[DISCUSSION DRAFT]
TITLE I—MODERNIZING AND PROTECTING INFRASTRUCTURE
Subtitle ____—Energy Reliability and Security

SEC. 1201. RESOLVING ENVIRONMENTAL AND GRID RELIABILITY CONFLICTS.

(a) COMPLIANCE WITH OR VIOLATION OF ENVIRONMENTAL LAWS WHILE UNDER EMERGENCY ORDER.—Section 202(c) of the Federal Power Act (16 U.S.C. 824a(c)) is amended—

(1) by inserting ''(1)'' after ''(c)''; and

(2) by adding at the end the following:

''(2) With respect to an order issued under this subsection that may result in a conflict with a requirement of any Federal, State, or local environmental law or regulation, the Commission shall ensure that such order requires generation, delivery, interchange, or transmission of electric energy only during hours necessary to meet the emergency and serve the public interest, and, to the maximum extent practicable, is consistent with any applicable Federal, State, or local environmental law or regulation and minimizes any adverse environmental impacts.

''(3) To the extent any omission or action taken by a party, that is necessary to comply with an order issued under this subsection, including any omission or action taken to voluntarily comply with such order, results in noncompliance with, or causes such party to not comply with, any Federal, State, or local environmental law or regulation, such omission or action shall not be considered a violation of such environmental law or regulation, or subject such party to any requirement, civil or criminal liability, or a citizen suit under such environmental law or regulation.

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

''(B) In renewing or reissuing an order under subparagraph (A), the Commission shall consult with the primary Federal agency with expertise in the environmental interest protected by such law or regulation, and shall include in any such renewed or reissued order such conditions as such Federal agency determines necessary to min-

imize any adverse environmental impacts to the extent practicable. The conditions, if any, submitted by such Federal agency shall be made available to the public. The Commission may exclude such a condition from the renewed or reissued order if it determines that such condition would prevent the order from adequately addressing the emergency necessitating such order and provides in the order, or otherwise makes publicly available, an explanation of such determination.

''(5) If an order issued under this subsection is subsequently stayed, modified, or set aside by a court pursuant to section 313 or any other provision of law, any omission or action previously taken by a party that was necessary to comply with the order while the order was in effect, including any omission or action taken to voluntarily comply with the order, shall remain subject to paragraph (3).''.

(b) TEMPORARY CONNECTION OR CONSTRUCTION BY MUNICIPALITIES.—Section 202(d) of the Federal Power Act (16 U.S.C. 824a(d)) is amended by inserting ''or municipality'' before ''engaged in the transmission or sale of electric energy''.

SEC. 1202. RELIABILITY ANALYSIS FOR CERTAIN RULES THAT AFFECT ELECTRIC GENERATING FACILITIES.

(a) APPLICABILITY.—This section shall apply with respect to any proposed or final major rule issued by a Federal agency for which compliance with the rule may impact an electric utility generating unit or units, including by resulting in closure or interruption to operations of such a unit or units.

(b) RELIABILITY ANALYSIS.—

(1) ANALYSIS OF RULES.—The Federal Energy Regulatory Commission, in coordination with the Electric Reliability Organization, shall conduct an independent reliability analysis of a proposed or final major rule under this section to evaluate the anticipated effects of implementation and enforcement of the rule on—

(A) national, regional, or local electric reliability and resource adequacy;

(B) the fuel diversity of the electricity generation portfolio of the United States;

(C) the operation of wholesale electricity markets; and

(D) energy delivery and infrastructure, including electric transmission facilities and natural gas pipelines.

(2) RELEVANT INFORMATION.—A Federal agency shall provide to the Commission materials and information relevant to the analysis required under paragraph (1) for a rule, including relevant data, modeling, and resource adequacy and reliability assessments, prepared or relied upon by such agency in developing the rule.

(c) PROPOSED RULES.—Not later than 90 days after the date of publication in the Federal Register of a proposed rule described in subsection (a), the Federal Energy Regulatory Commission shall make available to the public an analysis of the proposed rule conducted in accordance with subsection (b), and any relevant special assessment or seasonal or long-term reliability assessment completed by the Electric Reliability Organization.

