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(Original Signature of Member)

114TH CONGRESS
1ST SESSION

H. R.

To modernize energy infrastructure, build a 21st century energy and manufacturing workforce, bolster America’s energy security and diplomacy, and promote energy efficiency and government accountability, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. UPTON introduced the following bill; which was referred to the Committee
on _____

A BILL

To modernize energy infrastructure, build a 21st century energy and manufacturing workforce, bolster America’s energy security and diplomacy, and promote energy efficiency and government accountability, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “North American Energy Security and Infrastructure Act
6 of 2015”.

1 (b) TABLE OF CONTENTS.—The table of contents for
2 this Act is as follows:

Sec. 1. Short title; table of contents.

TITLE I—MODERNIZING AND PROTECTING INFRASTRUCTURE

- Sec. 1101. FERC process coordination.
- Sec. 1102. Resolving environmental and grid reliability conflicts.
- Sec. 1103. Emergency preparedness for energy supply disruptions.
- Sec. 1104. Critical electric infrastructure security.
- Sec. 1105. Strategic Transformer Reserve.
- Sec. 1106. Cyber Sense.
- Sec. 1107. State coverage and consideration of PURPA standards for electric utilities.

TITLE II—21ST CENTURY WORKFORCE

Sec. 2101. Energy and manufacturing workforce development.

TITLE III—ENERGY SECURITY AND DIPLOMACY

- Sec. 3101. Sense of Congress.
- Sec. 3102. Energy security valuation.
- Sec. 3103. North American energy security plan.
- Sec. 3104. Collective energy security.
- Sec. 3105. Strategic Petroleum Reserve mission readiness plan.

TITLE IV—ENERGY EFFICIENCY AND ACCOUNTABILITY

Subtitle A—Energy Efficiency

CHAPTER 1—FEDERAL AGENCY ENERGY EFFICIENCY

- Sec. 4111. Energy-efficient and energy-saving information technologies.
- Sec. 4112. Energy efficient data centers.
- Sec. 4113. Report on energy and water savings potential from thermal insulation.
- Sec. 4114. Federal purchase requirement.

CHAPTER 2—ENERGY EFFICIENT TECHNOLOGY AND MANUFACTURING

- Sec. 4121. Inclusion of Smart Grid capability on Energy Guide labels.
- Sec. 4122. Voluntary verification programs for air conditioning, furnace, boiler, heat pump, and water heater products.
- Sec. 4123. Facilitating consensus furnace standards.
- Sec. 4124. Future of Industry program.

CHAPTER 3—ENERGY PERFORMANCE CONTRACTING

Sec. 4131. Use of energy and water efficiency measures in Federal buildings.

CHAPTER 4—SCHOOL BUILDINGS

Sec. 4141. Coordination of energy retrofitting assistance for schools.

Subtitle B—Accountability

CHAPTER 1—MARKET MANIPULATION, ENFORCEMENT, AND COMPLIANCE

Sec. 4211. FERC Office of Compliance Assistance and Public Participation.

CHAPTER 2—MARKET REFORMS

Sec. 4221. GAO study on wholesale electricity markets.

1 **TITLE I—MODERNIZING AND**
2 **PROTECTING INFRASTRUCTURE**
3 **SEC. 1101. FERC PROCESS COORDINATION.**

4 Section 15 of the Natural Gas Act (15 U.S.C. 717n)
5 is amended—

6 (1) by amending subsection (b)(2) to read as
7 follows:

8 “(2) OTHER AGENCIES.—

9 “(A) IN GENERAL.—Each Federal and
10 State agency considering an aspect of an appli-
11 cation for Federal authorization shall cooperate
12 with the Commission and comply with the dead-
13 lines established by the Commission.

14 “(B) IDENTIFICATION.—The Commission
15 shall identify, as early as practicable after it is
16 notified by a prospective applicant of a potential
17 project requiring Commission authorization,
18 any Federal or State agency, local government,
19 or Indian tribe that may consider an aspect of
20 an application for that Federal authorization.

21 “(C) NOTIFICATION.—

1 “(i) IN GENERAL.—The Commission
2 shall notify any agency identified under
3 subparagraph (B) of the opportunity to co-
4 operate or participate in the review pro-
5 cess.

6 “(ii) DEADLINE.—A notification
7 issued under clause (i) shall establish a
8 deadline by which a response to the notifi-
9 cation shall be submitted, which may be
10 extended by the Commission for good
11 cause.”;

12 (2) in subsection (c)—

13 (A) in paragraph (1)—

14 (i) by striking “and” at the end of
15 subparagraph (A);

16 (ii) by redesignating subparagraph
17 (B) as subparagraph (C); and

18 (iii) by inserting after subparagraph
19 (A) the following new subparagraph:

20 “(B) set deadlines for all such Federal au-
21 thorizations; and”;

22 (B) by striking paragraph (2); and

23 (C) by adding at the end the following new
24 paragraphs:

1 “(2) DEADLINE FOR FEDERAL AUTHORIZA-
2 TIONS.—A final decision on a Federal authorization
3 is due no later than 90 days after the Commission
4 issues its final environmental document, unless a
5 schedule is otherwise established by Federal law.

6 “(3) COMMISSION RECOMMENDATION.—To en-
7 sure that timely decisions are made and that the re-
8 sponsibilities of each Federal and State agency are
9 met when making a decision with respect to a Fed-
10 eral authorization, the Commission shall coordinate
11 its efforts with Federal and State agencies and make
12 a recommendation on the scope of the environmental
13 review that the Commission determines to be appro-
14 priate. Each Federal and State agency shall give
15 deference to the Commission’s recommendation as
16 appropriate and in accordance with applicable Fed-
17 eral law.

18 “(4) CONCURRENT REVIEWS.—Each Federal
19 and State agency considering an aspect of an appli-
20 cation for a Federal authorization shall—

21 “(A) carry out the obligations of that
22 agency under applicable law concurrently, and
23 in conjunction, with the review required by the
24 National Environmental Policy Act of 1969 (42
25 U.S.C. 4321 et seq.), unless doing so would im-

1 pair the ability of the agency to conduct needed
2 analysis or otherwise carry out those obliga-
3 tions;

4 “(B) formulate and implement administra-
5 tive, policy, and procedural mechanisms to en-
6 able the agency to ensure completion of re-
7 quired Federal authorizations no later than 90
8 days after the Commission issues its final envi-
9 ronmental document; and

10 “(C) transmit to the Commission a state-
11 ment—

12 “(i) acknowledging receipt of the
13 schedule established under paragraph (1);
14 and

15 “(ii) setting forth the plan formulated
16 under subparagraph (B) of this paragraph.

17 “(5) ISSUE IDENTIFICATION AND RESOLU-
18 TION.—

19 “(A) IDENTIFICATION.—Federal and State
20 agencies that may consider an aspect of an ap-
21 plication for Federal authorization shall iden-
22 tify, as early as possible, any issues of concern
23 that may delay or prevent an agency from
24 working with the Commission to resolve such
25 issues and granting such authorization.

1 “(B) ISSUE RESOLUTION.—The Commis-
2 sion may forward any issue of concern identi-
3 fied under subparagraph (A) to the heads of
4 the relevant agencies (including, in the case of
5 a failure by the State agency, the Federal agen-
6 cy overseeing the delegated authority) for reso-
7 lution.

8 “(6) FAILURE TO MEET SCHEDULE.—If a Fed-
9 eral or State agency does not complete a proceeding
10 for an approval that is required for a Federal au-
11 thorization in accordance with the schedule estab-
12 lished by the Commission under paragraph (1)—

13 “(A) the applicant may pursue remedies
14 under section 19(d); and

15 “(B) the head of the relevant Federal
16 agency (including, in the case of a failure by a
17 State agency, the Federal agency overseeing the
18 delegated authority) shall notify Congress and
19 the Commission of such failure and set forth a
20 recommended implementation plan to ensure
21 completion of the proceeding for an approval.”;

22 (3) by redesignating subsections (d) through (f)
23 as subsections (f) through (h), respectively; and

24 (4) by inserting after subsection (c) the fol-
25 lowing new subsections:

1 “(d) APPLICATION PROCESSING.—The Commission,
2 and Federal and State agencies, may allow an applicant
3 seeking Federal authorization to fund a third party con-
4 tractor to assist in reviewing the application.

5 “(e) ACCOUNTABILITY, TRANSPARENCY, EFFI-
6 CIENCY.—For applications requiring multiple Federal au-
7 thorizations, the Commission, with input from any Federal
8 or State agency considering an aspect of an application,
9 shall track and make available to the public on the Com-
10 mission’s website information related to the actions re-
11 quired to complete permitting, reviews, and other actions
12 required. Such information shall include the following:

13 “(1) The schedule established by the Commis-
14 sion under subsection (c)(1).

15 “(2) A list of all the actions required by each
16 applicable agency to complete permitting, reviews,
17 and other actions necessary to obtain a final decision
18 on the Federal authorization.

19 “(3) The expected completion date for each
20 such action.

21 “(4) A point of contact at the agency account-
22 able for each such action.

23 “(5) In the event that an action is still pending
24 as of the expected date of completion, a brief expla-
25 nation of the reasons for the delay.”.

1 **SEC. 1102. RESOLVING ENVIRONMENTAL AND GRID RELI-**
2 **ABILITY CONFLICTS.**

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

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

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

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

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

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

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

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

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

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

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

16 **SEC. 1103. EMERGENCY PREPAREDNESS FOR ENERGY SUP-**
17 **PLY DISRUPTIONS.**

18 (a) FINDING.—Congress finds that recent natural
19 disasters have underscored the importance of having resil-
20 ient oil and natural gas infrastructure and effective ways
21 for industry and government to communicate to address
22 energy supply disruptions.

23 (b) AUTHORIZATION FOR ACTIVITIES TO ENHANCE
24 EMERGENCY PREPAREDNESS FOR NATURAL DISAS-

1 TERS.—The Secretary of Energy shall develop and adopt
2 procedures to—

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

6 (2) leverage the Energy Information Adminis-
7 tration’s subject matter expertise within the Depart-
8 ment’s energy response team to improve supply
9 chain situation assessments;

10 (3) establish company liaisons and direct com-
11 munication with the Department’s energy response
12 team to improve situation assessments;

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

16 (5) facilitate and increase engagement among
17 States, the oil and natural gas industry, and the De-
18 partment in developing State and local energy assur-
19 ance plans;

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

23 (7) involve States and the oil and natural gas
24 industry in comprehensive drill and exercise pro-
25 grams.

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

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

8 **SEC. 1104. CRITICAL ELECTRIC INFRASTRUCTURE SECUR-**
9 **RITY.**

10 (a) CRITICAL ELECTRIC INFRASTRUCTURE SECUR-
11 RITY.—Part II of the Federal Power Act (16 U.S.C. 824
12 et seq.) is amended by adding after section 215 the fol-
13 lowing new section:

14 **“SEC. 215A. CRITICAL ELECTRIC INFRASTRUCTURE SECUR-**
15 **RITY.**

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

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

23 “(2) CRITICAL ELECTRIC INFRASTRUCTURE.—
24 The term ‘critical electric infrastructure’ means a
25 system or asset of the bulk-power system, whether

1 physical or virtual, the incapacity or destruction of
2 which would negatively affect national security, eco-
3 nomic security, public health or safety, or any com-
4 bination of such matters.

5 “(3) CRITICAL ELECTRIC INFRASTRUCTURE IN-
6 FORMATION.—The term ‘critical electric infrastruc-
7 ture information’ means information related to crit-
8 ical electric infrastructure, or proposed critical elec-
9 trical infrastructure, generated by or provided to the
10 Commission or other Federal agency, other than
11 classified national security information, that is des-
12 ignated as critical electric infrastructure information
13 by the Commission under subsection (d)(2). Such
14 term includes information that qualifies as critical
15 energy infrastructure information under the Com-
16 mission’s regulations.

