and Development Program Scientific Advisory Board be submitted not later than Mar. 15, 1992.

**Termination of Advisory Boards**

Advisory boards established after Jan. 5, 1973, to terminate not later than the expiration of the 2-year period beginning on the date of their establishment, unless in the case of a board established by the President or an officer of the Federal Government, such board is renewed by appropriate action prior to the expiration of such 2-year period, or in the case of a board established by the Congress, its duration is otherwise provided for by law. See sections 3(2) and 14 of Pub. L. 92–463, Oct. 6, 1972, 86 Stat. 770, 776, set out in the Appendix to Title 5, Government Organization and Employees.

**CHAPTER 173—ENERGY SECURITY**

<table>
<thead>
<tr>
<th>Subchapter</th>
<th>Sec.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Energy Security Activities</td>
</tr>
<tr>
<td>II.</td>
<td>Energy-Related Procurement</td>
</tr>
<tr>
<td>III.</td>
<td>General Provisions</td>
</tr>
</tbody>
</table>

**AMENDMENTS**


**SUBCHAPTER I—ENERGY SECURITY ACTIVITIES**

<table>
<thead>
<tr>
<th>Sec.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2911.</td>
</tr>
<tr>
<td>2912.</td>
</tr>
<tr>
<td>2913.</td>
</tr>
<tr>
<td>2914.</td>
</tr>
<tr>
<td>2915.</td>
</tr>
<tr>
<td>2916.</td>
</tr>
<tr>
<td>2917.</td>
</tr>
<tr>
<td>2918.</td>
</tr>
<tr>
<td>2919.</td>
</tr>
</tbody>
</table>

**AMENDMENTS**


**§ 2911. Energy performance goals and master plan for the Department of Defense**

(a) **Energy Performance Goals.**—(1) The Secretary of Defense shall submit to the congressional defense committees the energy performance goals for the Department of Defense regarding transportation systems, support systems, utilities, and infrastructure and facilities.

(2) The energy performance goals shall be submitted annually not later than the date on which the President submits to Congress the budget for the next fiscal year under section 1105 of title 31 and cover that fiscal year as well as the next five, 10, and 20 years. The Secretary shall identify changes to the energy performance goals since the previous submission.

(b) **Energy Performance Master Plan.**—(1) The Secretary of Defense shall develop a comprehensive master plan for the achievement of the energy performance goals of the Department of Defense, as set forth in laws, executive orders, and Department of Defense policies.

(2) The master plan shall include the following:

(A) A separate master plan, developed by each military department and Defense Agency, for the achievement of energy performance goals.

(B) The use of a baseline standard for the measurement of energy consumption by transportation systems, support systems, utilities, and facilities and infrastructure that is consistent for all of the military departments.

(C) A method of measurement of reductions or conservation in energy consumption that provides for the taking into account of changes in the current size of fleets, number of facilities, and overall square footage of facilities.

(D) Metrics to track annual progress in meeting energy performance goals.

(E) A description of specific requirements, and proposed investments, in connection with the achievement of energy performance goals reflected in the budget of the President for each fiscal year (as submitted to Congress under section 1105(a) of title 31).

(3) Not later than 30 days after the date on which the budget of the President is submitted to Congress for a fiscal year under section 1105(a) of title 31, the Secretary shall submit the current version of the master plan to Congress.

(c) **Special Considerations.**—For the purpose of developing and implementing the energy performance goals and energy performance master plan, the Secretary of Defense shall consider at a minimum the following:

(1) Opportunities to reduce the current rate of consumption of energy.

(2) Opportunities to reduce the future demand and the requirements for the use of energy.

(3) Opportunities to implement conservation measures to improve the efficient use of energy.

(4) Opportunities to pursue alternative energy initiatives, including the use of alternative fuels and hybrid-electric drive in military vehicles and equipment.

(5) Opportunities for the high-performance construction, lease, operation, and maintenance of buildings.

(6) Cost effectiveness, cost savings, and net present value of alternatives.

