109TH CONGRESS
1ST SESSION

S. 426

To enhance national security by improving the reliability of the United States electricity transmission grid, to ensure efficient, reliable and affordable energy to American consumers, and for other purposes.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 17, 2005

Mr. JEFFORDS (for himself, Ms. CANTWELL, and Mr. KENNEDY) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

A BILL

To enhance national security by improving the reliability of the United States electricity transmission grid, to ensure efficient, reliable and affordable energy to American consumers, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) Short Title.—This Act may be cited as the “Electric Reliability Security Act of 2005”.

(b) Table of Contents.—The table of contents of this Act is as follows:

Sec. 1. Short title; table of contents.
TITLE I—RELIABILITY

Sec. 101. Electric reliability standards.
Sec. 102. Model electric utility workers code.
Sec. 103. Electricity outage investigation.
Sec. 104. Study on reliability of United States energy grid.

TITLE II—EFFICIENCY

Sec. 201. System benefits fund.
Sec. 203. Appliance efficiency.
Sec. 204. Loan guarantees.

TITLE III—ONSITE GENERATION

Sec. 301. Net metering.
Sec. 302. Interconnection.
Sec. 303. Onsite generation for emergency facilities.

TITLE I—RELIABILITY

SEC. 101. ELECTRIC RELIABILITY STANDARDS.

(a) In General.—Part II of the Federal Power Act (16 U.S.C 824 et seq.) is amended by adding at the end the following:

“SEC. 215. ELECTRIC RELIABILITY.

“(a) Definitions.—In this section:

“(1)(A) The term ‘bulk-power system’ means—

“(i) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and

“(ii) electric energy from generation facilities needed to maintain transmission system reliability."
“(B) The term ‘bulk-power system’ does not include facilities used in the local distribution of electric energy.

“(2) The terms ‘Electric Reliability Organization’ and ‘ERO’ mean the organization certified by the Commission under subsection (c) the purpose of which is to establish and enforce reliability standards for the bulk-power system, subject to Commission review.

“(3) The term ‘interconnection’ means a geographic area in which the operation of bulk-power system components is synchronized such that the failure of 1 or more of such components may adversely affect the ability of the operators of other components within the system to maintain reliable operation of the facilities within their control.

“(4) The term ‘regional entity’ means an entity having enforcement authority pursuant to subsection (e)(4).

“(5)(A) The term ‘reliability standard’ means a requirement, approved by the Commission under this section, to provide for reliable operation of the bulk-power system.

“(B) The term ‘reliability standard’ includes requirements for the operation of existing bulk-power
system facilities and the design of planned additions or modifications to those facilities to the extent necessary to provide for reliable operation of the bulk-power system.

“(C) The term ‘reliability standard’ does not include any requirement to enlarge a facility described in subparagraph (B) or to construct new transmission capacity or generation capacity.

“(6) The term ‘reliable operation’ means operating the elements of the bulk-power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance or unanticipated failure of system elements.

“(7) The term ‘transmission organization’ means a regional transmission organization, independent system operator, independent transmission provider, or other transmission organization finally approved by the Commission for the operation of transmission facilities.

“(b) JURISDICTION AND APPLICABILITY.—(1)(A) The Commission shall have jurisdiction, within the United States, over the ERO certified by the Commission under subsection (c), any regional entities, and all users, owners
and operators of the bulk-power system, including the entities described in section 201(f), for purposes of approving reliability standards established under this section and enforcing compliance with this section.

“(B) All users, owners, and operators of the bulk-power system shall comply with reliability standards that take effect under this section.

“(2) Not later than 180 days after the date of enactment of this section, the Commission shall issue a final rule to implement this section.

“(c) CERTIFICATION.—(1) Following the issuance of a Commission rule under subsection (b)(2), any person may submit an application to the Commission for certification as the Electric Reliability Organization.

“(2) The Commission may certify an ERO described in paragraph (1) if the Commission determines that the ERO—

“(A) has the ability to develop and enforce, subject to subsection (e)(2), reliability standards that provide for an adequate level of reliability of the bulk-power system; and

“(B) has established rules that—

“(i) ensure the independence of the ERO from the users and owners and operators of the bulk-power system, while ensuring fair stake-
holder representation in the selection of directors of the ERO and balanced decisionmaking in any ERO committee or subordinate organizational structure;

“(ii) allocate equitably reasonable dues, fees, and other charges among end users for all activities under this section;

“(iii) provide fair and impartial procedures for enforcement of reliability standards through the imposition of penalties in accordance with subsection (e) (including limitations on activities, functions, or operations, or other appropriate sanctions);

“(iv) provide for reasonable notice and opportunity for public comment, due process, openness, and balance of interests in developing reliability standards and otherwise exercising the duties of the ERO; and

“(v) provide for taking, after certification, appropriate steps to gain recognition in Canada and Mexico.

“(d) RELIABILITY STANDARDS.—(1) The Electric Reliability Organization shall file each reliability standard or modification to a reliability standard that the Electric
Reliability Organization proposes to be made effective under this section with the Commission.

“(2)(A) The Commission may approve, by rule or order, a proposed reliability standard or modification to a reliability standard if the Commission determines that the standard is just, reasonable, not unduly discriminatory or preferential, and in the public interest.

“(B) The Commission—

“(i) shall give due weight to the technical expertise of the Electric Reliability Organization with respect to the content of a proposed standard or modification to a reliability standard and to the technical expertise of a regional entity organized on an interconnection-wide basis with respect to a reliability standard to be applicable within that interconnection; but

“(ii) shall not defer with respect to the effect of a standard on competition.

“(C) A proposed standard or modification shall take effect upon approval by the Commission.

