

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Reliability and Continuity of Communications Networks, Including Broadband Technologies)	PS Docket No. 11-60
)	
Effects on Broadband Communications Networks of Damage or Failure of Network Equipment or Severe Overload)	PS Docket No. 10-92
)	
Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks)	EB Docket No. 06-119
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To the Commission:

Additional Comments and Notice from Nickolaus E. Leggett

The following is the text of H.R. 668, Secure High-voltage Infrastructure for Electricity from Lethal Damage Act (SHIELD Act). This bill was introduced on February 11, 2011. This bill addresses the subjects of solar geomagnetic storms and electromagnetic pulse (EMP) impacting the electric power industry. The FCC needs to evaluate this bill in its own consideration of these subjects and the needed protection of America's communications infrastructure.

Respectfully submitted,

**Nickolaus E. Leggett
Analyst and Inventor
1432 Northgate Square, #2A**

**Reston, VA 20190-3748
(703) 709-0752**

June 21, 2011

SUMMARY AS OF:

2/11/2011--Introduced.

Secure High-voltage Infrastructure for Electricity from Lethal Damage Act or SHIELD Act - Amends the Federal Power Act to authorize the Federal Energy Regulatory Commission (FERC), with or without notice, hearing, or report, to order emergency measures to protect the reliability of either the bulk-power system or the defense critical electric infrastructure whenever the President issues a written directive or determination identifying an imminent grid security threat.

Directs FERC to consult with governmental authorities in Canada and Mexico regarding implementation of emergency measures.

Prescribes: (1) implementation procedures; and (2) related cost recovery measures affecting owners, operators, or users of either the bulk-power system or the defense critical electric infrastructure.

Directs FERC to require any owner, user, or operator of the domestic bulk-power system to implement measures to protect the system against specified vulnerabilities.

Directs FERC also to order the Electric Reliability Organization (ERO) to submit reliability standards to: (1) protect the bulk-power system from a reasonably foreseeable geomagnetic storm event or electromagnetic pulse event (EMP); and (2) require entities that own or operate large transformers to ensure their adequate availability to restore promptly the reliable operation of the bulk-power system in the event of destruction or disability as a result of attack or a geomagnetic storm or EMP.

Directs the Secretary of Energy to establish a program to: (1) develop technical expertise in the protection of electric energy systems against either geomagnetic storms or malicious acts using electronic communications or electromagnetic weapons; and (2) share it with owners, operators, or users of systems for the generation, transmission, or distribution of electric energy located in the United States and with state commissions.

Exempts, for a specified period, the Tennessee Valley Authority and the Bonneville Power Administration from any requirement pertaining to either

emergency response measures or measures to address grid security vulnerabilities.

H.R.668

Latest Title: Secure High-voltage Infrastructure for Electricity from Lethal Damage Act

Sponsor: [Rep Franks, Trent](#) [AZ-2] (introduced 2/11/2011) [Cosponsors](#) (24)

Latest Major Action: 2/18/2011 Referred to House subcommittee. Status: Referred to the Subcommittee on Energy and Power.

H.R.668

SHIELD Act (Introduced in House - IH)

SECTION 1. SHORT TITLE.

This Act may be cited as the `Secure High-voltage Infrastructure for Electricity from Lethal Damage Act' or the `SHIELD Act'.

SEC. 2. FINDINGS.

The Congress makes the following findings:

(1) According to the Report of the Commission to Assess the Threat to the United States from Electromagnetic Pulse Attack (in this Act referred to as the `EMP Commission Report'), the society and economy of the United States are `critically dependent upon the availability of electricity.'.

(2) According to the EMP Commission Report, `continued electrical supply is necessary for sustaining water supplies, production and distribution of food, fuel, communications, and everything else that is part of our economy'.

(3) According to the EMP Commission Report, `contemporary U.S. society is not structured, nor does it have the means, to provide for the needs of nearly 300 million Americans without electricity.'.

(4) According to the EMP Commission Report, due to the existing electrical system operating at or near its physical

capacity, ` a relatively modest upset to the system can cause functional collapse.'.

(5) According to the EMP Commission Report, electromagnetic pulse (in this Act referred to as `EMP') is a threat to the overall electrical power system.

(6) According to the EMP Commission Report, EMP occurs both naturally, such as geomagnetic storms, and via manmade devices.