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

24 “(5) ELECTROMAGNETIC PULSE.—The term
25 ‘electromagnetic pulse’ means 1 or more pulses of

1 electromagnetic energy emitted by a device capable
2 of disabling or disrupting operation of, or destroy-
3 ing, electronic devices or communications networks,
4 including hardware, software, and data, by means of
5 such a pulse.

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

10 “(7) GRID SECURITY EMERGENCY.—The term
11 ‘grid security emergency’ means the occurrence or
12 imminent danger of—

13 “(A)(i) a malicious act using electronic
14 communication or an electromagnetic pulse, or
15 a geomagnetic storm event, that could disrupt
16 the operation of those electronic devices or com-
17 munications networks, including hardware, soft-
18 ware, and data, that are essential to the reli-
19 ability of critical electric infrastructure or of de-
20 fense critical electric infrastructure; and

21 “(ii) disruption of the operation of such
22 devices or networks, with significant adverse ef-
23 fects on the reliability of critical electric infra-
24 structure or of defense critical electric infra-
25 structure, as a result of such act or event; or

1 “(B)(i) a direct physical attack on critical
2 electric infrastructure or on defense critical
3 electric infrastructure; and

4 “(ii) significant adverse effects on the reli-
5 ability of critical electric infrastructure or of de-
6 fense critical electric infrastructure as a result
7 of such physical attack.

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

10 “(b) AUTHORITY TO ADDRESS GRID SECURITY
11 EMERGENCY.—

12 “(1) AUTHORITY.—Whenever the President
13 issues and provides to the Secretary a written direc-
14 tive or determination identifying a grid security
15 emergency, the Secretary may, with or without no-
16 tice, hearing, or report, issue such orders for emer-
17 gency measures as are necessary in the judgment of
18 the Secretary to protect or restore the reliability of
19 critical electric infrastructure or of defense critical
20 electric infrastructure during such emergency. As
21 soon as practicable but not later than 180 days after
22 the date of enactment of this section, the Secretary
23 shall, after notice and opportunity for comment, es-
24 tablish rules of procedure that ensure that such au-
25 thority can be exercised expeditiously.

1 “(2) NOTIFICATION OF CONGRESS.—Whenever
2 the President issues and provides to the Secretary a
3 written directive or determination under paragraph
4 (1), the President shall promptly notify congress-
5 sional committees of relevant jurisdiction, including
6 the Committee on Energy and Commerce of the
7 House of Representatives and the Committee on En-
8 ergy and Natural Resources of the Senate, of the
9 contents of, and justification for, such directive or
10 determination.

11 “(3) CONSULTATION.—Before issuing an order
12 for emergency measures under paragraph (1), the
13 Secretary shall, to the extent practicable in light of
14 the nature of the grid security emergency and the
15 urgency of the need for action, consult with appro-
16 priate governmental authorities in Canada and Mex-
17 ico, entities described in paragraph (4), the Elec-
18 tricity Sub-sector Coordinating Council, the Commis-
19 sion, and other appropriate Federal agencies regard-
20 ing implementation of such emergency measures.

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

23 “(A) the Electric Reliability Organization;

24 “(B) a regional entity; or

1 “(C) any owner, user, or operator of crit-
2 ical electric infrastructure or of defense critical
3 electric infrastructure within the United States.

4 “(5) EXPIRATION AND REISSUANCE.—

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

9 “(B) EXTENSIONS.—The Secretary may
10 reissue an order for emergency measures issued
11 under paragraph (1) for subsequent periods,
12 not to exceed 15 days for each such period, pro-
13 vided that the President, for each such period,
14 issues and provides to the Secretary a written
15 directive or determination that the grid security
16 emergency identified under paragraph (1) con-
17 tinues to exist or that the emergency measure
18 continues to be required.

19 “(6) COST RECOVERY.—

20 “(A) CRITICAL ELECTRIC INFRASTRUC-
21 TURE.—If the Commission determines that
22 owners, operators, or users of critical electric
23 infrastructure have incurred substantial costs to
24 comply with an order for emergency measures
25 issued under this subsection and that such costs

1 were prudently incurred and cannot reasonably
2 be recovered through regulated rates or market
3 prices for the electric energy or services sold by
4 such owners, operators, or users, the Commis-
5 sion shall, consistent with the requirements of
6 section 205, after notice and an opportunity for
7 comment, establish a mechanism that permits
8 such owners, operators, or users to recover such
9 costs.

10 “(B) DEFENSE CRITICAL ELECTRIC INFRA-
11 STRUCTURE.—To the extent the owner or oper-
12 ator of defense critical electric infrastructure is
13 required to take emergency measures pursuant
14 to an order issued under this subsection, the
15 owners or operators of a critical defense facility
16 or facilities designated by the Secretary pursu-
17 ant to subsection (c) that rely upon such infra-
18 structure shall bear the full incremental costs of
19 the measures.

20 “(7) TEMPORARY ACCESS TO CLASSIFIED IN-
21 FORMATION.—The Secretary, and other appropriate
22 Federal agencies, shall, to the extent practicable and
23 consistent with their obligations to protect classified
24 information, provide temporary access to classified
25 information related to a grid security emergency for

1 which emergency measures are issued under para-
2 graph (1) to key personnel of any entity subject to
3 such emergency measures to enable optimum com-
4 munication between the entity and the Secretary and
5 other appropriate Federal agencies regarding the
6 grid security emergency.

7 “(c) DESIGNATION OF CRITICAL DEFENSE FACILI-
8 TIES.—Not later than 180 days after the date of enact-
9 ment of this section, the Secretary, in consultation with
10 other appropriate Federal agencies and appropriate own-
11 ers, users, or operators of infrastructure that may be de-
12 fense critical electric infrastructure, shall identify and des-
13 ignate facilities located in the United States (including the
14 territories) that are—

15 “(1) critical to the defense of the United States;

16 and

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

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

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

1 “(1) PROTECTION OF CRITICAL ELECTRIC IN-
2 FRASTRUCTURE INFORMATION.—Critical electric in-
3 frastructure information—

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

7 “(B) shall not be made available by any
8 Federal, State, political subdivision or tribal au-
9 thority pursuant to any Federal, State, political
10 subdivision or tribal law requiring public disclo-
11 sure of information or records.

12 “(2) DESIGNATION AND SHARING OF CRITICAL
13 ELECTRIC INFRASTRUCTURE INFORMATION.—Not
14 later than one year after the date of enactment of
15 this section, the Commission, in consultation with
16 the Secretary of Energy, shall promulgate such reg-
17 ulations and issue such orders as necessary to—

18 “(A) designate information as critical elec-
19 tric infrastructure information;

20 “(B) prohibit the unauthorized disclosure
21 of critical electric infrastructure information;

22 “(C) ensure there are appropriate sanc-
23 tions in place for Commissioners, officers, em-
24 ployees, or agents of the Commission who
25 knowingly and willfully disclose critical electric

1 infrastructure information in a manner that is
2 not authorized under this section; and

3 “(D) taking into account standards of the
4 Electric Reliability Organization, facilitate vol-
5 untary sharing of critical electric infrastructure
6 information with, between, and by—

7 “(i) Federal, State, political subdivi-
8 sion, and tribal authorities;

9 “(ii) the Electric Reliability Organiza-
10 tion;

11 “(iii) regional entities;

12 “(iv) information sharing and analysis
13 centers established pursuant to Presi-
14 dential Decision Directive 63;

15 “(v) owners, operators, and users of
16 critical electric infrastructure in the United
17 States; and

18 “(vi) other entities determined appro-
19 priate by the Commission.

20 “(3) CONSIDERATIONS.—In promulgating regu-
21 lations and issuing orders under paragraph (2), the
22 Commission shall take into consideration the role of
23 State commissions in reviewing the prudence and
24 cost of investments, determining the rates and terms
25 of conditions for electric services, and ensuring the

1 safety and reliability of the bulk-power system and
2 distribution facilities within their respective jurisdic-
3 tions.

4 “(4) PROTOCOLS.—The Commission shall, in
5 consultation with Canadian and Mexican authorities,
6 develop protocols for the voluntary sharing of critical
7 electric infrastructure information with Canadian
8 and Mexican authorities and owners, operators, and
9 users of the bulk-power system outside the United
10 States.

11 “(5) NO REQUIRED SHARING OF INFORMA-
12 TION.—Nothing in this section shall require a person
13 or entity in possession of critical electric infrastruc-
14 ture information to share such information with
15 Federal, State, political subdivision, or tribal au-
16 thorities, or any other person or entity.

17 “(6) DISCLOSURE OF NON-CRITICAL ELECTRIC
18 INFRASTRUCTURE INFORMATION.—In implementing
19 this section, the Commission shall segregate critical
20 electric infrastructure information within documents
21 and electronic communications, wherever feasible, to
22 facilitate disclosure of information that is not des-
23 ignated as critical electric infrastructure informa-
24 tion.

1 “(e) SECURITY CLEARANCES.—The Secretary shall
2 facilitate and, to the extent practicable, expedite the acqui-
3 sition of adequate security clearances by key personnel of
4 any entity subject to the requirements of this section, to
5 enable optimum communication with Federal agencies re-
6 garding threats to the security of the critical electric infra-
7 structure. The Secretary, the Commission, and other ap-
8 propriate Federal agencies shall, to the extent practicable
9 and consistent with their obligations to protect classified
10 and critical electric infrastructure information, share time-
11 ly actionable information regarding grid security with ap-
12 propriate key personnel of owners, operators, and users
13 of the critical electric infrastructure.

14 “(f) CLARIFICATIONS OF LIABILITY.—

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

1 omission shall not be considered a violation of such
2 rule, order, regulation, or provision.

3 “(2) RELATION TO SECTION 202(c).—Except as
4 provided in paragraph (4), an action or omission
5 taken by an owner, operator, or user of critical elec-
6 tric infrastructure or of defense critical electric in-
7 frastructure to comply with an order for emergency
8 measures issued under subsection (b)(1) shall be
9 treated as an action or omission taken to comply
10 with an order issued under section 202(c) for pur-
11 poses of such section.

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

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

25 (b) CONFORMING AMENDMENTS.—

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

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

8 **SEC. 1105. STRATEGIC TRANSFORMER RESERVE.**

9 (a) FINDING.—Congress finds that the storage of
10 strategically located spare large power transformers will
11 reduce the vulnerability of the United States to multiple
12 risks facing electric grid reliability, including physical at-
13 tack, cyber attack, electromagnetic pulse, geomagnetic dis-
14 turbances, severe weather, and seismic events.

15 (b) DEFINITIONS.—In this section:

16 (1) BULK-POWER SYSTEM.—The term “bulk-
17 power system” has the meaning given such term in
18 section 215(a) of the Federal Power Act (16 U.S.C.
19 824o(a)).

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

24 (A) has sustained extensive damage such
25 that—

1 (i) repair or refurbishment is not eco-
2 nomically viable; or

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

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

9 (3) ELECTRIC RELIABILITY ORGANIZATION.—

10 The term “Electric Reliability Organization” has the
11 meaning given such term in section 215(a) of the
12 Federal Power Act (16 U.S.C. 824o(a)).

13 (4) LARGE POWER TRANSFORMER.—The term
14 “large power transformer” means a power trans-
15 former with a maximum nameplate rating of 100
16 megavolt-amperes or higher, including related crit-
17 ical equipment, that is, or is intended to be, a part
18 of the bulk-power system.

19 (5) SECRETARY.—The term “Secretary” means
20 the Secretary of Energy.

21 (6) SPARE LARGE POWER TRANSFORMER.—The
22 term “spare large power transformer” means a large
23 power transformer that is stored within the Stra-
24 tegic Transformer Reserve to be available to tempo-

1 rarely replace a critically damaged large power trans-
2 former.