(7) The value of diversification of types and sources of energy used.

(8) The value of economies-of-scale associated with fewer energy types used.

(9) The value of the use of renewable energy sources.

(10) The value of incorporating electric, hybrid-electric, and high efficiency vehicles into vehicle fleets.

(b) **Energy Performance Master Plan.**—(1) The Secretary of Defense shall develop a comprehensive master plan for the achievement of the energy performance goals of the Department of Defense, as set forth in laws, executive orders, and Department of Defense policies.

(d) **Selection of Energy Conservation Measures.**—(1) For the purpose of implementing the
energy performance master plan, the Secretary of Defense shall provide that the selection of energy conservation measures, including energy efficient maintenance, shall be limited to those measures that—
(A) are readily available;
(B) demonstrate an economic return on the investment;
(C) are consistent with the energy performance goals and energy performance master plan for the Department; and
(D) are supported by the special considerations specified in subsection (c).

(2) In this subsection, the term "energy efficient maintenance" includes—
(A) the repair of military vehicles, equipment, or facility and infrastructure systems, such as lighting, heating, or cooling equipment or systems, or industrial processes, by replacement with technology that—
(i) will achieve energy savings over the life-cycle of the equipment or system being repaired; and
(ii) will meet the same end needs as the equipment or system being repaired; and
(B) improvements in an operation or maintenance process, such as improved training or improved controls, that result in energy savings.

(e) GOAL REGARDING USE OF RENEWABLE ENERGY TO MEET FACILITY ENERGY NEEDS.—(1) It shall be the goal of the Department of Defense—
(A) to produce or procure not less than 25 percent of the total quantity of facility energy it consumes within its facilities during fiscal year 2025 and each fiscal year thereafter from renewable energy sources; and
(B) to produce or procure facility energy from renewable energy sources whenever the use of such renewable energy sources is consistent with the energy performance goals and energy performance master plan for the Department and supported by the special considerations specified in subsection (c).

(2) In this subsection, the term "renewable energy source" means energy generated from renewable sources, including the following:
(A) Solar.
(B) Wind.
(C) Biomass.
(D) Landfill gas.
(E) Ocean, including tidal, wave, current, and thermal.
(F) Geothermal, including electricity and heat pumps.
(G) Municipal solid waste.

(H) New hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project. For purposes of this subparagraph, hydroelectric generation capacity is "new" if it was placed in service on or after January 1, 1999.

(I) Thermal energy generated by any of the preceding sources.

Reliability of the Department of Energy and other agencies within the Department of Energy, as appropriate, and the Environmental Security Technical Certification Program of the Department of Defense.

"(3) Under the pilot program, the Secretary of Defense shall investigate opportunities for any excess electricity created for the military installation to be sold or otherwise made available to the local community near the installation.

"(4) The Secretary of Defense shall use the results of the pilot program as the basis for informing key performance parameters and validating energy components and designs that could be implemented in various military installations across the country and at forward operating bases.

"(5) The pilot program shall support the effort of the Secretary of Defense to use the military as a test bed to promote innovative energy technologies.

"(d) IMPLEMENTATION AND DURATION.—If the Secretary of Defense carries out a pilot program under this section, such pilot program shall begin by not later than July 1, 2011, and shall be not less than three years in duration.

"(e) REPORTS.—

"(1) INITIAL REPORT.—If the Secretary of Defense carries out a pilot program under this section, the Secretary shall submit to the appropriate congressional committees by not later than October 1, 2011, an initial report that provides an update on the implementation of the pilot program, including an identification of the selected military installation and national laboratory partner and a description of technologies under evaluation.

"(2) FINAL REPORT.—Not later than 90 days after completion of a pilot program under this section, the Secretary shall submit to the appropriate congressional committees a report on the pilot program, including any findings and recommendations of the Secretary.

"(f) DEFINITIONS.—For purposes of this section:

"(1) the term 'appropriate congressional committees' means—

"(A) the Committee on Armed Services, the Committee on Energy and Commerce, and the Committee on Science and Technology of the House of Representatives; and

"(B) the Committee on Armed Services, the Committee on Energy and Natural Resources, and the Committee on Commerce, Science, and Transportation of the Senate.