(d) FINAL RULES.—

(1) INCLUSIONS.—A final rule described in subsection (a) shall include—

(A) a copy of the analysis conducted pursuant to subsection (c) of the rule as proposed; and

(B) a section on electric reliability and resource adequacy that addresses any concerns or issues raised in such analysis or any assessment included pursuant to subsection (c).

(2) ANALYSIS.—Not later than 120 days after the date of publication in the Federal Register of a final rule described in subsection (a), the Federal Energy Regulatory Commission shall make available to the public an analysis of the final rule conducted in accordance with subsection (b), and any relevant special assessment or seasonal or long-term reliability assessment completed by the Electric Reliability Organization.

(e) DEFINITIONS.—In this section:

(1) ELECTRIC RELIABILITY ORGANIZATION.—The term ''Electric Reliability Organization'' has the meaning given to such term in section 215(a) of the Federal Power Act (16 U.S.C. 824o(a)).

(2) FEDERAL AGENCY.—The term ''Federal agency'' means an agency, as that term is defined in section 551 of title 5, United States Code.

(3) MAJOR RULE.—The term ''major rule'' means a proposed or final rule that is estimated by the Federal agency issuing the rule, or the Director of the Office of Management and Budget, to result in an annual effect on the economy of $1,000,000,000 or more.

SEC. 1203. EMERGENCY PREPAREDNESS FOR ENERGY SUPPLY DISRUPTIONS.

(a) FINDING.—Congress finds that recent natural disasters have underscored the importance of having resilient oil and natural gas infrastructure and effective ways for industry and government to communicate to address energy supply disruptions.

(b) AUTHORIZATION FOR ACTIVITIES TO ENHANCE EMERGENCY PREPAREDNESS FOR NATURAL DISASTERS.—The Secretary of Energy shall develop and adopt procedures to—

(1) improve communication and coordination between the Department of Energy's energy response team, Federal partners, and industry;

(2) leverage the Energy Information Administration's subject matter expertise within the Department's energy response team to improve supply chain situation assessments;

(3) establish company liaisons and direct communication with the Department's energy response team to improve situation assessments;

(4) streamline and enhance processes for obtaining temporary regulatory relief to speed up emergency response and recovery;

(5) facilitate and increase engagement among States, the oil and natural gas industry, and the De-

partment in developing State and local energy assurance plans;

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

(7) involve States and the oil and natural gas industry in comprehensive drill and exercise programs.

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

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

SEC. 1204. CRITICAL ELECTRIC INFRASTRUCTURE SECURITY.

(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) CRITICAL ELECTRIC INFRASTRUCTURE.—The term 'critical electric infrastructure' means a system or asset, whether physical or virtual, used for the generation, transmission, or distribution of electric energy affecting interstate commerce, the incapacity or destruction of which would negatively affect national security, economic security, public health or safety, or any combination of such matters.

''(3) CRITICAL ELECTRIC INFRASTRUCTURE INFORMATION.—The term 'critical electric infrastructure information' means information related to critical electric infrastructure, or proposed critical electrical infrastructure, generated by or provided to the Commission, other than classified national security information, that is designated as critical electric infrastructure information by the Commission under subsection (d)(2).

''(4) 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 Secretary pursuant to subsection (c), but is not owned or operated by the owner or operator of such facility.

''(5) ELECTROMAGNETIC PULSE.—The term 'electromagnetic pulse' means 1 or more pulses of electromagnetic energy emitted by a device capable of disabling or disrupting operation of, or destroying, electronic devices or communications networks, including hardware, software, and data, by means of such a pulse.

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

''(7) GRID SECURITY EMERGENCY.—The term 'grid security emergency' means the imminent danger of—

''(A)(i) a malicious act using electronic communication or an electromagnetic pulse, or a geomagnetic storm event, that could disrupt the operation of those 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

''(ii) 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; or

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

''(ii) significant adverse effects on the reliability of the bulk-power system or of defense critical electric infrastructure as a result of such physical attack.

