§ 8253. Energy management requirements

(a) Energy performance requirement for Federal buildings

(1) Subject to paragraph (2), each agency shall apply energy conservation measures to, and shall improve the design for the construction of, the Federal buildings of the agency (including each industrial or laboratory facility) so that the energy consumption per gross square foot of the Federal buildings of the agency in fiscal years 2006 through 2015 is reduced, as compared with the energy consumption per gross square foot of the Federal buildings of the agency in fiscal year 2003, by the percentage specified in the following table:

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Percentage Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>2</td>
</tr>
<tr>
<td>2007</td>
<td>4</td>
</tr>
<tr>
<td>2008</td>
<td>9</td>
</tr>
<tr>
<td>2009</td>
<td>12</td>
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<tr>
<td>2010</td>
<td>15</td>
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<tr>
<td>2011</td>
<td>18</td>
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<tr>
<td>2012</td>
<td>21</td>
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<tr>
<td>2013</td>
<td>24</td>
</tr>
<tr>
<td>2014</td>
<td>27</td>
</tr>
<tr>
<td>2015</td>
<td>30</td>
</tr>
</tbody>
</table>

(2) An agency may exclude from the requirements of paragraph (1) any building, and the associated energy consumption and gross square footage, in which energy intensive activities are carried out. Each agency shall identify and list in each report made under section 8258(a) of this title the buildings designated by it for such exclusion.

(3) Not later than December 31, 2014, the Secretary shall review the results of the implementation of the energy performance requirement established under paragraph (1) and submit to Congress recommendations concerning energy performance requirements for fiscal years 2016 through 2025.

(b) Energy management requirement for Federal agencies

(1) Not later than January 1, 2005, each agency shall, to the maximum extent practicable, install in Federal buildings owned by the United States all energy and water conservation measures with payback periods of less than 10 years, as determined by using the methods and procedures developed pursuant to section 8254 of this title.

(2) The Secretary may waive the requirements of this subsection for any agency for such periods as the Secretary may determine if the Secretary finds that the agency is taking all practicable steps to meet the requirements and that the requirements of this subsection will pose an unacceptable burden upon the agency. If the Secretary waives the requirements of this subsection, the Secretary shall, as part of the report required under section 8258(b) of this title, notify the Congress in writing with an explanation and a justification of the reasons for such waiver.

(3) This subsection shall not apply to an agency’s facilities that generate or transmit electric energy or to the uranium enrichment facilities operated by the Department of Energy.

(4) An agency may participate in the Environmental Protection Agency’s “Green Lights” program for purposes of receiving technical assistance in complying with the requirements of this section.

(c) Exclusions

(1)(A) An agency may exclude, from the energy performance requirement for a fiscal year established under subsection (a) of this section and the energy management requirement established under subsection (b) of this section, any Federal building or collection of Federal buildings, if the head of the agency finds that—

(i) compliance with those requirements would be impracticable;

(ii) the agency has completed and submitted all federally required energy management reports;

(iii) the agency has achieved compliance with the energy efficiency requirements of this chapter, the Energy Policy Act of 1992, Executive orders, and other Federal law; and

(iv) the agency has implemented all practicable, life cycle cost-effective projects with respect to the Federal building or collection of Federal buildings to be excluded.

(B) A finding of impracticability under subparagraph (A)(i) shall be based on—

(i) the energy intensiveness of activities carried out in the Federal building or collection of Federal buildings; or

(ii) the fact that the Federal building or collection of Federal buildings is used in the performance of a national security function.

(2) Each agency shall identify and list, in each report made under section 8258(a) of this title, the Federal buildings designated by it for such exclusion. The Secretary shall review such findings for consistency with the standards for exclusion set forth in paragraph (1), and may within 90 days after receipt of the findings, reverse the exclusion. In the case of any such reversal, the agency shall comply with the requirements of subsections (a) and (b)(1) of this section for the building concerned.