3 (c) STRATEGIC TRANSFORMER RESERVE PLAN.—

4 (1) PLAN.—Not later than one year after the
5 date of enactment of this Act, the Secretary, acting
6 through the Office of Electricity Delivery and En-
7 ergy Reliability, shall, in consultation with the Fed-
8 eral Energy Regulatory Commission, the Electricity
9 Sub-sector Coordinating Council, and the Electric
10 Reliability Organization, prepare and submit to Con-
11 gress a plan to establish a Strategic Transformer
12 Reserve for the storage, in strategically-located fa-
13 cilities, of spare large power transformers in suffi-
14 cient numbers to temporarily replace critically dam-
15 aged large power transformers.

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

18 (A) the appropriate number and type of
19 spare large power transformers necessary to
20 provide or restore sufficient resiliency to the
21 bulk-power system to mitigate significant im-
22 pacts to the electric grid resulting from—

- 23 (i) physical attack;
24 (ii) cyber attack;
25 (iii) electromagnetic pulse attack;

1 (iv) geomagnetic disturbances;

2 (v) severe weather; or

3 (vi) seismic events;

4 (B) other critical electric grid equipment
5 for which an inventory of spare equipment is
6 necessary to provide or restore sufficient resil-
7 iency to the bulk-power system;

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

15 (D) the potential locations for, and feasi-
16 bility and appropriate number of, strategic stor-
17 age locations for reserve equipment, including
18 consideration of—

19 (i) the physical security of such loca-
20 tions;

21 (ii) the protection of the confiden-
22 tiality of such locations; and

23 (iii) the proximity of such locations to
24 sites of potentially critically damaged large
25 power transformers, so as to enable effi-

1 cient delivery of spare large power trans-
2 formers to such sites;

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

8 (i) power and voltage rating for each
9 winding;

10 (ii) overload requirements;

11 (iii) impedance between windings;

12 (iv) configuration of windings; and

13 (v) tap requirements;

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

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

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

21 (iii) management, maintenance, and
22 operation costs;

23 (G) the funding options available to estab-
24 lish, stock, manage, and maintain the Strategic
25 Transformer Reserve, including consideration of

1 fees on owners of bulk-power system facilities
2 relying on the Strategic Transformer Reserve,
3 use of Federal appropriations, and public-pri-
4 vate cost-sharing options;

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

10 (i) transformer transportation weight;

11 (ii) transformer size;

12 (iii) topology of critical substations;

13 (iv) availability of appropriate trans-
14 former mounting pads;

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

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

21 (I) eligibility criteria for withdrawal of
22 spare large power transformers from the Stra-
23 tegic Transformer Reserve to replace critically
24 damaged large power transformers;

1 (J) the process by which owners of criti-
2 cally damaged large power transformers may
3 apply for a withdrawal from the Strategic
4 Transformer Reserve;

5 (K) the process by which spare large power
6 transformers withdrawn from the Strategic
7 Transformer Reserve are returned to the Stra-
8 tegic Transformer Reserve or are replaced;

9 (L) possible fees to be paid by owners of
10 critically damaged large power transformers
11 that have withdrawn such spare large power
12 transformers from the Strategic Transformer
13 Reserve;

14 (M) possible fees to be paid by owners of
15 large power transformers to cover operating
16 costs of the Strategic Transformer Reserve;

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

19 (O) other considerations for designing,
20 constructing, stocking, funding, and managing
21 the Strategic Transformer Reserve.

22 (d) ESTABLISHMENT.—The Secretary may establish
23 a Strategic Transformer Reserve in accordance with the
24 plan prepared pursuant to subsection (c) after the date

1 that is 6 months after the date on which such plan is sub-
2 mitted to Congress.

3 (e) DISCLOSURE OF INFORMATION.—Any informa-
4 tion included in the Strategic Transformer Reserve plan,
5 or shared in the preparation and development of such
6 plan, the disclosure of which could cause harm to critical
7 electric infrastructure (as defined in section 215A of the
8 Federal Power Act), shall be exempt from disclosure under
9 section 552(b)(3) of title 5, United States Code, and any
10 State, tribal, or local law requiring disclosure of informa-
11 tion or records.

12 **SEC. 1106. CYBER SENSE.**

13 (a) IN GENERAL.—The Secretary of Energy shall es-
14 tablish a voluntary Cyber Sense program to identify and
15 promote cyber-secure products intended for use in the
16 bulk-power system, as defined in section 215(a) of the
17 Federal Power Act (16 U.S.C. 824o(a)).

18 (b) PROGRAM REQUIREMENTS.—In carrying out sub-
19 section (a), the Secretary of Energy shall—

20 (1) establish a Cyber Sense testing process to
21 identify products and technologies intended for use
22 in the bulk-power system, including products relat-
23 ing to industrial control systems, such as supervisory
24 control and data acquisition systems;

1 (2) for products tested and identified under the
2 Cyber Sense program, establish and maintain
3 cybersecurity vulnerability reporting processes and a
4 related database;

5 (3) promulgate regulations regarding vulner-
6 ability reporting processes for products tested and
7 identified under the Cyber Sense program;

8 (4) provide technical assistance to utilities,
9 product manufacturers, and other electric sector
10 stakeholders to develop solutions to mitigate identi-
11 fied vulnerabilities in products tested and identified
12 under the Cyber Sense program;

13 (5) biennially review products tested and identi-
14 fied under the Cyber Sense program for
15 vulnerabilities and provide analysis with respect to
16 how such products respond to and mitigate cyber
17 threats;

18 (6) develop procurement guidance for utilities
19 for products tested and identified under the Cyber
20 Sense program;

21 (7) provide reasonable notice to the public, and
22 solicit comments from the public, prior to estab-
23 lishing or revising the Cyber Sense testing process;

24 (8) oversee Cyber Sense testing carried out by
25 third parties; and

1 U.S.C. 2621(d)) is amended by adding the following
2 at the end:

3 “(20) IMPROVING THE RESILIENCE OF ELEC-
4 TRIC INFRASTRUCTURE.—

5 “(A) IN GENERAL.—Each electric utility
6 shall develop a plan to use resiliency-related
7 technologies and other approaches designed to
8 improve the resilience of electric infrastructure,
9 mitigate power outages, continue delivery of
10 vital services, and maintain the flow of power to
11 facilities critical to public health, safety, and
12 welfare, to the extent practicable using the most
13 current data, metrics, and frameworks related
14 to current and future threats, including phys-
15 ical and cyber attacks, electromagnetic pulse at-
16 tacks, geomagnetic disturbances, seismic events,
17 and severe weather and other environmental
18 stressors.

19 “(B) RESILIENCY-RELATED TECH-
20 NOLOGIES.—For purposes of this paragraph,
21 examples of resiliency-related technologies in-
22 clude—

23 “(i) advanced grid technologies capa-
24 ble of isolating or repairing problems re-
25 motely, such as advanced metering infra-

1 structure, high-tech sensors, grid moni-
2 toring and control systems, and remote re-
3 configuration and redundancy systems;
4 “(ii) all types of distributed and back-
5 up generation;
6 “(iii) microgrids;
7 “(iv) combined heat and power;
8 “(v) waste heat resources;
9 “(vi) energy storage technologies;
10 “(vii) wiring, cabling, and other dis-
11 tribution components, including submers-
12 ible distribution components, and enclo-
13 sures;
14 “(viii) electronically-controlled re-
15 closers and similar technologies for power
16 restoration; and
17 “(ix) advanced energy analytics tech-
18 nology (as described in paragraph (21)).
19 “(C) RATE RECOVERY.—Each State regu-
20 latory authority (with respect to each electric
21 utility for which it has ratemaking authority)
22 shall consider authorizing each such electric
23 utility to recover any capital, operating expendi-
24 ture, or other costs of the electric utility related
25 to the procurement, deployment, or use of resil-

1 iciency-related technologies, including a reason-
2 able rate of return on the capital expenditures
3 of the electric utility for the procurement, de-
4 ployment, or use of resiliency-related tech-
5 nologies.

6 “(21) PROMOTING INVESTMENTS IN ADVANCED
7 ENERGY ANALYTICS TECHNOLOGY.—

8 “(A) IN GENERAL.—Each electric utility
9 shall develop and implement a plan for deploy-
10 ing advanced energy analytics technology.

11 “(B) RATE RECOVERY.—Each State regu-
12 latory authority (with respect to each electric
13 utility for which it has ratemaking authority)
14 shall consider confirming and clarifying, if nec-
15 essary, that each such electric utility is author-
16 ized to recover the costs of the electric utility
17 relating to the procurement, deployment, or use
18 of advanced energy analytics technology, includ-
19 ing a reasonable rate of return on all such costs
20 incurred by the electric utility for the procure-
21 ment, deployment, or use of advanced energy
22 analytics technology, provided such technology
23 is used by the electric utility for purposes of re-
24 alizing operational efficiencies, cost savings, en-
25 hanced energy management and customer en-

1 gagement, improvements in system reliability,
2 safety, and cybersecurity, or other benefits to
3 ratepayers.

4 “(C) ADVANCED ENERGY ANALYTICS
5 TECHNOLOGY.—For purposes of this para-
6 graph, examples of advanced energy analytics
7 technology include internet-based and cloud-
8 based computing solutions and subscription li-
9 censing models, including software as a service
10 that uses cyber-physical systems to allow the
11 correlation of data aggregated from appropriate
12 data sources and smart grid sensor networks,
13 employs analytics and machine learning, or em-
14 ploys other advanced computing solutions and
15 models.

16 “(22) ASSURING ELECTRIC RELIABILITY WITH
17 RELIABLE GENERATION.—

18 “(A) ASSURANCE OF ELECTRIC RELI-
19 ABILITY.—Each electric utility shall adopt or
20 modify policies to ensure that such electric util-
21 ity incorporates reliable generation into its inte-
22 grated resource plan to assure the availability
23 of electric energy over a 10-year planning pe-
24 riod.

1 “(B) RELIABLE GENERATION.—For pur-
2 poses of this paragraph, ‘reliable generation’
3 means electric generation facilities with reli-
4 ability attributes that include—

5 “(i) operational characteristics that
6 enable the generation of electric energy on
7 a continuous basis;

8 “(ii) in order to generate electric en-
9 ergy on a continuous basis—

10 “(I) possession of adequate fuel
11 on-site;

12 “(II) the operational ability to
13 generate electric energy from more
14 than one fuel source; or

15 “(III) fuel certainty, through
16 contractual obligations, that ensures
17 adequate fuel supply;

18 “(iii) operational characteristics that
19 enable the generation of electric energy
20 during emergency and severe weather con-
21 ditions; and

22 “(iv) essential reliability services, in-
23 cluding frequency support and voltage sup-
24 port, to maintain electric reliability.”.

25 (2) COMPLIANCE.—

1 (A) TIME LIMITATIONS.—Section 112(b)
2 of the Public Utility Regulatory Policies Act of
3 1978 (16 U.S.C. 2622(b)) is amended by add-
4 ing at the end the following:

5 “(7)(A) Not later than 1 year after the date of
6 enactment of this paragraph, each State regulatory
7 authority (with respect to each electric utility for
8 which it has ratemaking authority) and each non-
9 regulated electric utility shall commence the consid-
10 eration referred to in section 111, or set a hearing
11 date for consideration, with respect to the standards
12 established by paragraphs (20) and (22) of section
13 111(d).

14 “(B) Not later than 2 years after the date of
15 the enactment of this paragraph, each State regu-
16 latory authority (with respect to each electric utility
17 for which it has ratemaking authority) and each
18 nonregulated electric utility shall complete the con-
19 sideration, and shall make the determination, re-
20 ferred to in section 111 with respect to each stand-
21 ard established by paragraphs (20) and (22) of sec-
22 tion 111(d).