''(8) SECRETARY.—The term 'Secretary' means the Secretary of Energy.

"(b) AUTHORITY TO ADDRESS GRID SECURITY EMERGENCY.—

"(1) AUTHORITY.—Whenever the President issues and provides to the Secretary a written directive or determination identifying a grid security emergency, the Secretary may, with or without notice, hearing, or report, issue such orders for emergency measures as are necessary in the judgment of the Secretary to protect the reliability of the bulk-power system or of defense critical electric infrastructure during such emergency. As soon as practicable but not later than 180 days after the date of enactment of this section, the Secretary 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 Secretary a written directive or determination under paragraph (1), the President 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.

"(3) CONSULTATION.—Before issuing an order for emergency measures under paragraph (1), the Secretary shall, to the extent practicable in light of the nature of the grid security emergency and the urgency of the need for action, consult with appropriate governmental authorities in Canada and Mexico, entities described in paragraph (4), the Commission, 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) EXPIRATION AND REISSUANCE.—

"(A) IN GENERAL.—Except as provided in subparagraph (B), an order for emergency measures issued under paragraph (1) shall expire no later than 30 days after its issuance.

"(B) EXTENSIONS.—The Secretary may reissue an order for emergency measures issued

under paragraph (1) for subsequent periods, not to exceed 30 days for each such period, provided that the President, for each such period, issues and provides to the Secretary a written directive or determination that the grid security emergency identified under paragraph (1) continues to exist or that the emergency measure continues to be required.

''(6) COST RECOVERY.—

''(A) BULK-POWER SYSTEM.—If the Commission determines that owners, operators, or users of the bulk-power system have incurred substantial costs to comply with an order for emergency measures issued under this subsection 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.

''(B) DEFENSE CRITICAL ELECTRIC INFRASTRUCTURE.—To the extent the owner or operator of defense critical electric infrastructure is

required to take emergency measures pursuant to an order issued under this subsection, the owners or operators of a facility or facilities designated by the Secretary pursuant to subsection (c) that rely upon such infrastructure shall bear the full incremental costs of the measures.

''(7) TEMPORARY ACCESS TO CLASSIFIED INFORMATION.—The Secretary, and other appropriate Federal agencies, shall, to the extent practicable and consistent with their obligations to protect classified information, provide temporary access to classified information related to a grid security emergency for which emergency measures are issued under paragraph (1) to key personnel of any entity subject to such emergency measures to enable optimum communication between the entity and the Secretary and other appropriate Federal agencies regarding the grid security emergency.

''(c) DESIGNATION OF CRITICAL DEFENSE FACILITIES.—Not later than 180 days after the date of enactment of this section, the Secretary, in consultation with other appropriate Federal agencies and appropriate owners, users, or operators of infrastructure that may be defense critical electric infrastructure, shall identify and des-

ignate facilities located in the United States (including the territories) that are—

''(1) critical to the defense of the United States; and

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

The Secretary may, in consultation with appropriate Federal agencies and appropriate owners, users, or operators of defense critical electric infrastructure, periodically revise the list of designated facilities as necessary.

''(d) PROTECTION AND SHARING OF CRITICAL ELECTRIC INFRASTRUCTURE INFORMATION.—

''(1) PROTECTION OF CRITICAL ELECTRIC INFRASTRUCTURE INFORMATION.—Critical electric infrastructure information—

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

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

''(2) DESIGNATION AND SHARING OF CRITICAL ELECTRIC INFRASTRUCTURE INFORMATION.—The

Commission shall promulgate such regulations and issue such orders as necessary to—

"(A) designate information as critical electric infrastructure information;

"(B) prohibit the unauthorized disclosure of critical electric infrastructure information;

"(C) ensure there are appropriate sanctions in place for Commissioners, officers, employees, or agents of the Commission who knowingly and willfully disclose critical electric infrastructure information in a manner that is not authorized under this section; and

"(D) provide standards for and authorize the appropriate voluntary sharing of critical electric infrastructure information with, between, and by—

"(i) Federal, State, local, and tribal authorities;

"(ii) the Electric Reliability Organization;

"(iii) regional entities;

"(iv) information sharing and analysis centers established pursuant to Presidential Decision Directive 63;

"(v) owners, operators, and users of the bulk-power system in the United States; and

"(vi) other entities determined appropriate by the Commission.