(3) Not later than 180 days after August 8, 2005, the Secretary shall issue guidelines that establish criteria for exclusions under paragraph (1).

(d) Implementation steps

The Secretary shall consult with the Secretary of Defense and the Administrator of General Services in developing guidelines for the implementation of this part. To meet the requirements of this section, each agency shall—

(1) prepare and submit to the Secretary, not later than December 31, 1993, a plan describing how the agency intends to meet such requirements, including how it will—

(A) designate personnel primarily responsible for achieving such requirements;

(B) identify high priority projects through calculation of payback periods;

(C) take maximum advantage of contracts authorized under subchapter VII of this chapter, of financial incentives and other services provided by utilities for efficiency investment, and of other forms of financing to reduce the direct costs to the Government; and
(D) otherwise implement this part:

(2) perform energy surveys of its Federal buildings to the extent necessary and update such surveys as needed, incorporating any relevant information obtained from the survey conducted pursuant to section 8258(b) of this title;

(3) using such surveys, determine the cost and payback period of energy and water conservation measures likely to achieve the requirements of this section;

(4) install energy and water conservation measures, in that order as required by guidelines established by the Secretary under paragraph (2), all Federal buildings shall, for the maximum extent practicable, advanced buildings, be metered. Each agency shall use, to the maximum extent practicable, advanced meters or advanced metering devices that provide data at least daily and that measure at least hourly consumption of electricity in the Federal buildings of the agency. Not later than October 1, 2016, each agency shall provide for equivalent metering of natural gas and steam, in accordance with guidelines established by the Secretary under paragraph (2). Such data shall be incorporated into existing Federal energy tracking systems and made available to Federal facility managers.

(2) Guidelines

(A) In general

Not later than 180 days after August 8, 2005, the Secretary, in consultation with the Department of Energy, the General Services Administration, representatives from the metering industry, utility industry, energy services industry, energy efficiency industry, energy efficiency advocacy organizations, national laboratories, universities, and Federal facility managers, shall establish guidelines for agencies to carry out paragraph (1).

(B) Requirements for guidelines

The guidelines shall—

(i) take into consideration—

(I) the cost of metering and the reduced cost of operation and maintenance expected to result from metering;

(II) the extent to which metering is expected to result in increased potential for energy management, increased potential for energy savings and energy efficiency improvement, and cost and energy savings due to utility contract aggregation; and

(III) the measurement and verification protocols of the Department of Energy;

(ii) include recommendations concerning the amount of funds and the number of trained personnel necessary to gather and use the metering information to track and reduce energy use;

(iii) establish priorities for types and locations of buildings to be metered based on cost-effectiveness and a schedule of one or more dates, not later than 1 year after the date of issuance of the guidelines, on which the requirements specified in paragraph (1) shall take effect; and

(iv) establish exclusions from the requirements specified in paragraph (1) based on the de minimis quantity of energy use of a Federal building, industrial process, or structure.

(3) Plan

Not later than 6 months after the date guidelines are established under paragraph (2), in a report submitted by the agency under section 8258(a) of this title, each agency shall submit to the Secretary a plan describing how the agency will implement the requirements of paragraph (1), including (A) how the agency will designate personnel primarily responsible for achieving the requirements and (B) demonstration by the agency, complete with documentation, of any finding that advanced meters or advanced metering devices, as defined in paragraph (1), are not practical.

(f) Use of energy and water efficiency measures in Federal buildings

(1) Definitions

In this subsection:

(A) Commissioning

The term “commissioning”, with respect to a facility, means a systematic process—

(i) of ensuring, using appropriate verification and documentation, during the period beginning on the initial day of the design phase of the facility and ending not earlier than 1 year after the date of completion of construction of the facility, that all facility systems perform interactively in accordance with—

(I) the design documentation and intent of the facility; and

(II) the operational needs of the owner of the facility, including preparation of operation personnel; and

(ii) the primary goal of which is to ensure fully functional systems that can be properly operated and maintained during the useful life of the facility.

