discusses grid secu-
2 rity threats, grid security vulnerabilities, de-
3 fense critical electric infrastructure
4 vulnerabilities, or plans, procedures, or meas-
5 ures to address such threats or vulnerabilities;
6 and

7 “(C) the unauthorized disclosure of which
8 could be used in a malicious manner to impair
9 the reliability of the bulk-power system or of
10 defense critical electric infrastructure.

11 “(10) SECRETARY.—The term ‘Secretary’
12 means the Secretary of Energy.

13 “(11) SECURITY.—The definition of ‘security’
14 in section 3(16) shall not apply to the provisions in
15 this section.

16 “(b) EMERGENCY RESPONSE MEASURES.—

17 “(1) AUTHORITY TO ADDRESS GRID SECURITY
18 THREATS.—Whenever the President issues and pro-
19 vides to the Commission (either directly or through
20 the Secretary) a written directive or determination
21 identifying an imminent grid security threat, the
22 Commission may, with or without notice, hearing, or
23 report, issue such orders for emergency measures as
24 are necessary in its judgment to protect the reli-
25 ability of the bulk-power system or of defense critical

1 electric infrastructure against such threat. As soon
2 as practicable but not later than 180 days after the
3 date of enactment of this section, the Commission
4 shall, after notice and opportunity for comment, es-
5 tablish rules of procedure that ensure that such au-
6 thority can be exercised expeditiously.

7 “(2) NOTIFICATION OF CONGRESS.—Whenever
8 the President issues and provides to the Commission
9 (either directly or through the Secretary) a written
10 directive or determination under paragraph (1), the
11 President (or the Secretary, as the case may be)
12 shall promptly notify congressional committees of
13 relevant jurisdiction, including the Committee on
14 Energy and Commerce of the House of Representa-
15 tives and the Committee on Energy and Natural Re-
16 sources of the Senate, of the contents of, and jus-
17 tification for, such directive or determination.

18 “(3) CONSULTATION.—Before issuing an order
19 for emergency measures under paragraph (1), the
20 Commission shall, to the extent practicable in light
21 of the nature of the grid security threat and the ur-
22 gency of the need for such emergency measures, con-
23 sult with appropriate governmental authorities in
24 Canada and Mexico, entities described in paragraph
25 (4), the Secretary, and other appropriate Federal

1 agencies regarding implementation of such emer-
2 gency measures.

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

5 “(A) the Electric Reliability Organization;

6 “(B) a regional entity; or

7 “(C) any owner, user, or operator of the
8 bulk-power system or of defense critical electric
9 infrastructure within the United States.

10 “(5) DISCONTINUANCE.—The Commission shall
11 issue an order discontinuing any emergency meas-
12 ures ordered under this subsection, effective not
13 later than 30 days after the earliest of the following:

14 “(A) The date upon which the President
15 issues and provides to the Commission (either
16 directly or through the Secretary) a written di-
17 rective or determination that the grid security
18 threat identified under paragraph (1) no longer
19 exists.

20 “(B) The date upon which the Commission
21 issues a written determination that the emer-
22 gency measures are no longer needed to address
23 the grid security threat identified under para-
24 graph (1), including by means of Commission
25 approval of a reliability standard under section

1 215 that the Commission determines adequately
2 addresses such threat.

3 “(C) The date that is 1 year after the
4 issuance of an order under paragraph (1).

5 “(6) COST RECOVERY.—If the Commission de-
6 termines that owners, operators, or users of the
7 bulk-power system or of defense critical electric in-
8 frastructure have incurred substantial costs to com-
9 ply with an order under this subsection and that
10 such costs were prudently incurred and cannot rea-
11 sonably be recovered through regulated rates or
12 market prices for the electric energy or services sold
13 by such owners, operators, or users, the Commission
14 shall, after notice and an opportunity for comment,
15 establish a mechanism that permits such owners, op-
16 erators, or users to recover such costs.