"(3) CONSIDERATIONS.—In promulgating regulations and issuing orders under paragraph (2), the Commission shall take into consideration the role of State commissions in reviewing the prudence and cost of investments, determining the rates and terms of conditions for electric services, and ensuring the safety and reliability of the bulk-power system and distribution facilities within their respective jurisdictions.

"(4) PROTOCOLS.—The Commission shall, in consultation with Canadian and Mexican authorities, develop protocols for the voluntary sharing of critical electric infrastructure information with, between, and by Canadian and Mexican authorities and owners, operators, and users of the bulk-power system outside the United States.

"(5) NO REQUIRED SHARING OF INFORMATION.—Nothing in this section shall require a person or entity in possession of critical electric infrastructure information to share such information with

Federal, State, local, or tribal authorities, or any other person or entity.

''(6) DISCLOSURE OF NON-CRITICAL ELECTRIC INFRASTRUCTURE INFORMATION.—In implementing this section, the Commission shall segregate critical electric infrastructure information within documents and electronic communications, wherever feasible, to facilitate disclosure of information that is not designated as critical electric infrastructure information.

''(e) SECURITY CLEARANCES.—The Secretary shall facilitate and, to the extent practicable, expedite the acquisition of adequate security clearances by key personnel of any entity subject to the requirements of this section, to enable optimum communication with Federal agencies regarding threats to the security of the critical electric infrastructure. The Secretary, the Commission, and other appropriate Federal agencies shall, to the extent practicable and consistent with their obligations to protect classified and critical electric infrastructure information, share timely actionable information regarding grid security with appropriate key personnel of owners, operators, and users of the critical electric infrastructure.

''(f) CLARIFICATIONS OF LIABILITY.—

"(1) COMPLIANCE WITH OR VIOLATION OF THIS ACT.—Except as provided in paragraph (4), to the extent any action or omission taken by an entity that is necessary to comply with an order for emergency measures issued under subsection (b)(1), including any action or omission taken to voluntarily comply with such order, results in noncompliance with, or causes such entity not to comply with any rule, order, regulation, or provision of this Act, including any reliability standard approved by the Commission pursuant to section 215, such action or omission shall not be considered a violation of such rule, order, regulation, or provision.

"(2) RELATION TO SECTION 202(c).—Except as provided in paragraph (4), an action or omission taken by an owner, operator, or user of the bulk-power system or of defense critical electric infrastructure to comply with an order for emergency measures issued under subsection (b)(1) shall be treated as an action or omission taken to comply with an order issued under section 202(c) for purposes of such section.

"(3) SHARING OR RECEIPT OF INFORMATION.—No cause of action shall lie or be maintained in any Federal or State court for the sharing or receipt of

information under, and that is conducted in accordance with, subsection (d).

''(4) RULE OF CONSTRUCTION.—Nothing in this subsection shall be construed to require dismissal of a cause of action against an entity that, in the course of complying with an order for emergency measures issued under subsection (b)(1) by taking an action or omission for which they would be liable but for paragraph (1) or (2), takes such action or omission in a grossly negligent manner.''.

(b) CONFORMING AMENDMENTS.—

(1) JURISDICTION.—Section 201(b)(2) of the Federal Power Act (16 U.S.C. 824(b)(2)) is amended by inserting ''215A,'' after ''215,'' each place it appears.

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

SEC. 1205. STRATEGIC TRANSFORMER RESERVE.