(7) According to the EMP Commission Report, while the electric infrastructure `has a degree of durability against . . . the failure of one or a small number of [electric] components,' the current strategy for recovery leaves the United States ill-prepared to respond effectively to an EMP attack that would potentially result in damage to vast numbers of components nearly simultaneously over an unprecedented geographic scale.

(8) According to the EMP Commission Report, EMP `may couple ultimately unmanageable currents and voltages into an electrical system routinely operated with little margin and cause the collapse of large portions of the electrical system.'.

(9) According to the EMP Commission Report, a collapse of large portions of the electrical system will result in significant periods of power-outage and `restoration from collapse or loss of significant portions of the system [will be] exceedingly difficult.'.

(10) According to the EMP Commission Report, `should the electrical power system be lost for any substantial period of time . . . the consequences are likely to be catastrophic to civilian society.'.

(11) According to the EMP Commission Report, `the Commission is deeply concerned that [negative] impacts [on the electric infrastructure] are certain in an EMP event unless practical steps are taken to provide protection for critical elements of the electric system.'.

SEC. 3. AMENDMENT TO THE FEDERAL POWER ACT.

(a) Critical Electric Infrastructure Security- Part II of the Federal Power Act (16 U.S.C. 824 et seq.) is amended by adding after section 215 the following new section:

` SEC. 215A. CRITICAL ELECTRIC INFRASTRUCTURE SECURITY.

` (a) Definitions- For purposes of this section:

` (1) BULK-POWER SYSTEM; ELECTRIC RELIABILITY ORGANIZATION; REGIONAL ENTITY- The terms `bulk-power system', `Electric Reliability Organization', and `regional entity'

have the meanings given such terms in paragraphs (1), (2), and (7) of section 215(a), respectively.

` (2) DEFENSE CRITICAL ELECTRIC INFRASTRUCTURE- The term `defense critical electric infrastructure' means any infrastructure located in the United States (including the territories) used for the generation, transmission, or distribution of electric energy that--

- ` (A) is not part of the bulk-power system; and
- ` (B) serves a facility designated by the President pursuant to subsection (d)(1), but is not owned or operated by the owner or operator of such facility.

` (3) DEFENSE CRITICAL ELECTRIC INFRASTRUCTURE VULNERABILITY- The term `defense critical electric infrastructure vulnerability' means a weakness in defense critical electric infrastructure that, in the event of a malicious act using an electromagnetic pulse, would pose a substantial risk of disruption of those electrical or electronic devices or communications networks, including hardware, software, and data, that are essential to the reliability of defense critical electric infrastructure.

` (4) ELECTROMAGNETIC PULSE- The term `electromagnetic pulse' means 1 or more pulses of electromagnetic energy generated or emitted by a device capable of disabling, disrupting, or destroying electronic equipment by means of such a pulse.

` (5) GEOMAGNETIC STORM- The term `geomagnetic storm' means a temporary disturbance of the Earth's magnetic field resulting from solar activity.

` (6) GRID SECURITY THREAT- The term `grid security threat' means a substantial likelihood of--

- ` (A) a malicious act using an electromagnetic pulse, or a geomagnetic storm event, that could disrupt the operation of those electrical or electronic devices or communications networks, including hardware, software, and data, that are essential to the reliability of the bulk-power system or of defense critical electric infrastructure; and
- ` (B) disruption of the operation of such devices or networks, with significant adverse effects on the reliability of the bulk-power system or of defense critical electric infrastructure, as a result of such act or event.

` (7) GRID SECURITY VULNERABILITY- The term `grid security vulnerability' means a weakness that, in the event of a malicious act using an electromagnetic pulse, would pose a substantial risk of disruption to the operation of those electrical or electronic devices or communications networks, including hardware, software, and data, that are essential to the reliability of the bulk-power system.

Canada and Mexico, entities described in paragraph (4), the Secretary, and other appropriate Federal agencies regarding implementation of such emergency measures.

` (4) APPLICATION- An order for emergency measures under this subsection may apply to--

` (A) the Electric Reliability Organization;

` (B) a regional entity; or

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

` (5) DISCONTINUANCE- The Commission shall issue an order discontinuing any emergency measures ordered under this subsection, effective not later than 30 days after the earliest of the following:

` (A) The date upon which the President issues and provides to the Commission (either directly or through the Secretary) a written directive or determination that the grid security threat identified under paragraph (1) no longer exists.