23 “(8)(A) Not later than 6 months after the date
24 of enactment of this paragraph, each State regu-
25 latory authority (with respect to each electric utility

1 for which it has ratemaking authority) and each
2 nonregulated electric utility shall commence the con-
3 sideration referred to in section 111, or set a hear-
4 ing date for consideration, with respect to the stand-
5 ard established by paragraph (21) of section 111(d).

6 “(B) Not later than 1 year after the date of en-
7 actment of this paragraph, each State regulatory au-
8 thority (with respect to each electric utility for which
9 it has ratemaking authority) and each nonregulated
10 electric utility shall complete the consideration, and
11 shall make the determination, referred to in section
12 111 with respect to the standard established by
13 paragraph (21) of section 111(d).”.

14 (B) FAILURE TO COMPLY.—Section 112(c)
15 of the Public Utility Regulatory Policies Act of
16 1978 (16 U.S.C. 2622(c)) is amended by add-
17 ing the following at the end: “In the case of the
18 standards established by paragraphs (20)
19 through (22) of section 111(d), the reference
20 contained in this subsection to the date of en-
21 actment of this Act shall be deemed to be a ref-
22 erence to the date of enactment of such para-
23 graphs.”.

24 (C) PRIOR STATE ACTIONS.—Section 112
25 of the Public Utility Regulatory Policies Act of

1 1978 (16 U.S.C. 2622(d)) is amended by add-
2 ing at the end the following new subsection:

3 “(g) PRIOR STATE ACTIONS.—Subsections (b) and
4 (c) of this section shall not apply to a standard established
5 by paragraph (20), (21), or (22) of section 111(d) in the
6 case of any electric utility in a State if—

7 “(1) before the date of enactment of this sub-
8 section, the State has implemented for such utility
9 the standard concerned (or a comparable standard);

10 “(2) the State regulatory authority for such
11 State or relevant nonregulated electric utility has
12 conducted a proceeding to consider implementation
13 of the standard concerned (or a comparable stand-
14 ard) for such utility during the 3-year period ending
15 on the date of enactment of this subsection; or

16 “(3) the State legislature has voted on the im-
17 plementation of the standard concerned (or a com-
18 parable standard) for such utility during the 3-year
19 period ending on the date of enactment of this sub-
20 section.”.

21 (b) COVERAGE FOR COMPETITIVE MARKETS.—Sec-
22 tion 102 of the Public Utility Regulatory Policies Act of
23 1978 (16 U.S.C. 2612) is amended by adding at the end
24 the following:

1 “(d) The requirements of this title do not apply to
2 the operations of an electric utility, or to proceedings re-
3 specting such operations, to the extent that such oper-
4 ations or proceedings relate to the competitive sale of re-
5 tail electric energy that is unbundled or separated from
6 the regulated provision or sale of distribution service.”.

7 **TITLE II—21ST CENTURY**
8 **WORKFORCE**

9 **SEC. 2101. ENERGY AND MANUFACTURING WORKFORCE DE-**
10 **VELOPMENT.**

11 (a) IN GENERAL.—The Secretary of Energy (in this
12 section referred to as the “Secretary”) shall establish and
13 carry out a comprehensive program to improve education
14 and training for energy and manufacturing-related jobs in
15 order to increase the number of skilled workers trained
16 to work in energy and manufacturing-related fields, in-
17 cluding by—

18 (1) encouraging underrepresented groups, in-
19 cluding religious and ethnic minorities, women, vet-
20 erans, individuals with disabilities, and
21 socioeconomically disadvantaged individuals to enter
22 into the science, technology, engineering, and mathe-
23 matics (in this section referred to as “STEM”)
24 fields;

1 (2) encouraging the Nation's education system
2 to equip students with the skills, mentorships, train-
3 ing, and technical expertise necessary to fill the em-
4 ployment opportunities vital to managing and oper-
5 ating the Nation's energy and manufacturing indus-
6 tries;

7 (3) providing students and other candidates for
8 employment with the necessary skills and certifi-
9 cations for skilled, semiskilled, and highly skilled en-
10 ergy and manufacturing-related jobs; and

11 (4) strengthening and more fully engaging De-
12 partment of Energy programs and labs in carrying
13 out the Department's Minorities in Energy Initia-
14 tive.

15 (b) PRIORITY.—The Secretary shall make educating
16 and training underrepresented groups for energy and
17 manufacturing-related jobs a national priority under the
18 program established under subsection (a).

19 (c) DIRECT ASSISTANCE.—In carrying out the pro-
20 gram established under subsection (a), the Secretary shall
21 provide direct assistance (including financial assistance
22 awards, technical expertise, wraparound services, career
23 coaching, mentorships, internships, and partnerships) to
24 schools, community colleges, workforce development orga-
25 nizations, nonprofit organizations, labor organizations, ap-

1 prenticeship programs, and minority serving institutions.
2 The Secretary shall distribute direct assistance in a man-
3 ner proportional to energy and manufacturing industry
4 needs and demand for jobs, consistent with information
5 obtained under subsections (e)(3) and (i).

6 (d) CLEARINGHOUSE.—In carrying out the program
7 established under subsection (a), the Secretary shall estab-
8 lish a clearinghouse to—

9 (1) maintain and update information and re-
10 sources on training and workforce development pro-
11 grams for energy and manufacturing-related jobs;
12 and

13 (2) act as a resource, and provide guidance, for
14 schools, community colleges, universities (including
15 minority serving institutions), workforce develop-
16 ment programs, labor management organizations,
17 and industry organizations that would like to de-
18 velop and implement energy and manufacturing-re-
19 lated training programs.

20 (e) COLLABORATION.—In carrying out the program
21 established under subsection (a), the Secretary—

22 (1) shall collaborate with schools, community
23 colleges, universities (including minority serving in-
24 stitutions), workforce training organizations, na-
25 tional laboratories, unions, State energy offices,

1 workforce investment boards, and the energy and
2 manufacturing industries;

3 (2) shall encourage and foster collaboration,
4 mentorships, and partnerships among organizations
5 (including unions, industry, schools, community col-
6 leges, workforce development organizations, and col-
7 leges and universities) that currently provide effec-
8 tive job training programs in the energy and manu-
9 facturing fields and institutions (including schools,
10 community colleges, workforce development pro-
11 grams, and colleges and universities) that seek to es-
12 tablish these types of programs in order to share
13 best practices and approaches that best suit local,
14 State, and national needs; and

15 (3) shall collaborate with the Bureau of Labor
16 Statistics, the Department of Commerce, the Bureau
17 of the Census, and the energy and manufacturing
18 industries to develop a comprehensive and detailed
19 understanding of the energy and manufacturing
20 workforce needs and opportunities by State and by
21 region, and publish an annual report on energy and
22 manufacturing job creation by the sectors enumer-
23 ated in subsection (i).

24 (f) GUIDELINES FOR EDUCATIONAL INSTITU-
25 TIONS.—

1 (1) IN GENERAL.—In carrying out the program
2 established under subsection (a), the Secretary, in
3 collaboration with the Secretary of Education, the
4 Secretary of Commerce, the Secretary of Labor, the
5 National Science Foundation, and industry shall de-
6 velop voluntary guidelines and best practices for
7 educational institutions of all levels, including for el-
8 ementary and secondary schools and community col-
9 leges and for undergraduate, graduate, and post-
10 graduate university programs, to help provide grad-
11 uates with the skills necessary to work in energy and
12 manufacturing-related jobs.

13 (2) INPUT.—The Secretary shall solicit input
14 from the oil, gas, coal, renewable, nuclear, utility,
15 energy-intensive and advanced manufacturing, and
16 pipeline industries in developing guidelines under
17 paragraph (1).

18 (3) ENERGY AND MANUFACTURING EFFICIENCY
19 AND CONSERVATION INITIATIVES.—The guidelines
20 developed under paragraph (1) shall include grade-
21 specific guidelines for teaching energy and manufac-
22 turing efficiency and conservation initiatives to edu-
23 cate students and families.

24 (4) STEM EDUCATION.—The guidelines devel-
25 oped under paragraph (1) shall promote STEM edu-

1 cation as it relates to job opportunities in energy
2 and manufacturing-related fields of study in schools,
3 community colleges, and universities nationally.

4 (g) OUTREACH TO MINORITY SERVING INSTITU-
5 TIONS.—In carrying out the program established under
6 subsection (a), the Secretary shall—

7 (1) give special consideration to increasing out-
8 reach to minority serving institutions (including his-
9 torically black colleges and universities, predomi-
10 nantly black institutions, Hispanic serving institu-
11 tions, and tribal institutions);

12 (2) make resources available to minority serving
13 institutions with the objective of increasing the num-
14 ber of skilled minorities and women trained to go
15 into the energy and manufacturing sectors;

16 (3) encourage industry to improve the opportu-
17 nities for students of minority serving institutions to
18 participate in industry internships and cooperative
19 work/study programs; and

20 (4) partner with the Department of Energy lab-
21 oratories to increase underrepresented groups' par-
22 ticipation in internships, fellowships, traineeships,
23 and employment at all Department of Energy lab-
24 oratories.

1 (h) OUTREACH TO DISPLACED AND UNEMPLOYED
2 ENERGY AND MANUFACTURING WORKERS.—In carrying
3 out the program established under subsection (a), the Sec-
4 retary shall—

5 (1) give special consideration to increasing out-
6 reach to employers and job trainers preparing dis-
7 placed and unemployed energy and manufacturing
8 workers for emerging energy and manufacturing
9 jobs;

10 (2) make resources available to institutions
11 serving displaced and unemployed energy and manu-
12 facturing workers with the objective of training indi-
13 viduals to re-enter the energy and manufacturing
14 workforce; and

15 (3) encourage the energy and manufacturing in-
16 dustries to improve opportunities for displaced and
17 unemployed energy and manufacturing workers to
18 participate in internships and cooperative work/study
19 programs.

20 (i) GUIDELINES TO DEVELOP SKILLS FOR AN EN-
21 ERGY AND MANUFACTURING INDUSTRY WORKFORCE.—In
22 carrying out the program established under subsection (a),
23 the Secretary shall collaborate with representatives from
24 the energy and manufacturing industries (including the
25 oil, gas, coal, nuclear, utility, pipeline, renewable, petro-

1 chemical, manufacturing, and electrical construction sec-
2 tors) to identify the areas of highest need in each sector
3 and to develop guidelines for the skills necessary to de-
4 velop a workforce trained to go into the following sectors
5 of the energy and manufacturing sectors:

6 (1) Energy efficiency industry, including work
7 in energy efficiency, conservation, weatherization, or
8 retrofitting, or as inspectors or auditors.

9 (2) Pipeline industry, including work in pipeline
10 construction and maintenance or work as engineers
11 or technical advisors.

12 (3) Utility industry, including work in the gen-
13 eration, transmission, and distribution of electricity
14 and natural gas, such as utility technicians, opera-
15 tors, lineworkers, engineers, scientists, and informa-
16 tion technology specialists.

17 (4) Alternative fuels, including work in biofuel
18 development and production.

19 (5) Nuclear industry, including work as sci-
20 entists, engineers, technicians, mathematicians, or
21 security personnel.

22 (6) Oil and gas industry, including work as sci-
23 entists, engineers, technicians, mathematicians, pe-
24 trochemical engineers, or geologists.

1 (7) Renewable industry, including work in the
2 development, manufacturing, and production of re-
3 newable energy sources (such as solar, hydropower,
4 wind, or geothermal energy).

5 (8) Coal industry, including work as coal min-
6 ers, engineers, developers and manufacturers of
7 state-of-the-art coal facilities, technology vendors,
8 coal transportation workers and operators, or mining
9 equipment vendors.

10 (9) Manufacturing industry, including work as
11 operations technicians, operations and design in ad-
12 ditive manufacturing, 3-D printing, advanced com-
13 posites, and advanced aluminum and other metal al-
14 loys, industrial energy efficiency management sys-
15 tems, including power electronics, and other innova-
16 tive technologies.