“(3) The Electric Reliability Organization shall rebuttably presume that a proposal from a regional entity organized on an interconnection-wide basis for a reliability standard or modification to a reliability standard to be applicable on an interconnection-wide basis is just, reason-
able, and not unduly discriminatory or preferential, and
in the public interest.

“(4) The Commission shall remand to the Electric
Reliability Organization for further consideration a pro-
posed reliability standard or a modification to a reliability
standard that the Commission disapproves in whole or in
part.

“(5) The Commission, upon a motion of the Commis-
sion or upon complaint, may order the Electric Reliability
Organization to submit to the Commission a proposed reli-
ability standard or a modification to a reliability standard
that addresses a specific matter if the Commission con-
siders such a new or modified reliability standard appro-
priate to carry out this section.

“(6)(A) The final rule adopted under subsection
(b)(2) shall include fair processes for the identification
and timely resolution of any conflict between a reliability
standard and any function, rule, order, tariff, rate sched-
ule, or agreement accepted, approved, or ordered by the
Commission applicable to a transmission organization.

“(B) The transmission organization shall continue to
comply with such function, rule, order, tariff, rate sched-
ule, or agreement as is accepted, approved, or ordered by
the Commission until—
“(i) the Commission finds a conflict exists between a reliability standard and any such provision;
“(ii) the Commission orders a change to the provision pursuant to section 206; and
“(iii) the ordered change becomes effective under this part.
“(C) If the Commission determines that a reliability standard needs to be changed as a result of such a conflict, the Commission shall order the ERO to develop and file with the Commission a modified reliability standard under paragraph (4) or (5).
“(e) ENFORCEMENT.—(1) Subject to paragraph (2), the ERO may impose a penalty on a user or owner or operator of the bulk-power system for a violation of a reliability standard approved by the Commission under subsection (d) if the ERO, after notice and an opportunity for a hearing—
“(A) finds that the user or owner or operator has violated a reliability standard approved by the Commission under subsection (d); and
“(B) files notice and the record of the proceeding with the Commission.
“(2)(A) A penalty imposed under paragraph (1) may take effect not earlier than the 31st day after the date
on which the ERO files with the Commission notice of the
penalty and the record of proceedings.

“(B) The penalty shall be subject to review by the
Commission upon—

“(i) a motion by the Commission; or

“(ii) application by the user, owner, or operator
that is the subject of the penalty filed not later than
30 days after the date on which the notice is filed
with the Commission.

“(C) Application to the Commission for review, or the
initiation of review by the Commission upon a motion of
the Commission, shall not operate as a stay of the penalty
unless the Commission orders otherwise upon a motion of
the Commission or upon application by the user, owner,
or operator that is the subject of the penalty.

“(D) In any proceeding to review a penalty imposed
under paragraph (1), the Commission, after notice and op-
portunity for hearing (which hearing may consist solely
of the record before the ERO and opportunity for the
presentation of supporting reasons to affirm, modify, or
set aside the penalty), shall by order affirm, set aside, re-
instate, or modify the penalty, and, if appropriate, remand
to the ERO for further proceedings.

“(E) The Commission shall implement expedited pro-
cedures for hearings described in subparagraph (D).
“(3) Upon a motion of the Commission or upon complaint, the Commission may order compliance with a reliability standard and may impose a penalty against a user or owner or operator of the bulk-power system if the Commission finds, after notice and opportunity for a hearing, that the user or owner or operator of the bulk-power system has engaged or is about to engage in any act or practice that constitutes or will constitute a violation of a reliability standard.

“(4)(A) The Commission shall issue regulations authorizing the ERO to enter into an agreement to delegate authority to a regional entity for the purpose of proposing reliability standards to the ERO and enforcing reliability standards under paragraph (1) if—

“(i) the regional entity is governed by an independent board, a balanced stakeholder board, or a combination of an independent and balanced stakeholder board;

“(ii) the regional entity otherwise meets the requirements of paragraphs (1) and (2) of subsection (c); and

“(iii) the agreement promotes effective and efficient administration of bulk-power system reliability.

“(B) The Commission may modify a delegation under this paragraph.
“(C) The ERO and the Commission shall rebuttably presume that a proposal for delegation to a regional entity organized on an interconnection-wide basis promotes effective and efficient administration of bulk-power system reliability and should be approved.

“(D) The regulations issued under this paragraph may provide that the Commission may assign the authority of the ERO to enforce reliability standards under paragraph (1) directly to a regional entity in accordance with this paragraph.

“(5) The Commission may take such action as the Commission determines to be appropriate against the ERO or a regional entity to ensure compliance with a reliability standard or any Commission order affecting the ERO or a regional entity.

“(6) Any penalty imposed under this section shall bear a reasonable relation to the seriousness of the violation and shall take into consideration the efforts of the user, owner, or operator to remedy the violation in a timely manner.

“(f) CHANGES IN ELECTRIC RELIABILITY ORGANIZATION RULES.—(1) The Electric Reliability Organization shall file with the Commission for approval any proposed rule or proposed rule change, accompanied by an expla-
nation of the basis and purpose of the rule and proposed
rule change.
“(2) The Commission, upon a motion of the Commis-
sion or upon complaint, may propose a change to the rules
of the ERO.
“(3) A proposed rule or proposed rule change shall
take effect upon a finding by the Commission, after notice
and opportunity for comment, that the change is just, rea-
sonable, not unduly discriminatory or preferential, is in
the public interest, and meets the requirements of sub-
section (e).
“(g) RELIABILITY REPORTS.—The ERO shall con-
duct periodic assessments of the reliability and adequacy
of the bulk-power system in North America.
“(h) COORDINATION WITH CANADA AND MEXICO.—
The President is urged to negotiate international agree-
ments with the governments of Canada and Mexico to pro-
vide for effective compliance with reliability standards and
the effectiveness of the ERO in the United States and
Canada or Mexico.
“(i) SAVINGS PROVISIONS.—(1) The ERO may de-
velop and enforce compliance with reliability standards for
only the bulk-power system.
“(2) Nothing in this section authorizes the ERO or
the Commission to order the construction of additional
generation or transmission capacity or to set and enforce
compliance with standards for adequacy or safety of elec-
tric facilities or services.