` (B) The date upon which the Commission issues a written determination that the emergency measures are no longer needed to address the grid security threat identified under paragraph (1), including by means of Commission approval of a reliability standard under section 215 that the Commission determines adequately addresses such threat.

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

` (6) COST RECOVERY- If the Commission determines that owners, operators, or users of the bulk-power system or of defense critical electric infrastructure have incurred substantial costs to comply with an order under this subsection or subsection (c) and that such costs were prudently incurred and cannot reasonably be recovered through regulated rates or market prices for the electric energy or services sold by such owners, operators, or users, the Commission shall, after notice and an opportunity for comment, establish a mechanism that permits such owners, operators, or users to recover such costs.

` (c) Measures To Address Grid Security Vulnerabilities-

` (1) COMMISSION AUTHORITY- If the Commission, in consultation with appropriate Federal agencies, identifies a grid security vulnerability that the Commission determines has not adequately been addressed through a reliability standard developed and approved under section 215, the Commission shall, after notice and opportunity for comment and after consultation with the Secretary, other appropriate Federal agencies, and appropriate governmental authorities in Canada and Mexico, promulgate a rule or issue an order requiring

implementation, by any owner, operator, or user of the bulk-power system in the United States, of measures to protect the bulk-power system against such vulnerability. Any such rule or order shall include a protection plan, including automated hardware-based solutions. Before promulgating a rule or issuing an order under this paragraph, the Commission shall, to the extent practicable in light of the urgency of the need for action to address the grid security vulnerability, request and consider recommendations from the Electric Reliability Organization regarding such rule or order. The Commission may establish an appropriate deadline for the submission of such recommendations.

` (2) RESCISSION- The Commission shall approve a reliability standard developed under section 215 that addresses a grid security vulnerability that is the subject of a rule or order under paragraph (1), unless the Commission determines that such reliability standard does not adequately protect against such vulnerability or otherwise does not satisfy the requirements of section 215. Upon such approval, the Commission shall rescind the rule promulgated or order issued under paragraph (1) addressing such vulnerability, effective upon the effective date of the newly approved reliability standard.

` (3) GEOMAGNETIC STORMS AND ELECTROMAGNETIC PULSE- Not later than 6 months after the date of enactment of this section, the Commission shall, after notice and an opportunity for comment and after consultation with the Secretary and other appropriate Federal agencies, issue an order directing the Electric Reliability Organization to submit to the Commission for approval under section 215, not later than 6 months after the issuance of such order, reliability standards adequate to protect the bulk-power system from any reasonably foreseeable geomagnetic storm or electromagnetic pulse event. The Commission's order shall specify the nature and magnitude of the reasonably foreseeable events against which such standards must protect. Such standards shall appropriately balance the risks to the bulk-power system associated with such events, including any regional variation in such risks, and the costs of mitigating such risks. If the Commission determines that the reliability standards submitted by the Electric Reliability Organization pursuant to this paragraph are inadequate, the Commission shall promulgate a rule or issue an order adequate to protect the bulk-power system from geomagnetic storms or electromagnetic pulse as required under paragraph (1).

` (4) LARGE TRANSFORMER AVAILABILITY- Not later than 1 year after the date of enactment of this section, the Commission shall, after notice and an opportunity for comment and after consultation with the Secretary and other appropriate Federal agencies, issue an order directing the Electric Reliability

Organization to submit to the Commission for approval under section 215, not later than 1 year after the issuance of such order, reliability standards addressing availability of large transformers. Such standards shall require entities that own or operate large transformers to ensure, individually or jointly, adequate availability of large transformers to promptly restore the reliable operation of the bulk-power system in the event that any such transformer is destroyed or disabled as a result of a geomagnetic storm event or electromagnetic pulse event. The Commission's order shall specify the nature and magnitude of the reasonably foreseeable events that shall provide the basis for such standards. Such standards shall--

- ˆ (A) provide entities subject to the standards with the option of meeting such standards individually or jointly; and
- ˆ (B) appropriately balance the risks associated with a reasonably foreseeable event, including any regional variation in such risks, and the costs of ensuring adequate availability of spare transformers.

ˆ (d) Critical Defense Facilities--

ˆ (1) DESIGNATION-- Not later than 180 days after the date of enactment of this section, the President shall designate, in a written directive or determination provided to the Commission, facilities located in the United States (including the territories) that are--

- ˆ (A) critical to the defense of the United States; and
- ˆ (B) vulnerable to a disruption of the supply of electric energy provided to such facility by an external provider.