"(2) The term 'microgrid' means an integrated energy system consisting of interconnected loads and distributed energy resources (including generators, energy storage devices, and smart controls) that can operate with the utility grid or in an intentional islanding mode.

"(3) The term 'national laboratory' means—

"(A) a national laboratory (as defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801)); or

"(B) a national security laboratory (as defined in section 3231 of the National Nuclear Security Administration Act (50 U.S.C. 2411)).

ENERGY SECURITY ON DEPARTMENT OF DEFENSE INSTALLATIONS


"(a) PLAN FOR ENERGY SECURITY REQUIRED.—

"(1) IN GENERAL.—Not later than 180 days after the date of the enactment of this Act (Oct. 28, 2009), the Secretary of Defense shall develop a plan for identifying and addressing areas in which the electricity needed to carry out critical military missions on Department of Defense installations is vulnerable to disruption.

"(2) ELEMENTS.—The plan developed under paragraph (1) shall include, at a minimum, the following:

"(A) An identification of the areas of vulnerability as described in paragraph (1), and an identification of priorities in addressing such areas of vulnerability.

"(B) A schedule for the actions to be taken by the Department to address such areas of vulnerability.

"(C) A strategy for working with other public or private sector entities to address such areas of vulnerability that are beyond the control of the Department.

"(D) An estimate of and consideration for the costs to the Department associated with implementation of the strategy.

"(b) WORK WITH NON-DEPARTMENT OF DEFENSE ENTITIES.—The Secretary of Defense shall work with other Federal entities, and with State and local government entities, to develop any regulations or other mechanisms needed to require or encourage actions to address areas of vulnerability identified pursuant to the plan developed under subsection (a) that are beyond the control of the Department of Defense.

CONSIDERATION OF FUEL LOGISTICS SUPPORT REQUIREMENTS IN PLANNING, REQUIREMENTS DEVELOPMENT, AND ACQUISITION PROCESSES


"(a) PLANNING.—In the case of analyses and force planning processes that are used to establish capability requirements and inform acquisition decisions, the Secretary of Defense shall require that analyses and force planning processes consider the requirements for, and vulnerability of, fuel logistics.

"(b) CAPABILITY REQUIREMENTS DEVELOPMENT PROCESS.—The Secretary of Defense shall develop and implement a methodology to enable the implementation of a fuel efficiency key performance parameter in the requirements development process for the modification of existing or development of new fuel consuming systems.

"(c) ACQUISITION PROCESS.—The Secretary of Defense shall require that the life-cycle cost analysis for new capabilities include the fully burdened cost of fuel during analysis of alternatives and evaluation of alternatives and acquisition program design trades.

"(d) IMPLEMENTATION PLAN.—The Secretary of Defense shall prepare a plan for implementing the requirements of this section. The plan shall be completed not later than 180 days after the date of the enactment of this Act (Oct. 14, 2008) and provide for the implementation of the requirements by not later than three years after the date of the enactment of this Act.

"(e) PROGRESS REPORT.—Not later than two years after the date of the enactment of this Act (Oct. 14, 2008), the Secretary of Defense shall submit to the congressional defense committees (Committees on Armed Services and Appropriations of the Senate and the House of Representatives) a report describing progress made to implement the requirements of this section, including an assessment of whether the implementation plan required by subsection (d) is being carried out on schedule.

"(f) NOTIFICATION OF COMPLIANCE.—As soon as practicable during the three-year period beginning on the date of the enactment of this Act (Oct. 14, 2008), the Secretary of Defense shall notify the congressional defense committees that the Secretary has complied with the requirements of this section. If the Secretary is unable to provide the notification, the Secretary shall submit to the congressional defense committees at the end of the three-year period a report containing—

"(1) an explanation of the reasons why the requirements, or portions of the requirements, have not been implemented; and

"(2) a revised plan under subsection (d) to complete implementation or a rationale regarding why portions of the requirements cannot or should not be implemented.