17 “(c) MEASURES TO ADDRESS GRID SECURITY
18 VULNERABILITIES.—

19 “(1) COMMISSION AUTHORITY.—If the Commis-
20 sion, in consultation with appropriate Federal agen-
21 cies, identifies a grid security vulnerability that the
22 Commission determines has not adequately been ad-
23 dressed through a reliability standard developed and
24 approved under section 215, the Commission shall,
25 after notice and opportunity for comment and after

1 consultation with the Secretary, other appropriate
2 Federal agencies, and appropriate governmental au-
3 thorities in Canada and Mexico, promulgate a rule
4 or issue an order requiring implementation, by any
5 owner, operator, or user of the bulk-power system in
6 the United States, of measures to protect the bulk-
7 power system against such vulnerability. Before pro-
8 mulgating a rule or issuing an order under this
9 paragraph, the Commission shall, to the extent prac-
10 ticable in light of the urgency of the need for action
11 to address the grid security vulnerability, request
12 and consider recommendations from the Electric Re-
13 liability Organization regarding such rule or order.
14 The Commission may establish an appropriate dead-
15 line for the submission of such recommendations.

16 “(2) CERTAIN EXISTING CYBERSECURITY
17 VULNERABILITIES.—Not later than 180 days after
18 the date of enactment of this section, the Commis-
19 sion shall, after notice and opportunity for comment
20 and after consultation with the Secretary, other ap-
21 propriate Federal agencies, and appropriate govern-
22 mental authorities in Canada and Mexico, promul-
23 gate a rule or issue an order requiring the imple-
24 mentation, by any owner, user, or operator of the
25 bulk-power system in the United States, of such

1 measures as are necessary to protect the bulk-power
2 system against the vulnerabilities identified in the
3 June 21, 2007, communication to certain ‘Electricity
4 Sector Owners and Operators’ from the North
5 American Electric Reliability Corporation, acting in
6 its capacity as the Electricity Sector Information
7 and Analysis Center.

8 “(3) RESCISSION.—The Commission shall ap-
9 prove a reliability standard developed under section
10 215 that addresses a grid security vulnerability that
11 is the subject of a rule or order under paragraph (1)
12 or (2), unless the Commission determines that such
13 reliability standard does not adequately protect
14 against such vulnerability or otherwise does not sat-
15 isfy the requirements of section 215. Upon such ap-
16 proval, the Commission shall rescind the rule pro-
17 mulgated or order issued under paragraph (1) or (2)
18 addressing such vulnerability, effective upon the ef-
19 fective date of the newly approved reliability stand-
20 ard.

21 “(4) GEOMAGNETIC STORMS.—Not later than 1
22 year after the date of enactment of this section, the
23 Commission shall, after notice and an opportunity
24 for comment and after consultation with the Sec-
25 retary and other appropriate Federal agencies, issue

1 an order directing the Electric Reliability Organiza-
2 tion to submit to the Commission for approval under
3 section 215, not later than 1 year after the issuance
4 of such order, reliability standards adequate to pro-
5 tect the bulk-power system from any reasonably
6 foreseeable geomagnetic storm event. The Commis-
7 sion's order shall specify the nature and magnitude
8 of the reasonably foreseeable events against which
9 such standards must protect. Such standards shall
10 appropriately balance the risks to the bulk-power
11 system associated with such events, including any
12 regional variation in such risks, and the costs of
13 mitigating such risks.

14 “(5) LARGE TRANSFORMER AVAILABILITY.—
15 Not later than 1 year after the date of enactment
16 of this section, the Commission shall, after notice
17 and an opportunity for comment and after consulta-
18 tion with the Secretary and other appropriate Fed-
19 eral agencies, issue an order directing the Electric
20 Reliability Organization to submit to the Commis-
21 sion for approval under section 215, not later than
22 1 year after the issuance of such order, reliability
23 standards addressing availability of large trans-
24 formers. Such standards shall require entities that
25 own or operate large transformers to ensure, individ-

1 ually or jointly, adequate availability of large trans-
2 formers to promptly restore the reliable operation of
3 the bulk-power system in the event that any such
4 transformer is destroyed or disabled as a result of
5 a reasonably foreseeable physical or other attack or
6 geomagnetic storm event. The Commission's order
7 shall specify the nature and magnitude of the rea-
8 sonably foreseeable attacks or events that shall pro-
9 vide the basis for such standards. Such standards
10 shall—

11 “(A) provide entities subject to the stand-
12 ards with the option of meeting such standards
13 individually or jointly; and

14 “(B) appropriately balance the risks asso-
15 ciated with a reasonably foreseeable attack or
16 event, including any regional variation in such
17 risks, and the costs of ensuring adequate avail-
18 ability of spare transformers.