The number of facilities designated by such directive or determination shall not exceed 100. The President may periodically revise the list of designated facilities through a subsequent written directive or determination provided to the Commission, provided that the total number of designated facilities at any time shall not exceed 100.

ˆ (2) COMMISSION AUTHORITY-- If the Commission identifies a defense critical electric infrastructure vulnerability that the Commission, in consultation with owners and operators of any facility or facilities designated by the President pursuant to paragraph (1), determines has not adequately been addressed through measures undertaken by owners or operators of defense critical electric infrastructure, the Commission shall, after notice and an opportunity for comment and after consultation with the Secretary and other appropriate Federal agencies, promulgate a rule or issue an order requiring implementation, by any owner or operator of defense critical electric infrastructure, of measures to protect the defense critical electric infrastructure against such vulnerability. The Commission shall exempt from any such rule or order any

specific defense critical electric infrastructure that the Commission determines already has been adequately protected against the identified vulnerability. The Commission shall make any such determination in consultation with the owner or operator of the facility designated by the President pursuant to paragraph (1) that relies upon such defense critical electric infrastructure.

^ (3) COST RECOVERY- An owner or operator of defense critical electric infrastructure shall be required to take measures under paragraph (2) only to the extent that the owners or operators of a facility or facilities designated by the President pursuant to paragraph (1) that rely upon such infrastructure agree to bear the full incremental costs of compliance with a rule promulgated or order issued under paragraph (2).

^ (e) Protection of Information-

^ (1) PROHIBITION OF PUBLIC DISCLOSURE OF PROTECTED INFORMATION- Protected information shall--

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

^ (B) not be made available pursuant to any State, local, or tribal law requiring disclosure of information or records.

^ (2) INFORMATION SHARING-

^ (A) IN GENERAL- Consistent with the Controlled Unclassified Information framework established by the President, the Commission shall promulgate such regulations and issue such orders as necessary to designate protected information and to prohibit the unauthorized disclosure of such protected information.

^ (B) SHARING OF PROTECTED INFORMATION- The regulations promulgated and orders issued pursuant to subparagraph (A) shall provide standards for and facilitate the appropriate sharing of protected information with, between, and by Federal, State, local, and tribal authorities, the Electric Reliability Organization, regional entities, and owners, operators, and users of the bulk-power system in the United States and of defense critical electric infrastructure.

SEC. 3. AMENDMENT TO THE FEDERAL POWER ACT.

(a) Critical Electric Infrastructure Security- Part II of the Federal Power Act (16 U.S.C. 824 et seq.) is amended by adding after section 215 the following new section:

SEC. 215A. CRITICAL ELECTRIC INFRASTRUCTURE SECURITY.

- (a) Definitions- For purposes of this section:
- (1) BULK-POWER SYSTEM; ELECTRIC RELIABILITY ORGANIZATION; REGIONAL ENTITY- The terms 'bulk-power system', 'Electric Reliability Organization', and 'regional entity' have the meanings given such terms in paragraphs (1), (2), and (7) of section 215(a), respectively.
 - (2) DEFENSE CRITICAL ELECTRIC INFRASTRUCTURE- The term 'defense critical electric infrastructure' means any infrastructure located in the United States (including the territories) used for the generation, transmission, or distribution of electric energy that--
 - (A) is not part of the bulk-power system; and
 - (B) serves a facility designated by the President pursuant to subsection (d)(1), but is not owned or operated by the owner or operator of such facility.
 - (3) DEFENSE CRITICAL ELECTRIC INFRASTRUCTURE VULNERABILITY- The term 'defense critical electric infrastructure vulnerability' means a weakness in defense critical electric infrastructure that, in the event of a malicious act using an electromagnetic pulse, would pose a substantial risk of disruption of those electrical or electronic devices or communications networks, including hardware, software, and data, that are essential to the reliability of defense critical electric infrastructure.
 - (4) ELECTROMAGNETIC PULSE- The term 'electromagnetic pulse' means 1 or more pulses of electromagnetic energy generated or emitted by a device capable of disabling, disrupting, or destroying electronic equipment by means of such a pulse.
 - (5) GEOMAGNETIC STORM- The term 'geomagnetic storm' means a temporary disturbance of the Earth's magnetic field resulting from solar activity.
 - (6) GRID SECURITY THREAT- The term 'grid security threat' means a substantial likelihood of--
 - (A) a malicious act using an electromagnetic pulse, or a geomagnetic storm event, that could disrupt the operation of those electrical or electronic devices or communications networks, including hardware, software, and data, that are essential to the reliability of the bulk-power system or of defense critical electric infrastructure; and
 - (B) disruption of the operation of such devices or networks, with significant adverse effects on the reliability

of the bulk-power system or of defense critical electric infrastructure, as a result of such act or event.