(B) Energy manager

(i) In general

The term “energy manager”, with respect to a facility, means the individual who is responsible for—

(I) ensuring compliance with this subsection by the facility; and

(II) reducing energy use at the facility.

(ii) Inclusions

The term “energy manager” may include—

1So in original. Two subsecs. (f) have been enacted.
(I) a contractor of a facility;
(II) a part-time employee of a facility; and
(III) an individual who is responsible for multiple facilities.

(C) Facility
(i) In general
The term “facility” means any building, installation, structure, or other property (including any applicable fixtures) owned or operated by, or constructed or manufactured and leased to, the Federal Government.

(ii) Inclusions
The term “facility” includes—
(I) a group of facilities at a single location or multiple locations managed as an integrated operation; and
(II) contractor-operated facilities owned by the Federal Government.

(iii) Exclusions
The term “facility” does not include any land or site for which the cost of utilities is not paid by the Federal Government.

(D) Life cycle cost-effective
The term “life cycle cost-effective”, with respect to a measure, means a measure, the estimated savings of which exceed the estimated costs over the lifespan of the measure, as determined in accordance with section 8254 of this title.

(E) Payback period
(i) In general
Subject to clause (ii), the term “payback period”, with respect to a measure, means a value equal to the quotient obtained by dividing—
(I) the estimated initial implementation cost of the measure (other than financing costs); by
(II) the annual cost savings resulting from the measure, including—
(aa) net savings in estimated energy and water costs; and
(bb) operations, maintenance, repair, replacement, and other direct costs.

(ii) Modifications and exceptions
The Secretary, in guidelines issued pursuant to paragraph (6), may make such modifications and provide such exceptions to the calculation of the payback period of a measure as the Secretary determines to be appropriate to achieve the purposes of this chapter.

(F) Recommissioning
The term “recommissioning” means a process—
(i) of commissioning a facility or system beyond the project development and warranty phases of the facility or system; and
(ii) the primary goal of which is to ensure optimum performance of a facility, in accordance with design or current operating needs, over the useful life of the facility, while meeting building occupancy requirements.

(G) Retrocommissioning
The term “retrocommissioning” means a process of commissioning a facility or system that was not commissioned at the time of construction of the facility or system.

(2) Facility energy managers
(A) In general
Each Federal agency shall designate an energy manager responsible for implementing this subsection and reducing energy use at each facility that meets criteria under subparagraph (B).

(B) Covered facilities
The Secretary shall develop criteria, after consultation with affected agencies, energy efficiency advocates, and energy and utility service providers, that cover, at a minimum, Federal facilities, including central utility plants and distribution systems and other energy intensive operations, that constitute at least 75 percent of facility energy use at each agency.

(3) Energy and water evaluations
(A) Evaluations
Effective beginning on the date that is 180 days after December 19, 2007, and annually thereafter, energy managers shall complete, for each calendar year, a comprehensive energy and water evaluation for approximately 25 percent of the facilities of each agency that meet the criteria under paragraph (2)(B) in a manner that ensures that an evaluation of each such facility is completed at least once every 4 years.

(B) Recommissioning and retrocommissioning
As part of the evaluation under subparagraph (A), the energy manager shall identify and assess recommissioning measures (or, if the facility has never been commissioned, retrocommissioning measures) for each such facility.

(4) Implementation of identified energy and water efficiency measures
Not later than 2 years after the completion of each evaluation under paragraph (3), each energy manager may—
(A) implement any energy- or water-saving measure that the Federal agency identified in the evaluation conducted under paragraph (3) that is life cycle cost-effective; and
(B) bundle individual measures of varying paybacks together into combined projects.