"(3) Nothing in this section preempts any authority
of any State to take action to ensure the safety, adequacy,
and reliability of electric service within that State, as long
as such action is not inconsistent with any reliability
standard.

"(4) Not later than 90 days after the date of applica-
tion of the Electric Reliability Organization or other af-
fected party, and after notice and opportunity for com-
ment, the Commission shall issue a final order deter-
mining whether a State action is inconsistent with a reli-
ability standard, taking into consideration any rec-
ommendation of the ERO.

"(5) The Commission, after consultation with the
ERO and the State taking action, may stay the effective-
ness of any State action, pending the issuance by the Com-
mission of a final order.

"(j) REGIONAL ADVISORY BODIES.—(1) The Com-
mmission shall establish a regional advisory body on the pe-
tition of at least 2/3 of the States within a region that have
more than 1/2 of the electric load of the States served with-
in the region.

"(2) A regional advisory body—
“(A) shall be composed of 1 member from each participating State in the region, appointed by the Governor of the State; and

“(B) may include representatives of agencies, States, and provinces outside the United States.

“(3) A regional advisory body may provide advice to the Electric Reliability Organization, a regional entity, or the Commission regarding—

“(A) the governance of an existing or proposed regional entity within the same region;

“(B) whether a standard proposed to apply within the region is just, reasonable, not unduly discriminatory or preferential, and in the public interest;

“(C) whether fees proposed to be assessed within the region are just, reasonable, not unduly discriminatory or preferential, and in the public interest; and

“(D) any other responsibilities requested by the Commission.

“(4) The Commission may give deference to the advice of a regional advisory body if that body is organized on an interconnection-wide basis.

“(k) ALASKA AND HAWAI‘I.—This section does not apply to Alaska or Hawaii.”
(b) STATUS OF ERO.—The Electric Reliability Organization certified by the Federal Energy Regulatory Commission under section 215(c) of the Federal Power Act (as added by subsection (a)) and any regional entity delegated enforcement authority pursuant to section 215(e)(4) of that Act (as so added) are not departments, agencies, or instrumentalities of the United States Government.

SEC. 102. MODEL ELECTRIC UTILITY WORKERS CODE.

Subtitle B of title I of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621 et seq.) is amended by adding at the end the following:

"SEC. 118. MODEL CODE FOR ELECTRIC UTILITY WORKERS.

"(a) IN GENERAL.—The Secretary shall develop by rule and circulate among the States for their consideration a model code containing standards for electric facility workers to ensure electric facility safety and reliability.

"(b) CONSULTATION.—In developing the standards, the Secretary shall consult with all interested parties, including representatives of electric facility workers.

"(c) NOT AFFECTING OCCUPATIONAL SAFETY AND HEALTH.—In issuing a model code under this section, the Secretary shall not, for purposes of section 4 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653), be deemed to be exercising statutory authority to prescribe
or enforce standards or regulations affecting occupational
safety and health.”.

SEC. 103. ELECTRICITY OUTAGE INVESTIGATION.

Part III of the Federal Power Act (16 U.S.C. 824) is amended—

(1) by redesignating sections 320 and 321 (16
U.S.C. 825r, 791a) as sections 321 and 322, respec-
tively; and

(2) by inserting after section 319 (16 U.S.C.
825q) the following:

“SEC. 320. ELECTRICITY OUTAGE INVESTIGATION BOARD.

“(a) Establishment.—There is established an
Electricity Outage Investigation Board that shall be an
independent establishment within the executive branch.

“(b) Membership.—(1) The Board shall consist of
7 members and shall include—

“(A) the Secretary of Energy (or a designee);

“(B) the Chairperson of the Federal Energy
Regulatory Commission (or a designee);

“(C) a representative of the National Academy
of Sciences appointed by the President;

“(D) a representative nominated by the major-
ity leader of the Senate and appointed by the Presi-
dent;
“(E) a representative nominated by the minority leader of the Senate and appointed by the President;

“(F) a representative nominated by the majority leader of the House of Representatives and appointed by the President; and

“(G) a representative nominated by the minority leader of the House of Representatives and appointed by the President.

“(2) Each member of the Board shall demonstrate relevant expertise in the field of electricity generation, transmission, and distribution, and such other expertise as will best assist in carrying out the duties of the Board.

“(c) TERMS.—(1) Except as provided in paragraph (2), each member of the Board shall serve for a term of 3 years.

“(2) The Secretary of Energy and the Chairperson of the Federal Energy Regulatory Commission shall be permanent members of the Board.

“(d) DUTIES.—The Board shall—

“(1) upon request by Congress or the President, investigate a major bulk-power system failure in the United States to determine the causes of the failure;
“(2) report expeditiously to Congress and the President the results of the investigation; and

“(3) recommend to Congress and the President actions to minimize the possibility of future bulk-power system failure.

“(e) COMPENSATION.—(1) Each member of the Board shall be paid at the rate payable for level III of the Executive Schedule for each day (including travel time) the member is engaged in the work of the Board.

“(2) Each member of the Board may receive travel expenses, including per diem in lieu of subsistence, in the same manner as is permitted under sections 5702 and 5703 of title 5, United States Code.”.

SEC. 104. STUDY ON RELIABILITY OF UNITED STATES ELECTRICITY GRID.