` (7) GRID SECURITY VULNERABILITY- The term `grid security vulnerability' means a weakness that, in the event of a malicious act using an electromagnetic pulse, would pose a substantial risk of disruption to the operation of those electrical or electronic devices or communications networks, including hardware, software, and data, that are essential to the reliability of the bulk-power system.

` (8) LARGE TRANSFORMER- The term `large transformer' means an electric transformer that is part of the bulk-power system.

` (9) PROTECTED INFORMATION- The term `protected information' means information, other than classified national security information, designated as protected information by the Commission under subsection (e)(2)--

` (A) that was developed or submitted in connection with the implementation of this section;

` (B) that specifically discusses grid security threats, grid security vulnerabilities, defense critical electric infrastructure vulnerabilities, or plans, procedures, or measures to address such threats or vulnerabilities; and

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

` (10) SECRETARY- The term `Secretary' means the Secretary of Energy.

` (11) SECURITY- The definition of `security' in section 3(16) shall not apply to the provisions in this section.

` (b) Emergency Response Measures-

` (1) AUTHORITY TO ADDRESS GRID SECURITY THREATS- Whenever the President issues and provides to the Commission (either directly or through the Secretary) a written directive or determination identifying an imminent grid security threat, the Commission may, with or without notice, hearing, or report, issue such orders for emergency measures as are necessary in its judgment to protect the reliability of the bulk-power system or of defense critical electric infrastructure against such threat. As soon as practicable, but not later than 180 days after the date of enactment of this section, the Commission shall, after notice and opportunity for comment, establish rules of procedure that ensure that such authority can be exercised expeditiously.

` (2) NOTIFICATION OF CONGRESS- Whenever the President issues and provides to the Commission (either directly or through the Secretary) a written directive or determination under paragraph (1), the President (or the Secretary, as the case may be) shall promptly notify congressional committees of

relevant jurisdiction, including the Committee on Energy and Commerce of the House of Representatives and the Committee on Energy and Natural Resources of the Senate, of the contents of, and justification for, such directive or determination.

ˆ (3) CONSULTATION- Before issuing an order for emergency measures under paragraph (1), the Commission shall, to the extent practicable in light of the nature of the grid security threat and the urgency of the need for such emergency measures, consult with appropriate governmental authorities in Canada and Mexico, entities described in paragraph (4), the Secretary, and other appropriate Federal agencies regarding implementation of such emergency measures.

ˆ (4) APPLICATION- An order for emergency measures under this subsection may apply to--

ˆ (A) the Electric Reliability Organization;

ˆ (B) a regional entity; or

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

ˆ (5) DISCONTINUANCE- The Commission shall issue an order discontinuing any emergency measures ordered under this subsection, effective not later than 30 days after the earliest of the following:

ˆ (A) The date upon which the President issues and provides to the Commission (either directly or through the Secretary) a written directive or determination that the grid security threat identified under paragraph (1) no longer exists.

ˆ (B) The date upon which the Commission issues a written determination that the emergency measures are no longer needed to address the grid security threat identified under paragraph (1), including by means of Commission approval of a reliability standard under section 215 that the Commission determines adequately addresses such threat.

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

ˆ (6) COST RECOVERY- If the Commission determines that owners, operators, or users of the bulk-power system or of defense critical electric infrastructure have incurred substantial costs to comply with an order under this subsection or subsection (c) and that such costs were prudently incurred and cannot reasonably be recovered through regulated rates or market prices for the electric energy or services sold by such owners, operators, or users, the Commission shall, after notice and an opportunity for comment, establish a mechanism that permits such owners, operators, or users to recover such costs.