"(g) FULLY BURDENED COST OF FUEL DEFINED.—In this section, the term 'fully burdened cost of fuel' means...
mitigation plans.

"(b) Risk mitigation plans.—

"(1) In general.—The Secretary of Defense shall develop and integrated prioritized plans to eliminate, reduce, or mitigate significant risks identified in the risk assessment under subsection (a).

"(2) Additional considerations.—In developing the risk mitigation plans under paragraph (1), the Secretary of Defense shall:

"(i) prioritize the mission critical installations, facilities, and activities that are subject to the greatest and most urgent risks; and

"(ii) consider the cost effectiveness of risk mitigation options.

"(c) Annual report.—

"(1) In general.—The Secretary of Defense shall submit a report on the efforts of the Department of Defense to mitigate the risks described in subsection (a) as part of the budget justification materials submitted to Congress in support of the Department of Defense budget for fiscal year 2010 and each fiscal year thereafter (as submitted with the budget of the President under section 110(a) of title 31, United States Code).

"(2) Content.—Each report submitted under paragraph (1) shall describe the integrated prioritized plans developed under subsection (b) and the progress made toward achieving the goals established under such subsection.

USE OF ENERGY EFFICIENT LIGHTING FIXTURES AND BULBS IN DEPARTMENT OF DEFENSE FACILITIES


"(a) Risk Assessment.—The Secretary of Defense shall conduct a comprehensive technical and operational risk assessment of the risks posed to mission critical installations, facilities, and activities of the Department of Defense by extended power outages resulting from failure of the commercial electricity supply or grid and related infrastructure.

"(b) Risk Mitigation Plans.—

"(1) In general.—The Secretary of Defense shall develop integrated prioritized plans to eliminate, reduce, or mitigate significant risks identified in the risk assessment under subsection (a).

"(2) Additional Considerations.—In developing the risk mitigation plans under paragraph (1), the Secretary of Defense shall:

"(i) prioritize the mission critical installations, facilities, and activities that are subject to the greatest and most urgent risks; and

"(ii) consider the cost effectiveness of risk mitigation options.

"(c) Annual Report.—

"(1) In general.—The Secretary of Defense shall submit a report on the efforts of the Department of Defense to mitigate the risks described in subsection (a) as part of the budget justification materials submitted to Congress in support of the Department of Defense budget for fiscal year 2010 and each fiscal year thereafter (as submitted with the budget of the President under section 110(a) of title 31, United States Code).

"(2) Content.—Each report submitted under paragraph (1) shall describe the integrated prioritized plans developed under subsection (b) and the progress made toward achieving the goals established under such subsection.

USE OF ENERGY EFFICIENT LIGHTING FIXTURES AND BULBS IN DEPARTMENT OF DEFENSE FACILITIES


"(a) Construction and Alteration of Buildings.—

Each building constructed or significantly altered by the Secretary of Defense or the Secretary of a military department shall be equipped, to the maximum extent feasible as determined by the Secretary concerned, with lighting fixtures and bulbs that are energy efficient.

"(b) Maintenance of Buildings.—Each lighting fixture or bulb that is replaced in the normal course of maintenance of buildings under the jurisdiction of the Secretary of Defense or the Secretary of a military department shall be replaced, to the maximum extent feasible as determined by the Secretary concerned, with a lighting fixture or bulb that is energy efficient.

"(c) Considerations.—In making a determination under this section concerning the feasibility of installing a lighting fixture or bulb that is energy efficient, the Secretary of Defense or the Secretary of a military department shall consider:

"(1) the life cycle cost effectiveness of the fixture or bulb;

"(2) the compatibility of the fixture or bulb with existing equipment;

"(3) whether use of the fixture or bulb could result in interference with productivity;

"(4) the aesthetics relating to use of the fixture or bulb by civilians;

"(5) such other factors as the Secretary concerned determines appropriate.