(a) Study on Reliability.—Not later than 45 days after the date of enactment of this Act, the Secretary of Energy shall enter into a contract with the National Academy of Sciences under which the Academy shall conduct a study on the reliability of the United States electricity grid to examine the effectiveness of the current United States electricity transmission and distribution system at providing efficient, secure, and affordable power to United States consumers.
(b) CONTENTS.—The study shall include an analysis of—

(1) the vulnerability of the transmission and distribution system to disruption by natural, mechanical or human causes including sabotage;

(2) the most efficient and cost-effective solutions for dealing with vulnerabilities or other problems of the electricity transmission and distribution system of the United States, including a comparison of investments in—

(A) efficiency;

(B) distributed generation;

(C) technical advances in software and other devices to improve the efficiency and reliability of the grid;

(D) new power line construction; and

(E) any other relevant matters.

(c) REPORT.—The contract shall provide that, not later than 180 days after the date of execution of the contract, the National Academy of Sciences shall submit to the President and Congress a report that details the findings and recommendations of the study.

**TITLE II—EFFICIENCY**

**SEC. 201. SYSTEM BENEFITS FUND.**

(a) DEFINITIONS.—In this section:
(1) ADMINISTRATOR.—The term “Administrator” means the Administrator of the Environmental Protection Agency.

(2) BOARD.—The term “Board” means the System Benefits Trust Fund Board established under subsection (b).

(3) COMMISSION.—The term “Commission” means the Federal Energy Regulatory Commission.

(4) FARM SYSTEM.—The term “farm system” means an electric generating facility that generates electric energy from the anaerobic digestion of agricultural waste produced by farming that is located on the farm where substantially all of the waste used is produced.

(5) FUND.—The term “Fund” means the System Benefits Trust Fund established under subsection (c).

(6) RENEWABLE ENERGY.—The term “renewable energy” means electricity generated from wind, ocean energy, organic waste (excluding incinerated municipal solid waste), biomass (including anaerobic digestion from farm systems and landfill gas recovery) or a geothermal, solar thermal, or photovoltaic source.
(7) Secretary.—The term “Secretary” means the Secretary of Energy.

(b) Board.—

(1) Establishment.—The Secretary shall establish a System Benefits Trust Fund Board to carry out the functions and responsibilities described in this section.

(2) Membership.—The Board shall be composed of—

(A) 1 representative of the Federal Energy Regulatory Commission appointed by the Federal Energy Regulatory Commission;

(B) 2 representatives of the Secretary of Energy appointed by the Secretary;

(C) 2 persons nominated by the National Association of Regulatory Utility Commissioners and appointed by the Secretary;

(D) 1 person nominated by the National Association of State Utility Consumer Advocates and appointed by the Secretary;

(E) 1 person nominated by the National Association of State Energy Officials and appointed by the Secretary;
(F) 1 person nominated by the National Energy Assistance Directors’ Association and appointed by the Secretary; and

(G) 1 representative of the Environmental Protection Agency appointed by the Administrator.

(3) CHAIRPERSON.—The Secretary shall select a member of the Board to serve as Chairperson of the Board.

(e) ESTABLISHMENT OF FUND.—

(1) IN GENERAL.—The Board shall establish an account or accounts at 1 or more financial institutions, which account or accounts shall—

(A) be known as the “System Benefits Trust Fund”; and

(B) consist of amounts deposited in the Fund under subsection (e).

(2) STATUS OF FUND.—The wires charges collected under subsection (e) and deposited in the Fund—

(A) shall not constitute funds of the United States;

(B) shall be held in trust by the Board solely for the purposes stated in subsection (d); and
(C) shall not be available to meet any obligations of the United States.

(d) USE OF FUND.—

(1) FUNDING OF STATE PROGRAMS.—Amounts in the Fund shall be used by the Board to provide matching funds to States and Indian tribes for the support of State or tribal public benefits programs relating to—

(A) energy conservation and efficiency;

(B) renewable energy sources;

(C) assisting low-income households in meeting their home energy needs; or

(D) research and development in areas described in subparagraphs (A) through (C).

(2) DISTRIBUTION.—

(A) IN GENERAL.—Except for amounts needed to pay costs of the Board in carrying out its duties under this section, the Board shall distribute all amounts in the Fund to States or Indian tribes to fund public benefits programs under paragraph (1).

(B) FUND SHARE.—

(i) IN GENERAL.—Subject to clause (iii), the Fund share of a public benefits
program funded under paragraph (1) shall be 50 percent.

(ii) Proportionate Reduction.— To the extent that the amount of matching funds requested by States and Indian tribes exceeds the maximum projected revenues of the Fund, the matching funds distributed to each State and Indian tribe shall be reduced by an amount equal to the proportion that the annual consumption of electricity of the State or Indian tribe bears to the annual consumption of electricity of all States and Indian tribes.

(iii) Additional State or Indian Tribe Funding.— A State or Indian tribe may apply funds to public benefits programs in addition to the amount of funds applied for the purpose of matching the Fund share.

(3) Program Criteria.— The Board shall recommend eligibility criteria for public benefits programs funded under this section for approval by the Secretary.

(4) Application.— Not later than August 1 of each year beginning in 2006, a State or Indian tribe
seeking matching funds for the following fiscal year shall file with the Board, in such form as the Board may require, an application—

(A) certifying that the funds will be used for an eligible public benefits program;

(B) stating the amount of State or Indian tribe funds earmarked for the program; and

(C) summarizing how amounts from the Fund from the previous calendar year (if any) were spent by the State and what the State accomplished as a result of the expenditures.