(a) FINDING.—Congress finds that the storage of strategically located spare large power transformers will diminish the vulnerability of the United States to multiple risks facing electric grid reliability, including physical attack, cyber attack, electromagnetic pulse, geomagnetic disturbances, severe weather, and seismic events.

(b) DEFINITIONS.—In this section:

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

(2) CRITICALLY DAMAGED LARGE POWER TRANSFORMER.—The term ''critically damaged large power transformer'' means a large power transformer that—

(A) has sustained extensive damage such that—

(i) repair or refurbishment is not economically viable; or

(ii) the extensive time to repair or refurbish the large power transformer would create an extended period of instability in the bulk-power system; and

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

(3) ELECTRIC RELIABILITY ORGANIZATION.—The term ''Electric Reliability Organization'' has the meaning given such term in section 215(a) of the Federal Power Act (16 U.S.C. 824o(a)).

(4) LARGE POWER TRANSFORMER.—The term ''large power transformer'' means a power trans-

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

(5) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

(6) SPARE LARGE POWER TRANSFORMER.—The term ''spare large power transformer'' means a large power transformer that is stored within the Strategic Transformer Reserve to be available to temporarily replace a critically damaged large power transformer.

(c) STRATEGIC TRANSFORMER RESERVE PLAN.—

(1) PLAN.—Not later than one year after the date of enactment of this Act, the Secretary, acting through the Office of Electricity Delivery and Energy Reliability, shall, in consultation with the Electric Reliability Organization, prepare and submit to Congress for approval a plan to establish a Strategic Transformer Reserve for the storage, in strategically-located facilities, of spare large power transformers in sufficient numbers to temporarily replace critically damaged large power transformers.

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

(A) the appropriate number of spare large power transformers and total capacity in megawatts necessary in the Strategic Transformer Reserve to provide or restore sufficient resiliency to the bulk-power system to mitigate significant impacts to the electric grid resulting from—

(i) physical attack;

(ii) cyber attack;

(iii) electromagnetic pulse attack;

(iv) geomagnetic disturbances;

(v) severe weather; or

(vi) seismic events;

(B) the potential locations for, and feasibility and appropriate number of, strategic storage locations, including consideration of—

(i) the physical security of such locations;

(ii) the protection of the confidentiality of such locations; and

(iii) the proximity of such locations to sites of potentially critically damaged large power transformers, so as to enable efficient delivery of spare large power transformers to such sites;

(C) the necessary degree of flexibility of spare large power transformers to be included in the Strategic Transformer Reserve to conform to different substation configurations, including consideration of transformer—

(i) power and voltage rating for each winding;

(ii) overload requirements;

(iii) impedance between windings;

(iv) configuration of windings; and

(v) tap requirements;

(D) an estimate of the direct cost of the Strategic Transformer Reserve, as proposed, including—

(i) the cost of storage facilities for the spare large power transformers;

(ii) the cost of the spare large power transformers; and

(iii) management, maintenance, and operation costs;

(E) the funding options available to establish, stock, manage, and maintain the Strategic Transformer Reserve, including consideration of public-private cost-sharing options;

(F) the ease and speed of transportation, installation, and energization of spare large power transformers to be included in the Strategic Transformer Reserve, including consideration of factors such as—

(i) transformer transportation weight;

(ii) transformer size;

(iii) topology of critical substations;

(iv) availability of appropriate transformer mounting pads;

(v) flexibility of the spare large power transformers as described in subparagraph (C); and

(vi) ability to rapidly transition a spare large power transformer from storage to energization;

(G) eligibility criteria for withdrawal of spare large power transformers from the Strategic Transformer Reserve to replace critically damaged large power transformers, including consideration of related existing industry programs;

(H) the process by which owners of critically damaged large power transformers may

apply for a withdrawal from the Strategic Transformer Reserve;

(I) the process by which spare large power transformers withdrawn from the Strategic Transformer Reserve are returned to the Strategic Transformer Reserve;

(J) any cost-share or rental fees determined appropriate for restocking returned spare large power transformers to the Strategic Transformer Reserve to be paid by owners of critically damaged large power transformers that have withdrawn such spare large power transformers; and

(K) other considerations for designing, constructing, stocking, and managing the Strategic Transformer Reserve.