(5) Follow-up on implemented measures
For each measure implemented under paragraph (4), each energy manager shall ensure that—
(A) equipment, including building and equipment controls, is fully commissioned at acceptance to be operating at design specifications;
(B) a plan for appropriate operations, maintenance, and repair of the equipment is in place at acceptance and is followed;
(C) equipment and system performance is measured during its entire life to ensure
proper operations, maintenance, and repair; and
(D) energy and water savings are measured and verified.
(6) Guidelines
(A) In general
The Secretary shall issue guidelines and necessary criteria that each Federal agency shall follow for implementation of—
(i) paragraphs (2) and (3) not later than 180 days after December 19, 2007; and
(ii) paragraphs (4) and (5) not later than 1 year after December 19, 2007.
(B) Relationship to funding source
The guidelines issued by the Secretary under subparagraph (A) shall be appropriate and uniform for measures funded with each type of funding made available under paragraph (10), but may distinguish between different types of measures project size, and other criteria the Secretary determines are relevant.
(7) Web-based certification
(A) In general
For each facility that meets the criteria established by the Secretary under paragraph (2)(B), the energy manager shall use the web-based tracking system under subparagraph (B) to certify compliance with the requirements for—
(i) energy and water evaluations under paragraph (3);
(ii) implementation of identified energy and water measures under paragraph (4); and
(iii) follow-up on implemented measures under paragraph (5).
(B) Deployment
(i) In general
Not later than 1 year after December 19, 2007, the Secretary shall develop and deploy a web-based tracking system required under this paragraph in a manner that tracks, at a minimum—
(I) the covered facilities;
(II) the status of meeting the requirements specified in subparagraph (A);
(III) the estimated cost and savings for measures required to be implemented in a facility;
(IV) the measured savings and persistence of savings for implemented measures; and
(V) the benchmarking information disclosed under paragraph (8)(C).
(ii) Ease of compliance
The Secretary shall ensure that energy manager compliance with the requirements in this paragraph, to the maximum extent practicable—
(I) can be accomplished with the use of streamlined procedures and templates that minimize the time demands on Federal employees; and
(II) is coordinated with other applicable energy reporting requirements.
(C) Availability
(i) In general
Subject to clause (ii), the Secretary shall make the web-based tracking system required under this paragraph available to Congress, other Federal agencies, and the public through the Internet.
(ii) Exemptions
At the request of a Federal agency, the Secretary may exempt specific data for specific facilities from disclosure under clause (i) for national security purposes.
(8) Benchmarking of Federal facilities
(A) In general
The energy manager shall enter energy use data for each metered building that is (or is a part of) a facility that meets the criteria established by the Secretary under paragraph (2)(B) into a building energy use benchmarking system, such as the Energy Star Portfolio Manager.
(B) System and guidance
Not later than 1 year after December 19, 2007, the Secretary shall—
(i) select or develop the building energy use benchmarking system required under this paragraph for each type of building; and
(ii) issue guidance for use of the system.
(C) Public disclosure
Each energy manager shall post the information entered into, or generated by, a benchmarking system under this subsection, on the web-based tracking system under paragraph (7)(B). The energy manager shall update such information each year, and shall include in such reporting previous years’ information to allow changes in building performance to be tracked over time.
(9) Federal agency scorecards
(A) In general
The Director of the Office of Management and Budget shall issue semiannual scorecards for energy management activities carried out by each Federal agency that includes—
(i) summaries of the status of implementing the various requirements of the agency and its energy managers under this subsection; and
(ii) any other means of measuring performance that the Director considers appropriate.
(B) Availability
The Director shall make the scorecards required under this paragraph available to Congress, other Federal agencies, and the public through the Internet.
(10) Funding and implementation
(A) Authorization of appropriations
There are authorized to be appropriated such sums as are necessary to carry out this subsection.
(B) Funding options
(i) In general
To carry out this subsection, a Federal agency may use any combination of—
(I) appropriated funds made available under subparagraph (A); and

(II) private financing otherwise authorized under Federal law, including financing available through energy savings performance contracts or utility energy service contracts.