(e) WIRES CHARGE.—

(1) DETERMINATION OF NEEDED FUNDING.— Not later than September 1 of each year, the Board shall determine and inform the Commission of the aggregate amount of wires charges that will be necessary to be paid into the Fund to pay matching funds to States and Indian tribes and pay the operating costs of the Board in the following fiscal year.

(2) IMPOSITION OF WIRES CHARGE.—

(A) IN GENERAL.—Not later than December 15 of each year, the Commission shall impose a nonbypassable, competitively neutral wires charge, to be paid directly into the Fund by the operator of the wire, on electricity car-
ried through the wire (measured as the electricity exits at the busbar at a generation facility, or, for electricity generated outside the United States, at the point of delivery to the wire operator’s system) in interstate commerce.

(B) AMOUNT.—The wires charge shall be set at a rate equal to the lesser of—

(i) 1.0 mills per kilowatt hour; or

(ii) a rate that is estimated to result in the collection of an amount of wires charges that is, to the maximum extent practicable, equal to the amount of needed funding determined under paragraph (1).

(3) DEPOSIT IN THE FUND.—The wires charge shall be paid by the operator of the wire directly into the Fund at the end of each month during the calendar year for distribution by the Board under subsection (c).

(4) PENALTIES.—The Commission may assess against a wire operator that fails to pay a wires charge as required by this subsection a civil penalty in an amount equal to not more than the amount of the unpaid wires charge.

(f) AUDITING.—
(1) **IN GENERAL.**—The Fund shall be audited annually by a firm of independent certified public accountants in accordance with generally accepted auditing standards.

(2) **ACCESS TO RECORDS.**—Representatives of the Secretary and the Commission shall have access to all books, accounts, reports, files, and other records pertaining to the Fund as necessary to facilitate and verify the audit.

(3) **REPORTS.**—

(A) **IN GENERAL.**—A report on each audit shall be submitted to the Secretary, the Commission, and the Secretary of the Treasury, who shall submit the report to the President and Congress not later than 180 days after the end of the fiscal year.

(B) **REQUIREMENTS.**—An audit report shall—

(i) set forth the scope of the audit; and

(ii) include—

(I) a statement of assets and liabilities, capital, and surplus or deficit;

(II) a surplus of deficit analysis;
(III) a statement of income and expenses;

(IV) any other information that may be considered necessary to keep the President and Congress informed of the operations and financial condition of the Fund; and

(V) any recommendations with respect to the Fund that the Secretary or the Commission may have.

SEC. 202. ELECTRICITY EFFICIENCY PERFORMANCE STANDARD.

Title VI of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621 note) is amended by adding at the end the following:

“SEC. 609. FEDERAL ELECTRICITY EFFICIENCY PERFORMANCE STANDARD.

“(a) IN GENERAL.—Each electric retail supplier shall implement energy efficiency and load reduction programs and measures to achieve verified improvements in energy efficiency and peak load reduction in retail customer facilities and the distribution systems that serve those facilities.

“(b) POWER SAVINGS.—The programs and measures under subsection (a) shall produce savings in total peak power demand and total electricity use by retail customers
by an amount that is equal to or greater than the following percentages relative to the peak demand and electricity used in that year by the retail electric supplier’s customers:

<table>
<thead>
<tr>
<th>Year</th>
<th>Reduction in demand</th>
<th>Reduction in use</th>
</tr>
</thead>
<tbody>
<tr>
<td>In calendar year 2006</td>
<td>1%</td>
<td>.75%</td>
</tr>
<tr>
<td>In calendar year 2007</td>
<td>2%</td>
<td>1.5%</td>
</tr>
<tr>
<td>In calendar year 2009</td>
<td>4%</td>
<td>3.0%</td>
</tr>
<tr>
<td>In calendar year 2011</td>
<td>6%</td>
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<td>In calendar year 2013</td>
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<td>6.0%</td>
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</tr>
</tbody>
</table>

“(c) BEGINNING DATE.—For purposes of this section, savings shall be counted only for measures installed after January 1, 2006.

“(d) RULEMAKING.—(1) Not later than June 30, 2005, the Secretary shall establish, by rule—

“(A) procedures and standards for counting and independently verifying energy and demand savings for purposes of enforcing the energy efficiency performance standards imposed by this section; and

“(B) procedures and a schedule for reporting findings to the Department of Energy and for making the reports available to the public.

“(2) In developing the procedures, standards, and schedule under paragraph (1), the Secretary shall consult with—

“(A) the association representing public utility regulators in the United States; and
“(B) the association representing the State energy officials in the United States.

“(e) REPORTING.—(1) Not later than June 30, 2008, and every 2 years thereafter, each retail electric supplier shall file with the State public utilities commission in each State in which the supplier provides service to retail customers a report demonstrating that the retail electric supplier has taken action to comply with the energy efficiency performance standards of this section.

“(2) A report filed under paragraph (1) shall include independent verification of the estimated savings pursuant to standards established by the Secretary.

“(3)(A) A State public utilities commission may—

“(i) accept a report as filed under paragraph (1); or

“(ii) review and investigate the accuracy of the report.

“(B) Each State public utilities commission shall—

“(i) make findings on any deficiencies relating to the requirements under section 2; and

“(ii) issue a remedial order for the correction of any deficiencies that are found.

“(f) UTILITIES OUTSIDE STATE JURISDICTION.—(1) An electric retail supplier that is not subject to the jurisdiction of a State public utilities commission shall submit
reports in accordance with subsection (e) to the governing body of the electric retail supplier.

“(2) A report submitted under paragraph (1) shall include independent verification of the estimated savings pursuant to standards established by the Secretary.

“(g) PROGRAM PARTICIPATION.—(1) An electric retail supplier may demonstrate satisfaction of the standard under this section, in whole or part, by savings achieved through participation in statewide, regional, or national programs that can be demonstrated to significantly improve the efficiency of electric distribution and use.