17 (10) Chemical manufacturing industry, includ-
18 ing work in construction (such as welders, pipe-
19 fitters, and tool and die makers) or as instrument
20 and electrical technicians, machinists, chemical proc-
21 ess operators, chemical engineers, quality and safety
22 professionals, and reliability engineers.

23 (j) ENROLLMENT IN TRAINING AND APPRENTICE-
24 SHIP PROGRAMS.—In carrying out the program estab-
25 lished under subsection (a), the Secretary shall work with

1 industry, organized labor, and community-based workforce
2 organizations to help identify students and other can-
3 didates, including from underrepresented communities
4 such as minorities, women, and veterans, to enroll into
5 training and apprenticeship programs for energy and
6 manufacturing-related jobs.

7 **TITLE III—ENERGY SECURITY** 8 **AND DIPLOMACY**

9 **SEC. 3101. SENSE OF CONGRESS.**

10 Congress finds the following:

11 (1) North America’s energy revolution has sig-
12 nificantly enhanced energy security in the United
13 States, and fundamentally changed the Nation’s en-
14 ergy future from that of scarcity to abundance.

15 (2) North America’s energy abundance has in-
16 creased global energy supplies and reduced the price
17 of energy for consumers in the United States and
18 abroad.

19 (3) Allies and trading partners of the United
20 States, including in Europe and Asia, are seeking
21 stable and affordable energy supplies from North
22 America to enhance their energy security.

23 (4) The United States has an opportunity to
24 improve its energy security and promote greater sta-
25 bility and affordability of energy supplies for its al-

1 lies and trading partners through a more integrated,
2 secure, and competitive North American energy sys-
3 tem.

4 (5) The United States also has an opportunity
5 to promote such objectives by supporting the free
6 flow of energy commodities and more open, trans-
7 parent, and competitive global energy markets, and
8 through greater Federal agency coordination relating
9 to regulations or agency actions that significantly af-
10 fect the supply, distribution, or use of energy.

11 **SEC. 3102. ENERGY SECURITY VALUATION.**

12 (a) ESTABLISHMENT OF ENERGY SECURITY VALU-
13 ATION METHODS.—Not later than one year after the date
14 of enactment of this Act, the Secretary of Energy, in col-
15 laboration with the Secretary of State, shall develop and
16 transmit, after public notice and comment, to the Com-
17 mittee on Energy and Commerce and the Committee on
18 Foreign Affairs of the House of Representatives and the
19 Committee on Energy and Natural Resources and the
20 Committee on Foreign Relations of the Senate a report
21 that develops recommended United States energy security
22 valuation methods. In developing the report, the Secre-
23 taries may consider the recommendations of the Adminis-
24 tration’s Quadrennial Energy Review released on April 21,
25 2015. The report shall—

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

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

11 (A) consumers and the economy;

12 (B) energy supply diversity and resiliency;

13 (C) well-functioning and competitive en-
14 ergy markets;

15 (D) United States trade balance; and

16 (E) national security objectives; and

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

21 (A) evaluated consistently across the Fed-
22 eral Government; and

23 (B) weighed appropriately and balanced
24 with environmental considerations required by
25 Federal law.

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

6 **SEC. 3103. NORTH AMERICAN ENERGY SECURITY PLAN.**

7 (a) REQUIREMENT.—Not later than one year after
8 the date of enactment of this Act, the Secretary of Energy,
9 in collaboration with the Secretary of State, shall develop
10 and transmit to the Committee on Energy and Commerce
11 and the Committee on Foreign Affairs of the House of
12 Representatives and the Committee on Energy and Nat-
13 ural Resources and the Committee on Foreign Relations
14 of the Senate the plan described in subsection (b).

15 (b) PURPOSE.—The plan referred to in subsection (a)
16 shall include—

17 (1) a recommended framework and implementa-
18 tion strategy to—

19 (A) improve planning and coordination
20 with Canada and Mexico to enhance energy in-
21 tegration, strengthen North American energy
22 security, and promote efficiencies in the explo-
23 ration, production, storage, supply, distribution,
24 marketing, pricing, and regulation of North
25 American energy resources; and

1 (B) address—

2 (i) North American energy public
3 data, statistics, and mapping collaboration;

4 (ii) responsible and sustainable best
5 practices for the development of unconven-
6 tional oil and natural gas; and

7 (iii) modern, resilient energy infra-
8 structure for North America, including
9 physical infrastructure as well as institu-
10 tional infrastructure such as policies, regu-
11 lations, and practices relating to energy de-
12 velopment; and

13 (2) a recommended framework and implementa-
14 tion strategy to improve collaboration with Carib-
15 bean and Central American partners on energy secu-
16 rity, including actions to support—

17 (A) more open, transparent, and competi-
18 tive energy markets;

19 (B) regulatory capacity building;

20 (C) improvements to energy transmission
21 and storage; and

22 (D) improvements to the performance of
23 energy infrastructure and efficiency.

24 (c) PARTICIPATION.—In developing the plan referred
25 to in subsection (a), the Secretaries may consult with

1 other Federal, State, private sector, and international par-
2 ticipants, as appropriate and consistent with applicable
3 law.

4 **SEC. 3104. COLLECTIVE ENERGY SECURITY.**

5 (a) IN GENERAL.—The Secretary of Energy and the
6 Secretary of State shall collaborate to strengthen domestic
7 energy security and the energy security of the allies and
8 trading partners of the United States, including through
9 actions that support or facilitate—

10 (1) energy diplomacy;

11 (2) the delivery of United States assistance, in-
12 cluding energy resources and technologies, to pre-
13 vent or mitigate an energy security crisis;

14 (3) the development of environmentally and
15 commercially sustainable energy resources;

16 (4) open, transparent, and competitive energy
17 markets; and

18 (5) regulatory capacity building.

19 (b) ENERGY SECURITY FORUMS.—Not later than one
20 year after date of enactment of this Act, the Secretary
21 of Energy, in collaboration with the Secretary of State,
22 shall convene not less than 2 forums to promote the collec-
23 tive energy security of the United States and its allies and
24 trading partners. The forums shall include participation

1 by the Secretary of Energy and the Secretary of State.

2 In addition, an invitation shall be extended to—

3 (1) appropriate representatives of foreign gov-
4 ernments that are allies or trading partners of the
5 United States; and

6 (2) independent experts and industry represent-
7 atives.

8 (c) REQUIREMENTS.—The forums shall—

9 (1) consist of at least one Trans-Atlantic and
10 one Trans-Pacific energy security forum;

11 (2) be designed to foster dialogue among gov-
12 ernment officials, independent experts, and industry
13 representatives regarding—

14 (A) the current state of global energy mar-
15 kets;

16 (B) trade and investment issues relevant to
17 energy; and

18 (C) barriers to more open, competitive, and
19 transparent energy markets; and

20 (3) be recorded and made publically available
21 on the Department of Energy's website, including,
22 not later than 30 days after each forum, publication
23 on the website any significant outcomes.

1 (d) NOTIFICATION.—At least 30 days before each of
2 the forums referred to in subsection (b), the Secretary of
3 Energy shall send a notification regarding the forum to—

4 (1) the chair and the ranking minority member
5 of the Committee on Energy and Commerce and the
6 Committee on Foreign Affairs of the House of Rep-
7 resentatives; and

8 (2) the chair and ranking minority member of
9 the Committee on Energy and Natural Resources
10 and the Committee on Foreign Relations of the Sen-
11 ate.

12 **SEC. 3105. STRATEGIC PETROLEUM RESERVE MISSION**
13 **READINESS PLAN.**

14 Not later than 180 days after date of enactment of
15 this Act, the Secretary of Energy shall conduct a long-
16 range strategic review of the Strategic Petroleum Reserve
17 and develop and transmit to Congress a plan that includes
18 an analysis and implementation schedule that—

19 (1) specifies near-term and long-term roles of
20 the Strategic Petroleum Reserve relative to United
21 States energy security and economic goals and objec-
22 tives;

23 (2) describes existing legal authorities gov-
24 erning the policies, configuration, and capabilities of
25 the Strategic Petroleum Reserve;

1 (3) identifies Strategic Petroleum Reserve con-
2 figuration and performance capabilities and rec-
3 ommends an action plan to achieve the optimal—

4 (A) capacity, location, and composition of
5 petroleum products in the Reserve; and

6 (B) storage and distributional capabilities;
7 and

8 (4) estimates the resources required to attain
9 and maintain the Strategic Petroleum Reserve’s
10 long-term sustainability and operational effective-
11 ness.

12 **TITLE IV—ENERGY EFFICIENCY**
13 **AND ACCOUNTABILITY**

14 **Subtitle A—Energy Efficiency**

15 **CHAPTER 1—FEDERAL AGENCY ENERGY**
16 **EFFICIENCY**

17 **SEC. 4111. ENERGY-EFFICIENT AND ENERGY-SAVING IN-**
18 **FORMATION TECHNOLOGIES.**

19 (a) AMENDMENT.—Subtitle C of title V of the En-
20 ergy Independence and Security Act of 2007 (Public Law
21 110–140; 121 Stat. 1661) is amended by adding at the
22 end the following:

23 **“SEC. 530. ENERGY-EFFICIENT AND ENERGY-SAVING INFOR-**
24 **MATION TECHNOLOGIES.**

25 “(a) DEFINITIONS.—In this section:

1 “(1) DIRECTOR.—The term ‘Director’ means
2 the Director of the Office of Management and Budg-
3 et.

4 “(2) INFORMATION TECHNOLOGY.—The term
5 ‘information technology’ has the meaning given that
6 term in section 11101 of title 40, United States
7 Code.

8 “(b) DEVELOPMENT OF IMPLEMENTATION STRAT-
9 EGY.—Not later than 1 year after the date of enactment
10 of this section, each Federal agency shall coordinate with
11 the Director, the Secretary, and the Administrator of the
12 Environmental Protection Agency to develop an implemen-
13 tation strategy (that includes best practices and measure-
14 ment and verification techniques) for the maintenance,
15 purchase, and use by the Federal agency of energy-effi-
16 cient and energy-saving information technologies, taking
17 into consideration the performance goals established under
18 subsection (d).

19 “(c) ADMINISTRATION.—In developing an implemen-
20 tation strategy under subsection (b), each Federal agency
21 shall consider—

22 “(1) advanced metering infrastructure;

23 “(2) energy-efficient data center strategies and
24 methods of increasing asset and infrastructure utili-
25 zation;

1 “(3) advanced power management tools;

2 “(4) building information modeling, including
3 building energy management;

4 “(5) secure telework and travel substitution
5 tools; and

6 “(6) mechanisms to ensure that the agency re-
7 alizes the energy cost savings brought about through
8 increased efficiency and utilization.

9 “(d) PERFORMANCE GOALS.—

10 “(1) IN GENERAL.—Not later than 180 days
11 after the date of enactment of this section, the Di-
12 rector, in consultation with the Secretary, shall es-
13 tablish performance goals for evaluating the efforts
14 of Federal agencies in improving the maintenance,
15 purchase, and use of energy-efficient and energy-sav-
16 ing information technology.

17 “(2) BEST PRACTICES.—The Chief Information
18 Officers Council established under section 3603 of
19 title 44, United States Code, shall recommend best
20 practices for the attainment of the performance
21 goals, which shall include Federal agency consider-
22 ation of, to the extent applicable by law, the use
23 of—

24 “(A) energy savings performance con-
25 tracting; and

1 “(B) utility energy services contracting.

2 “(e) REPORTS.—

3 “(1) AGENCY REPORTS.—Each Federal agency
4 shall include in the report of the agency under sec-
5 tion 527 a description of the efforts and results of
6 the agency under this section.