(d) CONGRESSIONAL APPROVAL OF STRATEGIC TRANSFORMER RESERVE PLAN.—The Secretary may not establish a Strategic Transformer Reserve until Congress has approved the plan submitted pursuant to subsection (c).

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated, out of funds provided for the Office of Energy Efficiency and Renewable Energy

within the Department of Energy, [$_____] to carry out this section.

SEC. 1206. CYBER SENSE.

(a) IN GENERAL.—The Secretary of Energy shall establish, in consultation with the Federal Energy Regulatory Commission and the National Institute of Standards and Technology, a voluntary Cyber Sense program to identify and promote cyber-secure products and technologies intended for use in the bulk-power system, as defined in section 215(a) of the Federal Power Act (16 U.S.C. 824o(a)).

(b) PROGRAM REQUIREMENTS.—In carrying out subsection (a), the Secretary of Energy shall—

(1) establish a Cyber Sense certification process to identify and certify cyber-secure products and technologies intended for use in the bulk-power system, including products relating to industrial control systems, such as supervisory control and data acquisition systems;

(2) establish and maintain performance and technological cybersecurity criteria by which a product or component may be Cyber Sense-certified (in this section referred to as ''Cyber Sense criteria'');

(3) annually review Cyber Sense criteria and, if appropriate, update such criteria;

(4) provide appropriate lead time, as determined by the Secretary, prior to the applicable effective date for a new or significant revision to Cyber Sense criteria, taking into account the timing requirements of the manufacturing, training, distribution, and implementation process with respect to such revisions;

(5) provide reasonable notice to the public, and solicit comments from the public, prior to establishing or revising Cyber Sense criteria;

(6) oversee Cyber Sense certifications made by third parties;

(7) conduct reviews of Cyber Sense-certified products in use in the bulk-power system to ensure that such products continue to meet the Cyber Sense criteria under which such products were certified, and take corrective action in any case in which such a product fails to meet such criteria; and

(8) consider incentives to encourage the use of Cyber Sense-certified products in the bulk-power system.

SEC. 1207. STATE CONSIDERATION OF RESILIENCY AND ADVANCED ENERGY ANALYTICS TECHNOLOGIES AND BASELOAD GENERATION.

(a) CONSIDERATION.—Section 111(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621(d)) is amended by adding the following at the end:

''(20) IMPROVING THE RESILIENCE OF ELECTRIC INFRASTRUCTURE.—

''(A) IN GENERAL.—Each State regulatory authority (with respect to each electric utility for which it has ratemaking authority) shall consider requiring each such electric utility to develop a plan to increase the utilization of resiliency-related technologies designed to improve the resilience of electric infrastructure, mitigate power outages, continue delivery of vital services and maintain the flow of power to facilities critical to public health, safety, and welfare.

''(B) RESILIENCY-RELATED TECHNOLOGIES.—For purposes of this paragraph, examples of resiliency-related technologies include—

''(i) advanced grid technologies capable of isolating or repairing problems remotely, such as advanced metering infrastructure, high-tech sensors, grid moni-

toring and control systems, and remote reconfiguration and redundancy systems;

''(ii) distributed and back-up generation to power critical facilities and operations;

''(iii) microgrids;

''(iv) combined heat and power;

''(v) waste heat resources;

''(vi) energy storage technologies;

''(vii) wiring, cabling, and other distribution components, including submersible distribution components, and enclosures; and

''(viii) electronically-controlled reclosers and similar technologies for power restoration.

''(C) RATE RECOVERY.—Each State regulatory authority (with respect to each electric utility for which it has ratemaking authority) shall consider authorizing each such electric utility to recover any capital, operating expenditure, or other costs of the electric utility related to the procurement, deployment, or use of resiliency-related technologies, including a reasonable rate of return on the capital expenditures

of the electric utility for the procurement, deployment, or use of resiliency-related technologies.