“(2) Verified efficiency savings resulting from programs described in paragraph (1) may be assigned to each participating retail supplier based upon the degree of participation of the supplier in the programs.

“(3) An electric retail supplier may purchase rights to extra savings achieved by other electric retail suppliers if the selling supplier or another electric retail supplier does not also take credit for those savings.

“(h) REMEDIES FOR FAILURE TO COMPLY.—(1) In the event that any retail electric supplier fails to achieve its energy savings or load reduction target for a specific year, any aggrieved party may bring a civil action or file an administrative claim to seek prompt remedial action before a State public utilities commission (or, in the case
of an electric retail supplier not subject to State public
utility commission jurisdiction, before an appropriate gov-
erning body).

“(2)(A) The State public utilities commission or
other appropriate governing body shall have a maximum
of 1 year to craft a remedy for a civil action or claim filed
under paragraph (1).

“(B) If a State public utilities commission or other
governing body certifies that the commission or body has
inadequate resources or authority to promptly resolve en-
forcement actions under this section, or fails to take action
within the time period specified in subparagraph (A), the
commission or body or an aggrieved party may seek en-
forcement in Federal district court.

“(3)(A) If a commission or court determines that en-
ergy savings or load reduction targets for a specific year
have not been achieved by a retail electric supplier under
this section, the commission or court shall—

“(i) determine the amount of the deficit; and

“(ii) fashion an equitable remedy to restore the
lost savings as soon as practicable.

“(B) A remedy under subparagraph (A)(ii) may in-
clude—
“(i) a refund to retail electric customers of an amount equal to the retail cost of the electricity consumed due to the failure to reach the target; and

“(ii) the appointment of a special master to administer a bidding system to procure the energy and demand savings equal to 125 percent of the deficit.”.

SEC. 203. APPLIANCE EFFICIENCY.

Section 325(d)(3) of the Energy Policy and Conservation Act (42 U.S.C. 6295(d)(3)) is amended by striking subparagraph (B) and inserting the following:

“(B) Not later than January 1, 2009, the Secretary shall publish a final rule to determine whether the standards in effect for central air conditioners and central air conditioning heat pumps should be amended. The rule shall address both system annual energy use and peak electric demand and may include more than 1 efficiency descriptor. The rule shall apply to products manufactured on or after January 1, 2012.”.

SEC. 204. LOAN GUARANTEES.

(a) DEFINITIONS.—In this section:

(1) ELIGIBLE ACTIVITY.—The term “eligible activity” means—

(A) advanced technologies for high-efficiency electricity transmission control and operation, including high-efficiency power elec-
tronics technologies (including software-controlled computer chips and sensors to diagnose trouble spots and re-route power into appropriate areas), high-efficiency electricity storage systems, and high-efficiency transmission wire or transmission cable system;

(B) distributed generation systems fueled solely by—

(i) solar, wind, biomass, geothermal, or ocean energy;

(ii) landfill gas;

(iii) natural gas systems utilizing best available control technology;

(iv) fuel cells; or

(v) any combination of the above;

(C) combined heat and power systems; and

(D) energy efficiency systems producing demonstrable electricity savings.

(2) QUALIFYING ENTITY.—The term “qualifying entity” means an individual, corporation, partnership, joint venture, trust or other entity identified by the Secretary under subsection (d)(1) as eligible for a guaranteed loan under this section.

(3) SECRETARY.—The term “Secretary” means the Secretary of Energy.
(b) Authority.—The Secretary may guarantee not more than 50 percent of the principal of any loan made to a qualifying entity for eligible activities under this section.

(c) Conditions.—

(1) In general.—The Secretary shall not guarantee a loan under this section unless—

(A) the guarantee is a qualifying entity;

(B) the guarantee has filed an application with the Secretary;

(C) the project, activity, program, or system for which the loan is made is an eligible activity; and

(D) the project, activity, program, or system for which the loan is made will significantly enhance the reliability, security, efficiency, and cost-effectiveness of electricity generation, transmission or distribution.

(2) Priority.—The Secretary shall give priority to guaranteed loans under this section for eligible activities that accomplish the objectives of this section in the most environmentally beneficial manner.

(3) Eligible financial institutions.—A loan guaranteed under this section shall be made by
a financial institution subject to the examination of
the Secretary.

(d) Rules.—Not later than 1 year after the date of
enactment of this section, the Secretary shall publish a
final rule establishing guidelines for loan requirements
under this section, including establishment of—

(1) criteria for determining which entities shall
be considered qualifying entities eligible for loan
guarantees under this section;

(2) criteria for determining which projects, ac-
tivities, programs, or systems shall be considered eli-
gible activities eligible for loan guarantees in accord-
ance with the purposes of this section;

(3) loan requirements including term, maximum
size, collateral requirements; and

(4) any other relevant features.

(e) Limitation on Size.—The Secretary may make
commitments to guarantee loans under this section only
to the extent that the total principal, any part of which
is guaranteed, will not exceed $10,000,000,000.

(f) Authorization of Appropriations.—There
are authorized to be appropriated to the Secretary such
sums as are necessary to cover the cost of loan guarantees
(as defined by section 502(5) of the Federal Credit Re-
**TITLE III—ONSITE GENERATION**

**SEC. 301. NET METERING.**

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

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“(11) NET METERING.—
   “(A) IN GENERAL.—Each electric utility shall make available upon request net metering service to any electric consumer that the electric utility serves.
   “(B) REFERENCES.—For purposes of implementing this paragraph, any reference contained in this section to the date of enactment of this Act shall be deemed to be a reference to the date of enactment of this paragraph.”.
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(b) **SPECIAL RULES FOR NET METERING.**—Section 115 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2625) is amended by adding at the end the following:

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“(i) NET METERING.—(1) In this subsection:
   “(A) The term ‘eligible onsite generating facility’ means—
   “(i) a facility on the site of a residential electric consumer with a maximum generating capacity of 25 kilowatts or less; or
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“(ii) a facility on the site of a commercial electric consumer with a maximum generating capacity of 1,000 kilowatts or less, that is fueled solely by a renewable energy resource.