7 “(2) OMB GOVERNMENT EFFICIENCY REPORTS
8 AND SCORECARDS.—Effective beginning not later
9 than October 1, 2017, the Director shall include in
10 the annual report and scorecard of the Director re-
11 quired under section 528 a description of the efforts
12 and results of Federal agencies under this section.”.

13 (b) CONFORMING AMENDMENT.—The table of con-
14 tents for the Energy Independence and Security Act of
15 2007 is amended by adding after the item relating to sec-
16 tion 529 the following:

“Sec. 530. Energy-efficient and energy-saving information technologies.”.

17 **SEC. 4112. ENERGY EFFICIENT DATA CENTERS.**

18 Section 453 of the Energy Independence and Security
19 Act of 2007 (42 U.S.C. 17112) is amended—

20 (1) in subsection (b)(2)(D)(iv), by striking “de-
21 termined by the organization” and inserting “pro-
22 posed by the stakeholders”;

23 (2) by striking subsection (b)(3); and

24 (3) by striking subsections (e) through (g) and
25 inserting the following:

1 “(c) STAKEHOLDER INVOLVEMENT.—The Secretary
2 and the Administrator shall carry out subsection (b) in
3 collaboration with information technology industry and
4 other key stakeholders, with the goal of producing results
5 that accurately reflect the most relevant and useful infor-
6 mation available. In such collaboration, the Secretary and
7 the Administrator shall pay particular attention to organi-
8 zations that—

9 “(1) have members with expertise in energy ef-
10 ficiency and in the development, operation, and
11 functionality of data centers, information technology
12 equipment, and software, such as representatives of
13 hardware manufacturers, data center operators, and
14 facility managers;

15 “(2) obtain and address input from Department
16 of Energy National Laboratories or any college, uni-
17 versity, research institution, industry association,
18 company, or public interest group with applicable ex-
19 pertise;

20 “(3) follow—

21 “(A) commonly accepted procedures for
22 the development of specifications; and

23 “(B) accredited standards development
24 processes; and

1 “(4) have a mission to promote energy effi-
2 ciency for data centers and information technology.

3 “(d) MEASUREMENTS AND SPECIFICATIONS.—The
4 Secretary and the Administrator shall consider and assess
5 the adequacy of the specifications, measurements, best
6 practices, and benchmarks described in subsection (b) for
7 use by the Federal Energy Management Program, the En-
8 ergy Star Program, and other efficiency programs of the
9 Department of Energy or the Environmental Protection
10 Agency.

11 “(e) STUDY.—The Secretary, in collaboration with
12 the Administrator, shall, not later than 18 months after
13 the date of enactment of the North American Energy Se-
14 curity and Infrastructure Act of 2015, make available to
15 the public an update to the Report to Congress on Server
16 and Data Center Energy Efficiency published on August
17 2, 2007, under section 1 of Public Law 109–431 (120
18 Stat. 2920), that provides—

19 “(1) a comparison and gap analysis of the esti-
20 mates and projections contained in the original re-
21 port with new data regarding the period from 2008
22 through 2015;

23 “(2) an analysis considering the impact of in-
24 formation technologies, including virtualization and
25 cloud computing, in the public and private sectors;

1 “(3) an evaluation of the impact of the com-
2 bination of cloud platforms, mobile devices, social
3 media, and big data on data center energy usage;

4 “(4) an evaluation of water usage in data cen-
5 ters and recommendations for reductions in such
6 water usage; and

7 “(5) updated projections and recommendations
8 for best practices through fiscal year 2020.

9 “(f) DATA CENTER ENERGY PRACTITIONER PRO-
10 GRAM.—The Secretary, in collaboration with key stake-
11 holders and the Director of the Office of Management and
12 Budget, shall maintain a data center energy practitioner
13 program that leads to the certification of energy practi-
14 tioners qualified to evaluate the energy usage and effi-
15 ciency opportunities in Federal data centers. Each Federal
16 agency shall consider having the data centers of the agen-
17 cy evaluated every 4 years, in accordance with section
18 543(f) of the National Energy Conservation Policy Act (42
19 U.S.C. 8253), by energy practitioners certified pursuant
20 to such program.

21 “(g) OPEN DATA INITIATIVE.—The Secretary, in col-
22 laboration with key stakeholders and the Director of the
23 Office of Management and Budget, shall establish an open
24 data initiative for Federal data center energy usage data,
25 with the purpose of making such data available and acces-

1 sible in a manner that encourages further data center in-
2 novation, optimization, and consolidation. In establishing
3 the initiative, the Secretary shall consider the use of the
4 online Data Center Maturity Model.

5 “(h) INTERNATIONAL SPECIFICATIONS AND
6 METRICS.—The Secretary, in collaboration with key
7 stakeholders, shall actively participate in efforts to har-
8 monize global specifications and metrics for data center
9 energy and water efficiency.

10 “(i) DATA CENTER UTILIZATION METRIC.—The Sec-
11 retary, in collaboration with key stakeholders, shall facili-
12 tate the development of an efficiency metric that measures
13 the energy efficiency of a data center (including equipment
14 and facilities).

15 “(j) PROTECTION OF PROPRIETARY INFORMATION.—
16 The Secretary and the Administrator shall not disclose
17 any proprietary information or trade secrets provided by
18 any individual or company for the purposes of carrying
19 out this section or the programs and initiatives established
20 under this section.”.

21 **SEC. 4113. REPORT ON ENERGY AND WATER SAVINGS PO-**
22 **TENTIAL FROM THERMAL INSULATION.**

23 (a) REPORT.—Not later than 1 year after the date
24 of enactment of this Act, the Secretary of Energy, in con-
25 sultation with appropriate Federal agencies and relevant

1 stakeholders, shall submit to the Committee on Energy
2 and Natural Resources of the Senate and the Committee
3 on Energy and Commerce of the House of Representatives
4 a report on the impact of thermal insulation on both en-
5 ergy and water use systems for potable hot and chilled
6 water in Federal buildings, and the return on investment
7 of installing such insulation.

8 (b) CONTENTS.—The report shall include—

9 (1) an analysis based on the cost of municipal
10 or regional water for delivered water and the avoided
11 cost of new water; and

12 (2) a summary of energy and water savings, in-
13 cluding short-term and long-term (20 years) projec-
14 tions of such savings.

15 **SEC. 4114. FEDERAL PURCHASE REQUIREMENT.**

16 Section 203(b) of the Energy Policy Act of 2005 (42
17 U.S.C. 15852(b)) is amended by striking paragraph (2)
18 and inserting the following:

19 “(2) RENEWABLE ENERGY.—The term ‘renew-
20 able energy’ means electric energy, or thermal en-
21 ergy if resulting from a thermal energy project
22 placed in service after December 31, 2014, gen-
23 erated from, or avoided by, solar, wind, biomass,
24 landfill gas, ocean (including tidal, wave, current,
25 and thermal), geothermal, municipal solid waste

1 (other than commonly recycled paper that is seg-
2 regated from solid waste), qualified waste heat re-
3 source, or new hydroelectric generation capacity
4 achieved from increased efficiency or additions of
5 new capacity at an existing hydroelectric project.

6 “(3) QUALIFIED WASTE HEAT RESOURCE.—The
7 term ‘qualified waste heat resource’ means—

8 “(A) exhaust heat or flared gas from any
9 industrial process;

10 “(B) waste gas or industrial tail gas that
11 would otherwise be flared, incinerated, or vent-
12 ed;

13 “(C) a pressure drop in any gas for an in-
14 dustrial or commercial process; or

15 “(D) such other forms of waste heat as the
16 Secretary determines appropriate.”.

17 **CHAPTER 2—ENERGY EFFICIENT**
18 **TECHNOLOGY AND MANUFACTURING**

19 **SEC. 4121. INCLUSION OF SMART GRID CAPABILITY ON EN-**
20 **ERGY GUIDE LABELS.**

21 Section 324(a)(2) of the Energy Policy and Conserva-
22 tion Act (42 U.S.C. 6294(a)(2)) is amended by adding the
23 following at the end:

24 “(J)(i) Not later than 1 year after the date
25 of enactment of this subparagraph, the Com-

1 mission shall initiate a rulemaking to consider
2 making a special note in a prominent manner
3 on any Energy Guide label for any product that
4 includes Smart Grid capability that—

5 “(I) Smart Grid capability is a fea-
6 ture of that product;

7 “(II) the use and value of that feature
8 depend on the Smart Grid capability of the
9 utility system in which the product is in-
10 stalled and the active utilization of that
11 feature by the customer; and

12 “(III) on a utility system with Smart
13 Grid capability, the use of the product’s
14 Smart Grid capability could reduce the
15 customer’s cost of the product’s annual op-
16 eration as a result of the incremental en-
17 ergy and electricity cost savings that would
18 result from the customer taking full advan-
19 tage of such Smart Grid capability.

20 “(ii) Not later than 3 years after the date
21 of enactment of this subparagraph, the Com-
22 mission shall complete the rulemaking initiated
23 under clause (i).”.

1 **SEC. 4122. VOLUNTARY VERIFICATION PROGRAMS FOR AIR**
2 **CONDITIONING, FURNACE, BOILER, HEAT**
3 **PUMP, AND WATER HEATER PRODUCTS.**

4 Section 326(b) of the Energy Policy and Conserva-
5 tion Act (42 U.S.C. 6296(b)) is amended by adding at
6 the end the following:

7 “(6) VOLUNTARY VERIFICATION PROGRAMS FOR AIR
8 CONDITIONING, FURNACE, BOILER, HEAT PUMP, AND
9 WATER HEATER PRODUCTS.—

10 “(A) RELIANCE ON VOLUNTARY PROGRAMS.—

11 For the purpose of verifying compliance with energy
12 conservation standards and Energy Star specifica-
13 tions established under sections 324A, 325, and 342
14 for covered products described in paragraphs (3),
15 (4), (5), (9), and (11) of section 322(a) and covered
16 equipment described in subparagraphs (B), (C), (D),
17 (F), (I), (J), and (K) of section 340(1), the Sec-
18 retary and the Administrator of the Environmental
19 Protection Agency shall rely on testing conducted by
20 recognized voluntary verification programs that are
21 recognized by the Secretary in accordance with sub-
22 paragraph (B).

23 “(B) RECOGNITION OF VOLUNTARY
24 VERIFICATION PROGRAMS.—

25 “(i) IN GENERAL.—Not later than 180
26 days after the date of enactment of this para-

1 graph, the Secretary shall initiate a negotiated
2 rulemaking in accordance with subchapter III
3 of chapter 5 of title 5, United States Code
4 (commonly known as the ‘Negotiated Rule-
5 making Act of 1990’) to develop criteria that
6 have consensus support for achieving recogni-
7 tion by the Secretary as an approved voluntary
8 verification program. Any subsequent amend-
9 ment to such criteria may be made only pursu-
10 ant to a subsequent negotiated rulemaking in
11 accordance with subchapter III of chapter 5 of
12 title 5, United States Code.