''(21) RATE DESIGN MODIFICATIONS TO PROMOTE INVESTMENTS IN ADVANCED ENERGY ANALYTICS TECHNOLOGY.—

''(A) RATE RECOVERY.—To promote electric utility investments in advanced energy analytics technology, each State regulatory authority (with respect to each electric utility for which it has ratemaking authority) shall consider authorizing each such electric utility to recover the costs of the electric utility relating to the procurement, deployment, or use of advanced energy analytics technology, including a reasonable rate of return on all such costs incurred by the electric utility for the procurement, deployment, or use of advanced energy analytics technology, provided such technology is used by the electric utility for purposes of realizing operational efficiencies, cost savings, enhanced energy management and customer engagement, improvements in system reliability, safety, and cybersecurity, or other benefits to ratepayers.

"(B) ADVANCED ENERGY ANALYTICS TECHNOLOGY.—For purposes of this paragraph, examples of advanced energy analytics technology include internet-based and cloud-based computing solutions and subscription and licensing models, including software as a service, platform as a service, and infrastructure as a service.

"(22) ASSURING ELECTRIC RELIABILITY WITH BASELOAD GENERATION.—

"(A) STATE CONSIDERATION.—Each State regulatory authority (with respect to each electric utility for which it has ratemaking authority) shall consider the adoption or modification of policies to ensure that each such electric utility incorporates sufficient baseload generation into its integrated resource plan to assure the reliable availability of electric energy over a 10-year planning period.

"(B) BASELOAD GENERATION.—For purposes of this paragraph, 'baseload generation' means large-output electric generation facilities with reliability attributes that include—

"(i) operational characteristics that enable the generation of electric energy on

a continuous basis for an extended period of time per day over a period of not less than 30 days;

"(ii) in order to generate electric energy on a continuous basis for an extended period of time—

"(I) for each day over a period of not less than 30 days—

"(aa) possession of adequate fuel on-site; or

"(bb) the operational ability to generate electric energy from more than one fuel source; or

"(II) fuel certainty, through contractual obligations, that ensures adequate fuel supply at stable pricing without risk of interruption;

"(iii) operational characteristics that enable the generation of electric energy during emergency and severe weather conditions; and

"(iv) essential reliability services, including frequency support and voltage support, to maintain electric reliability.".

(b) COMPLIANCE.—

(1) TIME LIMITATIONS.—Section 112(b) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(b)) is amended by adding at the end the following:

''(7)(A) Not later than 1 year after the date of enactment of this paragraph, each State regulatory authority (with respect to each electric utility for which it has ratemaking authority) shall commence the consideration referred to in section 111, or set a hearing date for consideration, with respect to the standard established by paragraph (20) of section 111(d).

''(B) Not later than 2 years after the date of enactment of this paragraph, each State regulatory authority (with respect to each electric utility for which it has ratemaking authority) shall complete the consideration, and shall make the determination, referred to in section 111 with respect to the standard established by paragraph (20) of section 111(d).

''(8)(A) Not later than 6 months after the date of enactment of this paragraph, each State regulatory authority (with respect to each electric utility for which it has ratemaking authority) shall commence the consideration referred to in section 111, or set a hearing date for consideration, with respect

to the standard established by paragraph (21) of section 111(d).

''(B) Not later than 1 year after the date of enactment of this paragraph, each State regulatory authority (with respect to each electric utility for which it has ratemaking authority) shall complete the consideration, and shall make the determination, referred to in section 111 with respect to the standard established by paragraph (21) of section 111(d).

''(9)(A) Not later than 1 year after the date of enactment of this paragraph, each State regulatory authority (with respect to each electric utility for which it has ratemaking authority) shall commence the consideration referred to in section 111, or set a hearing date for consideration, with respect to the standard established by paragraph (22) of section 111(d).