19 “(d) CRITICAL DEFENSE FACILITIES.—

20 “(1) DESIGNATION.—Not later than 180 days
21 after the date of enactment of this section, the
22 President shall designate, in a written directive or
23 determination provided to the Commission, facilities
24 located in the United States (including the terri-
25 tories) that are—

1 “(A) critical to the defense of the United
2 States; and

3 “(B) vulnerable to a disruption of the sup-
4 ply of electric energy provided to such facility
5 by an external provider.

6 The number of facilities designated by such directive
7 or determination shall not exceed 100. The Presi-
8 dent may periodically revise the list of designated fa-
9 cilities through a subsequent written directive or de-
10 termination provided to the Commission, provided
11 that the total number of designated facilities at any
12 time shall not exceed 100.

13 “(2) COMMISSION AUTHORITY.—If the Commis-
14 sion identifies a defense critical electric infrastruc-
15 ture vulnerability that the Commission, in consulta-
16 tion with owners and operators of any facility or fa-
17 cilities designated by the President pursuant to
18 paragraph (1), determines has not adequately been
19 addressed through measures undertaken by owners
20 or operators of defense critical electric infrastruc-
21 ture, the Commission shall, after notice and an op-
22 portunity for comment and after consultation with
23 the Secretary and other appropriate Federal agen-
24 cies, promulgate a rule or issue an order requiring
25 implementation, by any owner or operator of defense

1 critical electric infrastructure, of measures to protect
2 the defense critical electric infrastructure against
3 such vulnerability. The Commission shall exempt
4 from any such rule or order any specific defense
5 critical electric infrastructure that the Commission
6 determines already has been adequately protected
7 against the identified vulnerability. The Commission
8 shall make any such determination in consultation
9 with the owner or operator of the facility designated
10 by the President pursuant to paragraph (1) that re-
11 lies upon such defense critical electric infrastructure.

12 “(3) COST RECOVERY.—An owner or operator
13 of defense critical electric infrastructure shall be re-
14 quired to take measures under paragraph (2) only to
15 the extent that the owners or operators of a facility
16 or facilities designated by the President pursuant to
17 paragraph (1) that rely upon such infrastructure
18 agree to bear the full incremental costs of compli-
19 ance with a rule promulgated or order issued under
20 paragraph (2).

21 “(e) PROTECTION OF INFORMATION.—

22 “(1) PROHIBITION OF PUBLIC DISCLOSURE OF
23 PROTECTED INFORMATION.—Protected informa-
24 tion—

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

4 “(B) shall not be made available pursuant
5 to any State, local, or tribal law requiring dis-
6 closure of information or records.

7 “(2) INFORMATION SHARING.—

8 “(A) IN GENERAL.—Consistent with the
9 Controlled Unclassified Information framework
10 established by the President, the Commission
11 shall promulgate such regulations and issue
12 such orders as necessary to designate protected
13 information and to prohibit the unauthorized
14 disclosure of such protected information.

15 “(B) SHARING OF PROTECTED INFORMA-
16 TION.—The regulations promulgated and orders
17 issued pursuant to subparagraph (A) shall pro-
18 vide standards for and facilitate the appropriate
19 sharing of protected information with, between,
20 and by Federal, State, local, and tribal authori-
21 ties, the Electric Reliability Organization, re-
22 gional entities, and owners, operators, and
23 users of the bulk-power system in the United
24 States and of defense critical electric infrastruc-
25 ture. In promulgating such regulations and

1 issuing such orders, the Commission shall take
2 account of the role of State commissions in re-
3 viewing the prudence and cost of investments
4 within their respective jurisdictions. The Com-
5 mission shall consult with appropriate Canadian
6 and Mexican authorities to develop protocols for
7 the sharing of protected information with, be-
8 tween, and by appropriate Canadian and Mexi-
9 can authorities and owners, operators, and
10 users of the bulk-power system outside the
11 United States.

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

17 “(4) DISCLOSURE OF NON-PROTECTED INFOR-
18 MATION.—In implementing this section, the Com-
19 mission shall protect from disclosure only the min-
20 imum amount of information necessary to protect
21 the reliability of the bulk-power system and of de-
22 fense critical electric infrastructure. The Commission
23 shall segregate protected information within docu-
24 ments and electronic communications, wherever fea-

1 sible, to facilitate disclosure of information that is
2 not designated as protected information.