“(B) The term ‘net metering service’ means service to an electric consumer under which electric energy generated by that electric consumer from an eligible onsite generating facility and delivered to the local distribution facilities may be used to offset electric energy provided by the electric utility to the electric consumer during the applicable billing period.

“(C) The term ‘renewable energy resource’ means—

“(i) solar, wind, biomass, geothermal, or wave energy;

“(ii) landfill gas;

“(iii) fuel cells; and

“(iv) a combined heat and power system.

“(2) In undertaking the consideration and making the determination concerning net metering established by section 111(d)(11), the following shall apply:

“(A) An electric utility—

“(i) shall charge the owner or operator of an onsite generating facility rates and charges
that are identical to those that would be charged other electric consumers of the electric utility in the same rate class; and

“(ii) shall not charge the owner or operator of an onsite generating facility any additional standby, capacity, interconnection, or other rate or charge.

“(B) An electric utility that sells electric energy to the owner or operator of an onsite generating facility shall measure the quantity of electric energy produced by the onsite facility and the quantity of electricity consumed by the owner or operator of an onsite generating facility during a billing period in accordance with normal metering practices.

“(C) If the quantity of electric energy sold by the electric utility to an on-site generating facility exceeds the quantity of electric energy supplied by the onsite generating facility to the electric utility during the billing period, the electric utility may bill the owner or operator for the net quantity of electric energy sold, in accordance with normal metering practices.

“(D) If the quantity of electric energy supplied by the onsite generating facility to the electric utility exceeds the quantity of electric energy sold by the
electric utility to the onsite generating facility during the billing period—

“(i) the electric utility may bill the owner or operator of the onsite generating facility for the appropriate charges for the billing period in accordance with subparagraph (B); and

“(ii) the owner or operator of the onsite generating facility shall be credited for the excess kilowatt-hours generated during the billing period, with the kilowatt-hour credit appearing on the bill for the following billing period.

“(E) An eligible onsite generating facility and net metering system used by an electric consumer shall meet all applicable safety, performance, reliability, and interconnection standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and Underwriters Laboratories.

“(F) The Commission, after consultation with State regulatory authorities and nonregulated electric utilities and after notice and opportunity for comment, may adopt, by rule, additional control and testing requirements for onsite generating facilities and net metering systems that the Commission de-
termines are necessary to protect public safety and
system reliability.

“(G) An electric utility must provide net meter-
ing services to electric consumers until the cumu-
lative generating capacity of net metering systems
equals 1.0 percent of the utility’s peak demand dur-
ing the most recent calendar year.

“(H) Nothing in this subsection precludes a
State from imposing additional requirements regard-
ing the amount of net metering available within a
State consistent with the requirements of this sec-
tion.”.

SEC. 302. INTERCONNECTION.

(a) DEFINITIONS.—Section 3 of the Federal Power
Act (16 U.S.C. 796) is amended—

(1) by striking paragraph 23 and inserting the
following:

“(23) TRANSMITTING UTILITY.—The term
‘transmitting utility’ means any entity (notwith-
standing section 201(f)) that owns, controls, or oper-
ates an electric power transmission facility that is
used for the sale of electric energy.”; and

(2) by adding at the end the following:
“(26) Appropriate regulatory authority.—The term ‘appropriate regulatory authority’ means—

“(A) the Commission;
“(B) a State commission;
“(C) a municipality; or
“(D) a cooperative that is self-regulating under State law and is not a public utility.

“(27) Generating facility.—The term ‘generating facility’ means a facility that generates electric energy.

“(28) Local distribution utility.—The term ‘local distribution facility’ means an entity that owns, controls, or operates an electric power distribution facility that is used for the sale of electric energy.

“(29) Non-Federal regulatory authority.—The term ‘non-Federal regulatory authority’ means an appropriate regulatory authority other than the Commission.”.

(b) Interconnection to Distribution Facilities.—Section 210 of the Federal Power Act (16 U.S.C. 824i) is amended—

(1) by redesignating subsection (e) as subsection (g); and
(2) by inserting after subsection (d) the following:

"(e) INTERCONNECTION TO DISTRIBUTION FACILITIES.—(1)(A) A local distribution utility shall interconnect a generating facility with the distribution facilities of the local distribution utility if the owner of the generating facility—

"(i) complies with the final rule promulgated under paragraph (2); and

"(ii) pays the costs of the interconnection.

"(B) The costs of the interconnection—

"(i) shall be just and reasonable, and not unduly discriminatory or preferential, as determined by the appropriate regulatory authority; and

"(ii) shall be comparable to the costs charged by the local distribution utility for interconnection by any similarly situated generating facility to the distribution facilities of the local distribution utility.

"(C) The right of a generating facility to interconnect under subparagraph (A) does not relieve the generating facility or the local distribution utility of other Federal, State, or local requirements.

"(2) Not later than 180 days after the date of enactment of this subparagraph, the Commission shall promulgate final rules establishing reasonable and appropriate
technical standards for the interconnection of a generating
facility with the distribution facilities of a local distribu-
tion utility.