13 “(ii) MINIMUM REQUIREMENTS.—The cri-
14 teria developed under clause (i) shall, at a min-
15 imum, ensure that a voluntary verification pro-
16 gram—

17 “(I) is nationally recognized;

18 “(II) is operated by a third party and
19 not directly operated by a program partici-
20 pant;

21 “(III) satisfies any applicable ele-
22 ments of—

23 “(aa) International Organization
24 for Standardization standard num-
25 bered 17025; and

1 “(bb) any other relevant Inter-
2 national Organization for Standard-
3 ization standards identified and
4 agreed to through the negotiated rule-
5 making under clause (i);

6 “(IV) at least annually tests inde-
7 pendently obtained products following the
8 test procedures established under this title
9 to verify the certified rating of a represent-
10 ative sample of products and equipment
11 within the scope of the program;

12 “(V) maintains a publicly available
13 list of all ratings of products subject to
14 verification;

15 “(VI) requires the changing of the
16 performance rating or removal of the prod-
17 uct or equipment from the program if test-
18 ing determines that the performance rating
19 does not meet the levels the manufacturer
20 has certified to the Secretary;

21 “(VII) requires new program partici-
22 pants to substantiate ratings through test
23 data generated in accordance with Depart-
24 ment of Energy regulations;

1 “(VIII) allows for challenge testing of
2 products and equipment within the scope
3 of the program;

4 “(IX) requires program participants
5 to disclose the performance rating of all
6 covered products and equipment within the
7 scope of the program for the covered prod-
8 uct or equipment;

9 “(X) provides to the Secretary—

10 “(aa) an annual report of all test
11 results, the contents of which shall be
12 determined through the negotiated
13 rulemaking process under clause (i);
14 and

15 “(bb) test reports, on the request
16 of the Secretary or the Administrator
17 of the Environmental Protection
18 Agency, that note any instructions
19 specified by the manufacturer or the
20 representative of the manufacturer for
21 the purpose of conducting the
22 verification testing, to be exempted
23 from disclosure under section
24 552(b)(4) of title 5, United States
25 Code; and

1 “(XI) satisfies any additional require-
2 ments or standards that the Secretary and
3 Administrator of the Environmental Pro-
4 tection Agency shall establish consistent
5 with this subparagraph.

6 “(iii) CESSATION OF RECOGNITION.—The
7 Secretary may only cease recognition of a vol-
8 untary verification program as an approved pro-
9 gram described in subparagraph (A) upon a
10 finding that the program is not meeting its obli-
11 gations for compliance through program review
12 criteria developed during the negotiated rule-
13 making conducted under subparagraph (B).

14 “(C) ADMINISTRATION.—

15 “(i) IN GENERAL.—The Secretary and the
16 Administrator of the Environmental Protection
17 Agency shall not require—

18 “(I) manufacturers to participate in a
19 recognized voluntary verification program
20 described in subparagraph (A); or

21 “(II) participating manufacturers to
22 provide information that has already been
23 provided to the Secretary or the Adminis-
24 trator.

1 “(ii) LIST OF COVERED PRODUCTS.—The
2 Secretary or the Administrator of the Environ-
3 mental Protection Agency may maintain a pub-
4 licly available list of covered products and
5 equipment that distinguishes between products
6 that are and are not covered products and
7 equipment verified through a recognized vol-
8 untary verification program described in sub-
9 paragraph (A).

10 “(iii) PERIODIC VERIFICATION TESTING.—
11 The Secretary—

12 “(I) shall not subject products or
13 equipment that have been verification test-
14 ed under a recognized voluntary
15 verification program described in subpara-
16 graph (A) to periodic verification testing to
17 verify the accuracy of the certified per-
18 formance rating of the products or equip-
19 ment; but

20 “(II) may require testing of products
21 or equipment described in subclause (I)—

22 “(aa) if the testing is nec-
23 essary—

1 “(AA) to assess the overall
2 performance of a voluntary
3 verification program;

4 “(BB) to address specific
5 performance issues;

6 “(CC) for use in updating
7 test procedures and standards; or

8 “(DD) for other purposes
9 consistent with this title; or

10 “(bb) if such testing is agreed to
11 during the negotiated rulemaking con-
12 ducted under subparagraph (B).

13 “(D) EFFECT ON OTHER AUTHORITY.—Noth-
14 ing in this paragraph limits the authority of the Sec-
15 retary or the Administrator of the Environmental
16 Protection Agency to enforce compliance with any
17 law.”.

18 **SEC. 4123. FACILITATING CONSENSUS FURNACE STAND-**
19 **ARDS.**

20 (a) CONGRESSIONAL FINDINGS AND DECLARATION
21 OF PURPOSE.—

22 (1) FINDINGS.—Congress finds that—

23 (A) acting pursuant to the requirements of
24 section 325 of the Energy Policy and Conserva-
25 tion Act (42 U.S.C. 6295), the Secretary of En-

1 ergy is considering amending the energy con-
2 servation standards applicable to residential
3 non-weatherized gas furnaces and mobile home
4 gas furnaces;

5 (B) numerous stakeholders, representing
6 manufacturers, distributors, and installers of
7 residential non-weatherized gas furnaces and
8 mobile home furnaces, natural gas utilities,
9 home builders, multifamily property owners,
10 and energy efficiency, environmental, and con-
11 sumer advocates have begun negotiations in an
12 attempt to agree on a consensus recommenda-
13 tion to the Secretary on levels for such stand-
14 ards that will meet the statutory criteria; and

15 (C) the stakeholders believe these negotia-
16 tions are likely to result in a consensus rec-
17 ommendation, but several of the stakeholders
18 do not support suspending the current rule-
19 making.

20 (2) PURPOSE.—It is the purpose of this section
21 to provide the stakeholders described in paragraph
22 (1) with an opportunity to continue negotiations for
23 a limited time period to facilitate the proposal for
24 adoption of standards that enjoy consensus support,

1 while not delaying the current rulemaking except to
2 the extent necessary to provide such opportunity.

3 (b) OPPORTUNITY FOR A NEGOTIATED FURNACE
4 STANDARD.—Section 325(f)(4) of the Energy Policy and
5 Conservation Act (42 U.S.C. 6295(f)(4)) is amended by
6 adding after subparagraph (D) the following:

7 “(E)(i) Unless the Secretary has published such a no-
8 tice prior to the date of enactment of this Act, the Sec-
9 retary shall publish, not later than October 31, 2015, a
10 supplemental notice of proposed rulemaking or a notice
11 of data availability updating the proposed rule entitled
12 ‘Energy Conservation Program for Consumer Products:
13 Energy Conservation Standards for Residential Furnaces’
14 and published in the Federal Register on March 12, 2015
15 (80 Fed. Reg. 13119), to provide notice and an oppor-
16 tunity for comment on—

17 “(I) dividing non-weatherized natural gas
18 furnaces into two or more product classes with
19 separate energy conservation standards based
20 on capacity; and

21 “(II) any other matters the Secretary de-
22 termines appropriate.

23 “(ii) On receipt of a statement that is submitted on
24 or before January 1, 2016, jointly by interested persons
25 that are fairly representative of relevant points of view,

1 that contains recommended standards for non-weatherized
2 natural gas furnaces and mobile home gas furnaces that
3 are consistent with the requirements of this part (except
4 that the date on which such standards will apply may be
5 earlier or later than the date required under this part),
6 the Secretary shall evaluate the standards proposed in the
7 joint statement for consistency with the requirements of
8 subsection (o), and shall publish notice of the potential
9 adoption of the standards proposed in the joint statement,
10 modified as necessary to ensure consistency with sub-
11 section (o). The Secretary shall solicit public comment for
12 a period of at least 30 days with respect to such notice.

13 “(iii) Not later than July 31, 2016, but not before
14 July 1, 2016, the Secretary shall publish a final rule con-
15 taining a determination of whether the standards for non-
16 weatherized natural gas furnaces and mobile home gas
17 furnaces should be amended. Such rule shall contain any
18 such amendments to the standards.”.

19 **SEC. 4124. FUTURE OF INDUSTRY PROGRAM.**

20 (a) IN GENERAL.—Section 452 of the Energy Inde-
21 pendence and Security Act of 2007 (42 U.S.C. 17111) is
22 amended by striking the section heading and inserting the
23 following: “**FUTURE OF INDUSTRY PROGRAM**”.

1 (b) DEFINITION OF ENERGY SERVICE PROVIDER.—
2 Section 452(a) of the Energy Independence and Security
3 Act of 2007 (42 U.S.C. 17111(a)) is amended—

4 (1) by redesignating paragraphs (3) through
5 (5) as paragraphs (4) through (6), respectively; and
6 (2) by inserting after paragraph (2):

7 “(3) ENERGY SERVICE PROVIDER.—The term
8 ‘energy service provider’ means any business pro-
9 viding technology or services to improve the energy
10 efficiency, water efficiency, power factor, or load
11 management of a manufacturing site or other indus-
12 trial process in an energy-intensive industry, or any
13 utility operating under a utility energy service
14 project.”.

15 (c) INDUSTRIAL RESEARCH AND ASSESSMENT CEN-
16 TERS.—Section 452(e) of the Energy Independence and
17 Security Act of 2007 (42 U.S.C. 17111(e)) is amended—

18 (1) by redesignating paragraphs (1) through
19 (5) as subparagraphs (A) through (E), respectively,
20 and indenting appropriately;

21 (2) by striking “The Secretary” and inserting
22 the following:

23 “(1) IN GENERAL.—The Secretary”;

24 (3) in subparagraph (A) (as redesignated by
25 paragraph (1)), by inserting before the semicolon at

1 the end the following: “, including assessments of
2 sustainable manufacturing goals and the implemen-
3 tation of information technology advancements for
4 supply chain analysis, logistics, system monitoring,
5 industrial and manufacturing processes, and other
6 purposes”; and

7 (4) by adding at the end the following:

8 “(2) COORDINATION.—To increase the value
9 and capabilities of the industrial research and as-
10 sessment centers, the centers shall—

11 “(A) coordinate with Manufacturing Ex-
12 tension Partnership Centers of the National In-
13 stitute of Standards and Technology;

14 “(B) coordinate with the Building Tech-
15 nologies Office of the Department of Energy to
16 provide building assessment services to manu-
17 facturers;

18 “(C) increase partnerships with the Na-
19 tional Laboratories of the Department of En-
20 ergy to leverage the expertise and technologies
21 of the National Laboratories for national indus-
22 trial and manufacturing needs; and

23 “(D) increase partnerships with energy
24 service providers and technology providers to le-
25 verage private sector expertise and accelerate

1 deployment of new and existing technologies
2 and processes for energy efficiency, power fac-
3 tor, and load management.

4 “(3) OUTREACH.—The Secretary shall provide
5 funding for—

6 “(A) outreach activities by the industrial
7 research and assessment centers to inform
8 small and medium-sized manufacturers of the
9 information, technologies, and services avail-
10 able; and

11 “(B) coordination activities by each indus-
12 trial research and assessment center to leverage
13 efforts with—

14 “(i) Federal and State efforts;

15 “(ii) the efforts of utilities and energy
16 service providers;

17 “(iii) the efforts of regional energy ef-
18 ficiency organizations; and

19 “(iv) the efforts of other industrial re-
20 search and assessment centers.

21 “(4) SMALL BUSINESS LOANS.—The Adminis-
22 trator of the Small Business Administration shall, to
23 the maximum extent practicable, expedite consider-
24 ation of applications from eligible small business
25 concerns for loans under the Small Business Act (15

1 U.S.C. 631 et seq.) to implement recommendations
2 of industrial research and assessment centers estab-
3 lished under paragraph (1).”.

4 (d) CONFORMING AMENDMENT.—The item relating
5 to section 452 in the table of contents for the Energy
6 Independence and Security Act of 2007 is amended to
7 read as follows:

“Sec. 452. Future of Industry program.”.

8 **CHAPTER 3—ENERGY PERFORMANCE**
9 **CONTRACTING**

10 **SEC. 4131. USE OF ENERGY AND WATER EFFICIENCY MEAS-**
11 **URES IN FEDERAL BUILDINGS.**

12 (a) ENERGY MANAGEMENT REQUIREMENTS.—Sec-
13 tion 543(f)(4) of the National Energy Conservation Policy
14 Act (42 U.S.C. 8253(f)(4)) is amended—

15 (1) by moving the margins of subparagraphs
16 (A) and (B) 2 ems to the right and redesignating
17 such subparagraphs as clauses (i) and (ii), respec-
18 tively;

19 (2) by striking “Not later than” and inserting
20 the following:

21 “(A) IN GENERAL.—Not later than”; and

22 (3) by adding at the end the following new sub-
23 paragraph:

24 “(B) MEASURES NOT IMPLEMENTED.—

25 Each energy manager, as part of the certifi-

1 cation system under paragraph (7) and using
2 guidelines developed by the Secretary, shall pro-
3 vide an explanation regarding any life-cycle
4 cost-effective measures described in subpara-
5 graph (A)(i) that have not been implemented.”.