"(d) Energy Star.—A lighting fixture or bulb shall be treated as being energy efficient for purposes of this section if:

"(1) the fixture or bulb is certified under the Energy Star program established by section 324A of the Energy Policy and Conservation Act (42 U.S.C. 6291a); or

"(2) the Secretary of Defense or the Secretary of a military department has otherwise determined that the fixture or bulb is energy efficient.

"(e) Significant Alterations.—A building shall be treated as being significantly altered for purposes of subsection (a) if the alteration is subject to congressional authorization under section 2802 of title 10, United States Code.

"(f) Waiver Authority.—The Secretary of Defense may waive the requirements of this section if the Secretary determines that such a waiver is necessary to protect the national security interests of the United States.

"(g) Effective Date.—The requirements of subsections (a) and (b) shall take effect one year after the date of the enactment of this Act [Jan. 28, 2008].

REPORTING REQUIREMENTS RELATING TO RENEWABLE ENERGY USE BY DEPARTMENT OF DEFENSE TO MEET DEPARTMENT ELECTRICITY NEEDS


"(a) Initial Report.—Not later than 120 days after the date of the enactment of this Act [Jan. 28, 2008], the Under Secretary of Defense for Acquisition, Technology, and Logistics shall submit to the congressional defense committees (Committees on Armed Services and Appropriations of the Senate and the House of Representatives) a report containing the following information:

"(1) The extent to which energy from renewable energy sources is used to meet the electricity needs of the Department of Defense, to be stated as a percentage of total facility electricity use for the previous fiscal year.

"(2) The extent to which energy from renewable energy sources was procured through alternative financing methods, to be stated as a percentage of total renewable energy procurement and as a dollar amount for the previous fiscal year.

"(3) The extent to which energy from renewable energy sources was procured through the use of appropriated funds, to be stated as a percentage of total renewable energy procurement and as a dollar amount for the previous fiscal year.

"(4) A graphical illustration of energy use from renewable energy sources by the Department as a percentage of total facility electricity use over time, starting no later than fiscal year 2000 and running through fiscal year 2025, including projected future trends in renewable energy consumption through fiscal year 2025 in order to meet the goals for renewable energy set forth in section 2801(b) of title 10, United States Code, or other goals, as appropriate.

"(b) Subsequent Reports.—For fiscal year 2008 and each fiscal year thereafter, the information required by paragraphs (1) through (4) of subsection (a) shall be included in the Annual Energy Management Report prepared by the Under Secretary of Defense for Acquisition, Technology, and Logistics.

"(c) Renewable Energy Sources Defined.—In this section, the term 'renewable energy sources' has the meaning given that term in section 203(b) of the Energy Policy Act of 2005 (42 U.S.C. 15852(b)).

UTILIZATION OF FUEL CELLS AS BACK-UP POWER SYSTEMS IN DEPARTMENT OF DEFENSE OPERATIONS

cluding in telecommunications networks, perimeter security, individual equipment items, and remote facilities, in order to increase the operational longevity of back-up power systems and stand-by power systems in such operations and activities.”

**ENERGY EFFICIENCY IN WEAPONS PLATFORMS**


"(1) enhance platform performance;

"(2) reduce the size of the fuel logistics systems;

"(3) reduce the burden high fuel consumption places on agility;

"(4) reduce operating costs; and

"(5) dampen the financial impact of volatile oil prices.”

**DEPARTMENT OF DEFENSE ENERGY EFFICIENCY PROGRAM**


"(a) SENSE OF CONGRESS.—It is the sense of Congress that the Secretary of Defense should work to implement fuel efficiency reforms that allow for investment decisions based on the true cost of delivered fuel, strengthen the linkage between warfighting capability and fuel logistics requirements, provide high-level leadership encouraging fuel efficiency, target fuel efficiency improvements through science and technology investment, and include fuel efficiency in requirements and acquisition processes.