''(B) Not later than 2 years after the date of enactment of this paragraph, each State regulatory authority (with respect to each electric utility for which it has ratemaking authority) shall complete the consideration, and shall make the determination, referred to in section 111 with respect to the standard established by paragraph (22) of section 111(d).''.

(2) FAILURE TO COMPLY.—Section 112(c) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(c)) is amended by—

(A) inserting ", as applicable," after "non-regulated electric utility"; and

(B) adding the following at the end: "In the case of the standards established by paragraphs (20) through (22) of section 111(d), the reference contained in this subsection to the date of enactment of this Act shall be deemed to be a reference to the date of enactment of such paragraphs.".

(3) PRIOR STATE ACTIONS.—Section 112 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2622(d)) is amended by adding at the end the following new subsection:

"(g) PRIOR STATE ACTIONS.—Subsections (b) and (c) of this section shall not apply to a standard established by paragraph (20), (21), or (22) of section 111(d) in the case of any electric utility in a State if, before the date of enactment of this subsection—

"(1) the State has implemented for such utility the standard concerned (or a comparable standard);

"(2) the State regulatory authority for such State has conducted a proceeding to consider imple-

mentation of the standard concerned (or a comparable standard) for such utility; or

''(3) the State legislature has voted on the implementation of the standard concerned (or a comparable standard) for such utility.''.

SEC. 1208. RELIABILITY AND PERFORMANCE ASSURANCE IN REGIONAL TRANSMISSION ORGANIZATIONS.

Part II of the Federal Power Act (16 U.S.C. 824 et seq.), as amended by section 1204, is further amended by adding after section 215A the following new section:

''SEC. 215B. RELIABILITY AND PERFORMANCE ASSURANCE IN REGIONAL TRANSMISSION ORGANIZATIONS.

''(a) EXISTING CAPACITY MARKETS.—

''(1) FILING.—Not later than 30 days after the date of enactment of this section, the Commission shall direct each Regional Transmission Organization, and each Independent System Operator, that operates a capacity market, or a comparable market intended to ensure the procurement and availability of sufficient future electric energy resources, to demonstrate, by filing a new schedule under section 205, or, if appropriate, filing a declaration with respect to a schedule or schedules under such section then in

force, that the structure of such market meets the following criteria:

"(A) The structure of such market is based on integrated system planning practices that include—

"(i) a diverse and flexible generation portfolio;

"(ii) long-term reliability and stable pricing for customers;

"(iii) price adequacy and certainty for power generators over a long-term planning and investment horizon; and

"(iv) enhanced operational performance assurance during peak-demand periods;

"(B) The structure of such market provides for a sufficient supply of reliable electric energy to load-serving entities (as defined in section 217) from physical generation facilities that have reliability attributes that include—

"(i) operational characteristics that enable the generation of electric energy on a continuous basis for an extended period of time for each day over a period of not less than 30 days;

"(ii) in order to generate electric energy on a continuous basis for an extended period of time—

"(I) for each day over a period of not less than 30 days—

"(aa) possession of adequate fuel on-site; or

"(bb) the operational ability to generate electric energy from more than one fuel source; or

"(II) fuel certainty, through contractual obligations, that ensures adequate fuel supply at stable pricing without risk of interruption;

"(iii) operational characteristics that enable the generation of electric energy during emergency and severe weather conditions; and

"(iv) essential reliability services, including frequency support and voltage support, to maintain reliability of the bulk-power system (as defined in section 215).

"(2) INITIAL DETERMINATION.—The Commission shall determine whether each filing made pursuant to paragraph (1) adequately demonstrates that

the structure of the market addressed in such filing meets the criteria under paragraph (1).

"(b) COMMISSION DETERMINATION FOR NEW SCHEDULES.—Except as provided in subsection (a)(2), whenever a new schedule is filed under section 205 by a Regional Transmission Organization, or an Independent System Operator, that operates or intends to operate a market described in subsection (a)(1), the Commission shall determine whether, in light of the potential impacts of such new schedule, the structure of such market meets the criteria under subsection (a)(1).".