“(3)(A) In accordance with subparagraph (B) a local
distribution utility shall offer to sell backup power to a
generating facility that has interconnected with the local
distribution utility to the extent that the local distribution
utility—

“(i) is not subject to an order of a non-Federal
regulatory authority to provide open access to the
distribution facilities of the local distribution utility;

“(ii) has not offered to provide open access to
the distribution facilities of the local distribution
utility; or

“(iii) does not allow a generating facility to pur-
chase backup power from another entity using the
distribution facilities of the local distribution utility.

“(B) A sale of backup power under subparagraph (A)
shall be at such a rate, and under such terms and condi-
tions as are just and reasonable and not unduly discrimi-
natory or preferential, taking into account the actual in-
cremental cost, whenever incurred by the local distribution
utility, to supply such backup power service during the pe-
riod in which the backup power service is provided, as de-
termined by the appropriate regulatory authority.
“(C) A local distribution utility shall not be required to offer backup power for resale to any entity other than the entity for which the backup power is purchased.

“(D) To the extent backup power is used to serve a new or expanded load on the distribution system, the generating facility shall pay any reasonable cost associated with any transmission, distribution, or generating upgrade required to provide such service.”.

(e) Interconnection to Transmission Facilities.—Section 210 of the Federal Power Act (16 U.S.C. 824i) (as amended by subsection (b)) is amended by inserting after subsection (e) the following:

“(f) Interconnection to Transmission Facilities.—(1)(A) Notwithstanding subsections (a) and (c), a transmitting utility shall interconnect a generating facility with the transmission facilities of the transmitting utility if the owner of the generating facility—

“(i) complies with the final rules promulgated under paragraph (2); and

“(ii) pays the costs of interconnection.

“(B) Subject to subparagraph (C), the costs of interconnection—

“(i) shall be just and reasonable and not unduly discriminatory or preferential; and
“(ii) shall be comparable to the costs charged by the transmitting utility for interconnection by any similarly situated generating facility to the transmitting facilities of the transmitting utility.

“(C) A non-Federal regulatory authority that is authorized under Federal law to determine the rates for transmission service shall be authorized to determine the costs of any interconnection under this subparagraph.

“(D) The right of a generating facility to interconnect under subparagraph (A) does not relieve the generating facility or the transmitting utility of other Federal, State, or local requirements.

“(2) Not later than 180 days after the date of enactment of this subparagraph, the Commission shall promulgate rules establishing reasonable and appropriate technical standards for the interconnection of a generating facility with the transmission facilities of a transmitting utility.

“(3)(A) In accordance with subparagraph (B), a transmitting utility shall offer to sell backup power to a generating facility that has interconnected with the transmitting utility unless—

“(i) Federal or State law allows a generating facility to purchase backup power from an entity other than the transmitting utility; or
“(ii) a transmitting utility allows a generating facility to purchase backup power from an entity other than the transmitting utility using the transmission facilities of the transmitting utility and the transmission facilities of any other transmitting utility.

“(B) A sale of backup power under subparagraph (A) shall be at such a rate and under such terms and conditions as are just and reasonable and not unduly discriminatory or preferential, taking into account the actual incremental cost, whenever incurred by the local distribution utility, to supply such backup power service during the period in which the backup power service is provided, as determined by the appropriate regulatory authority.

“(C) A transmitting utility shall not be required to offer backup power for resale to any entity other than the entity for which the backup power is purchased.

“(D) To the extent backup power is used to serve a new or expanded load on the transmission system, the generating facility shall pay any reasonable costs associated with any transmission, distribution, or generation upgrade required to provide the service.”.

(d) CONFORMING AMENDMENTS.—Section 210 of the Federal Power Act (16 U.S.C. 824i) is amended—

(1) in subsection (a)(1)—
(A) by inserting “transmitting utility, local
distribution utility,” after “electric utility,”;
and
(B) in subparagraph (A), by inserting
“any transmitting utility,” after “small power
production facility,”;
(2) in subsection (b)(2), by striking “an evi-
dentiary hearing” and inserting “a hearing”;
(3) in subsection (c)(2)—
(A) in subparagraph (B), by striking “or”
at the end;
(B) in subparagraph (C), by striking
“and” at the end and inserting “or”; and
(C) by adding at the end the following:
“(D) promote competition in electricity
markets, and”; and
(4) in subsection (d), by striking the last sen-
tence.

SEC. 303. ONSITE GENERATION FOR EMERGENCY FACILI-
tIES.

(a) DEFINITIONS.—In this section:

(1) ELIGIBLE FACILITY.—The term “eligible fa-
cility” means a building owned or operated by a
State or local government that is used for—
(A) critical governmental dispatch and communication;

(B) police, fire, or emergency services;

(C) traffic control systems; or

(D) public water or sewer systems.

(2) **RENEWABLE UNINTERRUPTIBLE POWER SUPPLY SYSTEM.**—The term “renewable uninterruptible power supply system” means a system designed to maintain electrical power to critical loads in a public facility in the event of a loss or disruption in conventional grid electricity, where such system derives its energy production or storage capacity solely from—

(A) solar, wind, biomass, geothermal, or ocean energy;

(B) natural gas;

(C) landfill gas;

(D) a fuel cell device; or

(E) a combination of energy described in subparagraphs (A) through (D).

(3) **SECRETARY.**—The term “Secretary” means the Secretary of Energy.

(b) **DEMONSTRATION AND TECHNOLOGY TRANSFER PROGRAM.**—The Secretary shall establish a demonstration program for the implementation of innovative technologies
for renewable uninterruptible power supply systems located in eligible buildings and for the dissemination of information on those systems to interested parties.

(c) LIMIT ON FEDERAL FUNDING.—The Secretary shall provide not more than 40 percent of the costs of projects funded under this section.

(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $30,000,000 for each of fiscal years 2006 through 2009.