3 “(5) DURATION OF DESIGNATION.—Informa-
4 tion may not be designated as protected information
5 for longer than 5 years, unless specifically redesign-
6 nated by the Commission.

7 “(6) REMOVAL OF DESIGNATION.—The Com-
8 mission may remove the designation of protected in-
9 formation, in whole or in part, from a document or
10 electronic communication if the unauthorized disclo-
11 sure of such information could no longer be used to
12 impair the reliability of the bulk-power system or of
13 defense critical electric infrastructure.

14 “(7) JUDICIAL REVIEW OF DESIGNATIONS.—
15 Notwithstanding subsection (f) of this section or sec-
16 tion 313, a person or entity may seek judicial review
17 of a determination by the Commission concerning
18 the designation of protected information under this
19 subsection exclusively in the district court of the
20 United States in the district in which the complain-
21 ant resides, or has his principal place of business, or
22 in the District of Columbia. In such a case the court
23 shall determine the matter de novo, and may exam-
24 ine the contents of documents or electronic commu-
25 nications designated as protected information in

1 camera to determine whether such documents or any
2 part thereof were improperly designated as protected
3 information. The burden is on the Commission to
4 sustain its designation.

5 “(f) JUDICIAL REVIEW.—The Commission shall act
6 expeditiously to resolve all applications for rehearing of
7 orders issued pursuant to this section that are filed under
8 section 313(a). Any party seeking judicial review pursuant
9 to section 313 of an order issued under this section may
10 obtain such review only in the United States Court of Ap-
11 peals for the District of Columbia Circuit.

12 “(g) PROVISION OF ASSISTANCE TO INDUSTRY IN
13 MEETING GRID SECURITY PROTECTION NEEDS.—

14 “(1) EXPERTISE AND RESOURCES.—The Sec-
15 retary shall establish a program, in consultation with
16 other appropriate Federal agencies, to develop tech-
17 nical expertise in the protection of systems for the
18 generation, transmission, and distribution of electric
19 energy against geomagnetic storms or malicious acts
20 using electronic communications or electromagnetic
21 pulse that would pose a substantial risk of disrup-
22 tion to the operation of those electronic devices or
23 communications networks, including hardware, soft-
24 ware, and data, that are essential to the reliability
25 of such systems. Such program shall include the

1 identification and development of appropriate tech-
2 nical and electronic resources, including hardware,
3 software, and system equipment.

4 “(2) SHARING EXPERTISE.—As appropriate,
5 the Secretary shall offer to share technical expertise
6 developed under the program under paragraph (1),
7 through consultation and assistance, with owners,
8 operators, or users of systems for the generation,
9 transmission, or distribution of electric energy lo-
10 cated in the United States and with State commis-
11 sions. In offering such support, the Secretary shall
12 assign higher priority to systems serving facilities
13 designated by the President pursuant to subsection
14 (d)(1) and other critical-infrastructure facilities,
15 which the Secretary shall identify in consultation
16 with the Commission and other appropriate Federal
17 agencies.

18 “(3) SECURITY CLEARANCES AND COMMUNICA-
19 TION.—The Secretary shall facilitate and, to the ex-
20 tent practicable, expedite the acquisition of adequate
21 security clearances by key personnel of any entity
22 subject to the requirements of this section to enable
23 optimum communication with Federal agencies re-
24 garding grid security threats, grid security
25 vulnerabilities, and defense critical electric infra-

1 structure vulnerabilities. The Secretary, the Com-
2 mission, and other appropriate Federal agencies
3 shall, to the extent practicable and consistent with
4 their obligations to protect classified and protected
5 information, share timely actionable information re-
6 garding grid security threats, grid security
7 vulnerabilities, and defense critical electric infra-
8 structure vulnerabilities with appropriate key per-
9 sonnel of owners, operators, and users of the bulk-
10 power system and of defense critical electric infra-
11 structure.”.

12 (b) CONFORMING AMENDMENTS.—

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

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

Amend the title so as to read: “A bill to amend the
Federal Power Act to protect the bulk-power system and
electric infrastructure critical to the defense of the
United States against cybersecurity and other threats
and vulnerabilities”.