"(b) ENERGY EFFICIENCY PROGRAM.—The Secretary shall carry out a program to significantly improve the energy efficiency of facilities of the Department of Defense through 2010. The Secretary shall designate a senior official of each military department to be responsible for managing the program for the Department and a senior official of each military department to be responsible for managing the program for such department.

"(c) ENERGY EFFICIENCY GOALS.—The goal of the energy efficiency program shall be to achieve reductions in energy consumption by facilities of the Department of Defense as follows:

"(1) In the case of industrial and laboratory facilities, reductions in the average energy consumption per square foot of such facilities, per unit of production or other applicable unit, relative to energy consumption in 1990—

"(A) by 20 percent by 2005; and

"(B) by 25 percent by 2010.

"(2) In the case of other facilities, reductions in average energy consumption per gross square foot of such facilities, relative to energy consumption per gross square foot in 1985—

"(A) by 30 percent by 2005; and

"(B) by 35 percent by 2010.

"(d) STRATEGIES FOR IMPROVING ENERGY EFFICIENCY.—In order to achieve the goals set forth in subsection (c), the Secretary shall, to the maximum extent practicable—

"(1) purchase energy-efficient products, as so designated by the Environmental Protection Agency and the Department of Energy, and other products that are energy-efficient;

"(2) utilize energy savings performance contracts, utility energy-efficiency service contracts, and other contracts designed to achieve energy conservation;

"(3) use life-cycle cost analysis, including assessment of life-cycle energy costs, in making decisions about investments in products, services, construction, and other projects;

"(4) conduct energy efficiency audits for approximately 10 percent of all Department of Defense facilities each year;

"(5) explore opportunities for energy efficiency in industrial facilities for steam systems, boiler operation, air compressor systems, industrial processes, and fuel switching; and

"(6) retire inefficient equipment on an accelerated basis, where replacement results in lower life-cycle costs.

"(e) REPORTING REQUIREMENTS.—Not later than January 1, 2002, and each January 1 thereafter through 2010, the Secretary shall submit to the congressional defense committees [Committees on Armed Services and Appropriations of the Senate and the House of Representatives] the report required to be prepared by the Secretary pursuant to section 303 of Executive Order 13123 (64 Fed. Reg. 30851; [former] 42 U.S.C. 8251 note) regarding the progress made toward achieving the energy efficiency goals of the Department of Defense.”

**§2912. Availability and use of energy cost savings**

(a) AVAILABILITY.—An amount of the funds appropriated to the Department of Defense for a fiscal year that is equal to the amount of energy cost savings realized by the Department, including financial benefits resulting from shared energy savings contracts entered into under section 2913 of this title, shall remain available for obligation under subsection (b) until expended, without additional authorization or appropriation.

(b) USE.—The Secretary of Defense shall provide that the amount that remains available for obligation under subsection (a) and the funds made available under section 2919(b)(2) of this title shall be used as follows:

(1) One-half of the amount shall be used for the implementation of additional energy conservation measures at buildings, facilities, or installations of the Department of Defense or related to vehicles and equipment of the Department, which are designated, in accordance with regulations prescribed by the Secretary of Defense, by the head of the department, agency, or instrumentality that realized the savings referred to in subsection (a).

(2) One-half of the amount shall be used at the installation at which the savings were realized, as determined by the commanding officer of such installation consistent with applicable law and regulations, for—

(A) improvements to existing military family housing units;

(B) any unspecified minor construction project that will enhance the quality of life of personnel; or

(C) any morale, welfare, or recreation facility or service.

(c) TREATMENT OF CERTAIN FINANCIAL INCENTIVES.—Financial incentives received from gas or electric utilities under section 2913 of this title shall be credited to an appropriation designated by the Secretary of Defense. Amounts so credited shall be merged with the appropriation to which credited and shall be available for the same purposes and the same period as the appropriation with which merged.

(d) CONGRESSIONAL NOTIFICATION.—The Secretary of Defense shall include in the budget material submitted to Congress in connection with the submission of the budget for a fiscal year pursuant to section 1105 of title 31 a separate statement of the amounts available for obligation under this section in that fiscal year.