ˆ (c) Measures To Address Grid Security Vulnerabilities-

` (1) COMMISSION AUTHORITY- If the Commission, in consultation with appropriate Federal agencies, identifies a grid security vulnerability that the Commission determines has not adequately been addressed through a reliability standard developed and approved under section 215, the Commission shall, after notice and opportunity for comment and after consultation with the Secretary, other appropriate Federal agencies, and appropriate governmental authorities in Canada and Mexico, promulgate a rule or issue an order requiring implementation, by any owner, operator, or user of the bulk-power system in the United States, of measures to protect the bulk-power system against such vulnerability. Any such rule or order shall include a protection plan, including automated hardware-based solutions. Before promulgating a rule or issuing an order under this paragraph, the Commission shall, to the extent practicable in light of the urgency of the need for action to address the grid security vulnerability, request and consider recommendations from the Electric Reliability Organization regarding such rule or order. The Commission may establish an appropriate deadline for the submission of such recommendations.

` (2) RESCISSION- The Commission shall approve a reliability standard developed under section 215 that addresses a grid security vulnerability that is the subject of a rule or order under paragraph (1), unless the Commission determines that such reliability standard does not adequately protect against such vulnerability or otherwise does not satisfy the requirements of section 215. Upon such approval, the Commission shall rescind the rule promulgated or order issued under paragraph (1) addressing such vulnerability, effective upon the effective date of the newly approved reliability standard.

` (3) GEOMAGNETIC STORMS AND ELECTROMAGNETIC PULSE- Not later than 6 months after the date of enactment of this section, the Commission shall, after notice and an opportunity for comment and after consultation with the Secretary and other appropriate Federal agencies, issue an order directing the Electric Reliability Organization to submit to the Commission for approval under section 215, not later than 6 months after the issuance of such order, reliability standards adequate to protect the bulk-power system from any reasonably foreseeable geomagnetic storm or electromagnetic pulse event. The Commission's order shall specify the nature and magnitude of the reasonably foreseeable events against which such standards must protect. Such standards shall appropriately balance the risks to the bulk-power system associated with such events, including any regional variation in such risks, and the costs of mitigating such risks. If the Commission determines that the reliability standards submitted by the Electric Reliability

Organization pursuant to this paragraph are inadequate, the Commission shall promulgate a rule or issue an order adequate to protect the bulk-power system from geomagnetic storms or electromagnetic pulse as required under paragraph (1).

ˆ (4) LARGE TRANSFORMER AVAILABILITY- Not later than 1 year after the date of enactment of this section, the Commission shall, after notice and an opportunity for comment and after consultation with the Secretary and other appropriate Federal agencies, issue an order directing the Electric Reliability Organization to submit to the Commission for approval under section 215, not later than 1 year after the issuance of such order, reliability standards addressing availability of large transformers. Such standards shall require entities that own or operate large transformers to ensure, individually or jointly, adequate availability of large transformers to promptly restore the reliable operation of the bulk-power system in the event that any such transformer is destroyed or disabled as a result of a geomagnetic storm event or electromagnetic pulse event. The Commission's order shall specify the nature and magnitude of the reasonably foreseeable events that shall provide the basis for such standards. Such standards shall--

ˆ (A) provide entities subject to the standards with the option of meeting such standards individually or jointly; and

ˆ (B) appropriately balance the risks associated with a reasonably foreseeable event, including any regional variation in such risks, and the costs of ensuring adequate availability of spare transformers.

ˆ (d) Critical Defense Facilities-

ˆ (1) DESIGNATION- Not later than 180 days after the date of enactment of this section, the President shall designate, in a written directive or determination provided to the Commission, facilities located in the United States (including the territories) that are--

ˆ (A) critical to the defense of the United States; and

ˆ (B) vulnerable to a disruption of the supply of electric energy provided to such facility by an external provider.

The number of facilities designated by such directive or determination shall not exceed 100. The President may periodically revise the list of designated facilities through a subsequent written directive or determination provided to the Commission, provided that the total number of designated facilities at any time shall not exceed 100.

ˆ (2) COMMISSION AUTHORITY- If the Commission identifies a defense critical electric infrastructure vulnerability that the Commission, in consultation with owners and operators of any facility or facilities designated by the President pursuant to paragraph (1), determines has not adequately been addressed

through measures undertaken by owners or operators of defense critical electric infrastructure, the Commission shall, after notice and an opportunity for comment and after consultation with the Secretary and other appropriate Federal agencies, promulgate a rule or issue an order requiring implementation, by any owner or operator of defense critical electric infrastructure, of measures to protect the defense critical electric infrastructure against such vulnerability. The Commission shall exempt from any such rule or order any specific defense critical electric infrastructure that the Commission determines already has been adequately protected against the identified vulnerability. The Commission shall make any such determination in consultation with the owner or operator of the facility designated by the President pursuant to paragraph (1) that relies upon such defense critical electric infrastructure.