6 (b) REPORTS.—Section 548(b) of the National En-
7 ergy Conservation Policy Act (42 U.S.C. 8258(b)) is
8 amended—

9 (1) in paragraph (3), by striking “and” at the
10 end;

11 (2) in paragraph (4), by striking the period at
12 the end and inserting “; and”; and

13 (3) by adding at the end the following new
14 paragraph:

15 “(5) the status of each agency’s energy savings
16 performance contracts and utility energy service con-
17 tracts, the investment value of such contracts, the
18 guaranteed energy savings for the previous year as
19 compared to the actual energy savings for the pre-
20 vious year, the plan for entering into such contracts
21 in the coming year, and information explaining why
22 any previously submitted plans for such contracts
23 were not implemented.”.

24 (c) FEDERAL ENERGY MANAGEMENT DEFINI-
25 TIONS.—Section 551(4) of the National Energy Conserva-

1 tion Policy Act (42 U.S.C. 8259(4)) is amended by strik-
2 ing “or retrofit activities” and inserting “retrofit activi-
3 ties, or energy consuming devices and required support
4 structures”.

5 (d) AUTHORITY TO ENTER INTO CONTRACTS.—Sec-
6 tion 801(a)(2)(F) of the National Energy Conservation
7 Policy Act (42 U.S.C. 8287(a)(2)(F)) is amended—

8 (1) in clause (i), by striking “or” at the end;

9 (2) in clause (ii), by striking the period at the
10 end and inserting “; or”; and

11 (3) by adding at the end the following new
12 clause:

13 “(iii) limit the recognition of oper-
14 ation and maintenance savings associated
15 with systems modernized or replaced with
16 the implementation of energy conservation
17 measures, water conservation measures, or
18 any series of energy conservation measures
19 and water conservation measures.”.

20 (e) MISCELLANEOUS AUTHORITY.—Section
21 801(a)(2) of the National Energy Conservation Policy Act
22 (42 U.S.C. 8287(a)) is amended by adding at the end the
23 following:

24 “(H) MISCELLANEOUS AUTHORITY.—Not-
25 withstanding any other provision of law, a Fed-

1 eral agency may sell or transfer energy savings
2 and apply the proceeds of such sale or transfer
3 to fund a contract under this title.”.

4 (f) PAYMENT OF COSTS.—Section 802 of the Na-
5 tional Energy Conservation Policy Act (42 U.S.C. 8287a)
6 is amended by striking “(and related operation and main-
7 tenance expenses)” and inserting “, including related op-
8 erations and maintenance expenses”.

9 (g) ENERGY SAVINGS PERFORMANCE CONTRACTS
10 DEFINITIONS.—Section 804(2) of the National Energy
11 Conservation Policy Act (42 U.S.C. 8287c(2)) is amend-
12 ed—

13 (1) in subparagraph (A), by striking “federally
14 owned building or buildings or other federally owned
15 facilities” and inserting “Federal building (as de-
16 fined in section 551 (42 U.S.C. 8259))” each place
17 it appears;

18 (2) in subparagraph (C), by striking “; and”
19 and inserting a semicolon;

20 (3) in subparagraph (D), by striking the period
21 at the end and inserting a semicolon; and

22 (4) by adding at the end the following new sub-
23 paragraphs:

24 “(E) the use, sale, or transfer of energy in-
25 centives, rebates, or credits (including renew-

1 able energy credits) from Federal, State, or
2 local governments or utilities; and

3 “(F) any revenue generated from a reduc-
4 tion in energy or water use, more efficient
5 waste recycling, or additional energy generated
6 from more efficient equipment.”.

7 **CHAPTER 4—SCHOOL BUILDINGS**

8 **SEC. 4141. COORDINATION OF ENERGY RETROFITTING AS-** 9 **SISTANCE FOR SCHOOLS.**

10 Section 392 of the Energy Policy and Conservation
11 Act (42 U.S.C. 6371a) is amended by adding at the end
12 the following:

13 “(e) COORDINATION OF ENERGY RETROFITTING AS-
14 SISTANCE FOR SCHOOLS.—

15 “(1) DEFINITION OF SCHOOL.—Notwith-
16 standing section 391(6), for the purposes of this
17 subsection, the term ‘school’ means—

18 “(A) an elementary school or secondary
19 school (as defined in section 9101 of the Ele-
20 mentary and Secondary Education Act of 1965
21 (20 U.S.C. 7801));

22 “(B) an institution of higher education (as
23 defined in section 102(a) of the Higher Edu-
24 cation Act of 1965 (20 U.S.C. 1002(a)));

1 “(C) a school of the defense dependents’
2 education system under the Defense Depend-
3 ents’ Education Act of 1978 (20 U.S.C. 921 et
4 seq.) or established under section 2164 of title
5 10, United States Code;

6 “(D) a school operated by the Bureau of
7 Indian Affairs;

8 “(E) a tribally controlled school (as de-
9 fined in section 5212 of the Tribally Controlled
10 Schools Act of 1988 (25 U.S.C. 2511)); and

11 “(F) a Tribal College or University (as de-
12 fined in section 316(b) of the Higher Education
13 Act of 1965 (20 U.S.C. 1059c(b))).

14 “(2) ESTABLISHMENT OF CLEARINGHOUSE.—
15 The Secretary, acting through the Office of Energy
16 Efficiency and Renewable Energy, shall establish a
17 clearinghouse to disseminate information regarding
18 available Federal programs and financing mecha-
19 nisms that may be used to help initiate, develop, and
20 finance energy efficiency, distributed generation, and
21 energy retrofitting projects for schools.

22 “(3) REQUIREMENTS.—In carrying out para-
23 graph (2), the Secretary shall—

24 “(A) consult with appropriate Federal
25 agencies to develop a list of Federal programs

1 and financing mechanisms that are, or may be,
2 used for the purposes described in paragraph
3 (2); and

4 “(B) coordinate with appropriate Federal
5 agencies to develop a collaborative education
6 and outreach effort to streamline communica-
7 tions and promote available Federal programs
8 and financing mechanisms described in sub-
9 paragraph (A), which may include the develop-
10 ment and maintenance of a single online re-
11 source that includes contact information for rel-
12 evant technical assistance in the Office of En-
13 ergy Efficiency and Renewable Energy that
14 States, local education agencies, and schools
15 may use to effectively access and use such Fed-
16 eral programs and financing mechanisms.”.

17 **Subtitle B—Accountability**

18 **CHAPTER 1—MARKET MANIPULATION,**

19 **ENFORCEMENT, AND COMPLIANCE**

20 **SEC. 4211. FERC OFFICE OF COMPLIANCE ASSISTANCE AND**

21 **PUBLIC PARTICIPATION.**

22 Section 319 of the Federal Power Act (16 U.S.C.
23 825q–1) is amended to read as follows:

1 **“SEC. 319. OFFICE OF COMPLIANCE ASSISTANCE AND PUB-**
2 **LIC PARTICIPATION.**

3 “(a) ESTABLISHMENT.—There is established within
4 the Commission an Office of Compliance Assistance and
5 Public Participation (referred to in this section as the ‘Of-
6 fice’). The Office shall be headed by a Director.

7 “(b) DUTIES OF DIRECTOR.—

8 “(1) IN GENERAL.—The Director of the Office
9 shall promote improved compliance with Commission
10 rules and orders by—

11 “(A) making recommendations to the Com-
12 mission regarding—

13 “(i) the protection of consumers;

14 “(ii) market integrity and support for
15 the development of responsible market be-
16 havior;

17 “(iii) the application of Commission
18 rules and orders in a manner that ensures
19 that—

20 “(I) rates and charges for, or in
21 connection with, the transmission or
22 sale of electric energy subject to the
23 jurisdiction of the Commission shall
24 be just and reasonable and not unduly
25 discriminatory or preferential; and

1 “(II) markets for such trans-
2 mission and sale of electric energy are
3 not impaired and consumers are not
4 damaged; and

5 “(iv) the impact of existing and pro-
6 posed Commission rules and orders on
7 small entities, as defined in section 601 of
8 title 5, United States Code (commonly
9 known as the Regulatory Flexibility Act);

10 “(B) providing entities subject to regula-
11 tion by the Commission the opportunity to ob-
12 tain timely guidance for compliance with Com-
13 mission rules and orders; and

14 “(C) providing information to the Commis-
15 sion and Congress to inform policy with respect
16 to energy issues under the jurisdiction of the
17 Commission.

18 “(2) REPORTS AND GUIDANCE.—The Director
19 shall, as the Director determines appropriate, issue
20 reports and guidance to the Commission and to enti-
21 ties subject to regulation by the Commission, regard-
22 ing market practices, proposing improvements in
23 Commission monitoring of market practices, and ad-
24 dressing potential improvements to both industry
25 and Commission practices.

1 “(3) **OUTREACH.**—The Director shall promote
2 improved compliance with Commission rules and or-
3 ders through outreach, publications, and, where ap-
4 appropriate, direct communication with entities regu-
5 lated by the Commission.”.

6 **CHAPTER 2—MARKET REFORMS**

7 **SEC. 4221. GAO STUDY ON WHOLESALE ELECTRICITY MAR-**
8 **KETS.**

9 (a) **STUDY AND REPORT.**—Not later than 1 year
10 after the date of enactment of this Act, the Comptroller
11 General shall submit to the Committee on Energy and
12 Commerce of the House of Representatives and the Com-
13 mittee on Energy and Natural Resources of the Senate
14 a report describing the results of a study of whether and
15 how the current market rules, practices, and structures
16 of each regional transmission entity produce rates that are
17 just and reasonable by—

18 (1) facilitating fuel diversity, the availability of
19 generation resources during emergency and severe
20 weather conditions, resource adequacy, and reli-
21 ability, including the cost-effective retention and de-
22 velopment of needed generation;

23 (2) promoting the equitable treatment of busi-
24 ness models, including different utility types, the in-

1 tegration of diverse generation resources, and ad-
2 vanced grid technologies;

3 (3) identifying and addressing regulatory bar-
4 riers to entry, market-distorting incentives, and arti-
5 ficial constraints on competition;

6 (4) providing transparency regarding dispatch
7 decisions, including the need for out-of-market ac-
8 tions and payments, and the accuracy of day-ahead
9 unit commitments;

10 (5) facilitating the development of necessary
11 natural gas pipeline and electric transmission infra-
12 structure;

13 (6) ensuring fairness and transparency in gov-
14 ernance structures and stakeholder processes, in-
15 cluding meaningful participation by both voting and
16 non-voting stakeholder representatives;

17 (7) ensuring the proper alignment of the energy
18 and transmission markets by including both energy
19 and financial transmission rights in the day-ahead
20 markets;

21 (8) facilitating the ability of load-serving enti-
22 ties to self-supply their service territory load;

23 (9) considering, as appropriate, State and local
24 resource planning; and

1 (10) mitigating, to the extent practicable, the
2 disruptive effects of tariff revisions on the economic
3 decision-making of market participants.

4 (b) DEFINITIONS.—In this section:

5 (1) LOAD-SERVING ENTITY.—The term “load-
6 serving entity” has the meaning given that term in
7 section 217 of the Federal Power Act (16 U.S.C.
8 824q).

9 (2) REGIONAL TRANSMISSION ENTITY.—The
10 term “regional transmission entity” means a Re-
11 gional Transmission Organization or an Independent
12 System Operator, as such terms are defined in sec-
13 tion 3 of the Federal Power Act (16 U.S.C. 796).