^ (3) COST RECOVERY- An owner or operator of defense critical electric infrastructure shall be required to take measures under paragraph (2) only to the extent that the owners or operators of a facility or facilities designated by the President pursuant to paragraph (1) that rely upon such infrastructure agree to bear the full incremental costs of compliance with a rule promulgated or order issued under paragraph (2).

^ (e) Protection of Information-

^ (1) PROHIBITION OF PUBLIC DISCLOSURE OF PROTECTED INFORMATION- Protected information shall--

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

^ (B) not be made available pursuant to any State, local, or tribal law requiring disclosure of information or records.

^ (2) INFORMATION SHARING-

^ (A) IN GENERAL- Consistent with the Controlled Unclassified Information framework established by the President, the Commission shall promulgate such regulations and issue such orders as necessary to designate protected information and to prohibit the unauthorized disclosure of such protected information.

^ (B) SHARING OF PROTECTED INFORMATION- The regulations promulgated and orders issued pursuant to subparagraph (A) shall provide standards for and facilitate the appropriate sharing of protected information with, between, and by Federal, State, local, and tribal authorities, the Electric Reliability Organization, regional entities, and owners, operators, and users of the bulk-power system in the United States and of defense critical electric infrastructure. In promulgating such regulations and issuing such orders, the Commission shall take

account of the role of State commissions in reviewing the prudence and cost of investments within their respective jurisdictions. The Commission shall consult with appropriate Canadian and Mexican authorities to develop protocols for the sharing of protected information with, between, and by appropriate Canadian and Mexican authorities and owners, operators, and users of the bulk-power system outside the United States.

ˆ (3) SUBMISSION OF INFORMATION TO CONGRESS- Nothing in this section shall permit or authorize the withholding of information from Congress, any committee or subcommittee thereof, or the Comptroller General.

ˆ (4) DISCLOSURE OF NONPROTECTED INFORMATION- In implementing this section, the Commission shall protect from disclosure only the minimum amount of information necessary to protect the reliability of the bulk-power system and of defense critical electric infrastructure. The Commission shall segregate protected information within documents and electronic communications, wherever feasible, to facilitate disclosure of information that is not designated as protected information.

ˆ (5) DURATION OF DESIGNATION- Information may not be designated as protected information for longer than 5 years, unless specifically redesignated by the Commission.

ˆ (6) REMOVAL OF DESIGNATION- The Commission may remove the designation of protected information, in whole or in part, from a document or electronic communication if the unauthorized disclosure of such information could no longer be used to impair the reliability of the bulk-power system or of defense critical electric infrastructure.

ˆ (7) JUDICIAL REVIEW OF DESIGNATIONS- Notwithstanding subsection (f) of this section or section 313, a person or entity may seek judicial review of a determination by the Commission concerning the designation of protected information under this subsection exclusively in the district court of the United States in the district in which the complainant resides, or has his principal place of business, or in the District of Columbia. In such a case the court shall determine the matter de novo, and may examine the contents of documents or electronic communications designated as protected information in camera to determine whether such documents or any part thereof were improperly designated as protected information. The burden is on the Commission to sustain its designation.

ˆ (f) Judicial Review- The Commission shall act expeditiously to resolve all applications for rehearing of orders issued pursuant to this section that are filed under section 313(a). Any party seeking judicial review pursuant to section 313 of an order issued under this section may

obtain such review only in the United States Court of Appeals for the District of Columbia Circuit.

` (g) Provision of Assistance to Industry in Meeting Grid Security Protection Needs-

` (1) EXPERTISE AND RESOURCES- The Secretary shall establish a program, in consultation with other appropriate Federal agencies, to develop technical expertise in the protection of systems for the generation, transmission, and distribution of electric energy against geomagnetic storms or malicious acts using electromagnetic pulse that would pose a substantial risk of disruption to the operation of those electronic devices or communications networks, including hardware, software, and data, that are essential to the reliability of such systems.

SEC. 4. BUDGETARY COMPLIANCE.

The budgetary effects of this Act, for the purpose of complying with the Statutory Pay-As-You-Go Act of 2010, shall be determined by reference to the latest statement titled ` Budgetary Effects of PAYGO Legislation' for this Act, submitted for printing in the Congressional Record by the Chairman of the House Budget Committee, provided that such statement has been submitted prior to the vote on passage.