(ii) Combined funding for same measure

A Federal agency may use any combination of appropriated funds and private financing described in clause (i) to carry out the same measure under this subsection.

(C) Implementation

Each Federal agency may implement the requirements under this subsection itself or may contract out performance of some or all of the requirements.

(11) Rule of construction

This subsection shall not be construed to require or to obviate any contractor savings guarantees.

(f) 1 Large capital energy investments

(1) In general

Each Federal agency shall ensure that any large capital energy investment in an existing building that is not a major renovation but involves replacement of installed equipment (such as heating and cooling systems), or involves renovation, rehabilitation, expansion, or remodeling of existing space, employs the most efficient design, systems, equipment, and controls that are life-cycle cost effective.

(2) Process for review of investment decisions

Not later than 180 days after December 19, 2007, each Federal agency shall—

(A) develop a process for reviewing each decision made on a large capital energy investment described in paragraph (1) to ensure that the requirements of this subsection are met; and

(B) report to the Director of the Office of Management and Budget on the process established.

(3) Compliance report

Not later than 1 year after December 19, 2007, the Director of the Office of Management and Budget shall evaluate and report to Congress on the compliance of each agency with this subsection.

(C) Implementation

Each Federal agency shall provide for equivalent metering of natural gas and steam, in accordance with guidelines established by the Secretary under paragraph (2).

(f) 2


AMENDMENTS

2007—Subsec. (a)(1). Pub. L. 110–140, § 431, added table and struck out former table which listed percentage reductions for fiscal years as follows: 2 percent for fiscal year 2006, 4 percent for fiscal year 2007, 6 percent for fiscal year 2008, 8 percent for fiscal year 2009, 12 percent for fiscal year 2010, 12 percent for fiscal year 2011, 14 percent for fiscal year 2012, 16 percent for fiscal year 2013, 18 percent for fiscal year 2014, and 20 percent for fiscal year 2015.

Subsec. (e)(1). Pub. L. 110–140, § 434(b), inserted after second sentence “Not later than October 1, 2016, each agency shall provide for equivalent metering of natural gas and steam, in accordance with guidelines established by the Secretary under paragraph (2).”


2005—Subsec. (a)(1). Pub. L. 109–58, § 102(a)(1), substituted provisions relating to reduction of energy consumption in fiscal years 2006 to 2015 as compared to consumption in fiscal year 2003 and table of percentages specifying amount of reduction in each fiscal year for provisions relating to energy consumption during fiscal year 1995 at least 10 percent less than consumption during fiscal year 1985 and energy consumption during fiscal year 2000 at least 20 percent less than consumption during fiscal year 1985.


Subsec. (c)(1). Pub. L. 109–58, § 102(c), added par. (1) and struck out former par. (1) which read as follows: “An agency may exclude, from the energy consumption requirements for the year 2000 estimated under subpart (a) of this section and the requirements of subpart (b)(1) of this section, any Federal building or collection of Federal buildings, and the associated energy consumption and gross square footage, if the head of such agency finds that compliance with such requirements would be impractical. A finding of impracticability shall be based on the energy intensiveness of activities carried out in such Federal buildings or collection of Federal buildings, the type and amount of energy consumed, the technical feasibility of making the desired changes, and, in the cases of the Departments of Defense and Energy, the unique character of certain facilities operated by such Departments.”

Subsec. (c)(2). Pub. L. 109–58, § 102(d), substituted “standards for exclusion” for “impracticability standards”, “the exclusion” for “a finding of impracticability”, and “requirements of subsections (a) and (b)(1) of this section” for “energy consumption requirements”.

Subsec. (c)(3). Pub. L. 109–58, § 102(e), added subpar. (3).


1995—Subsec. (b)(2). Pub. L. 104–66 in last sentence inserted “, as part of the report required under section 8258(b) of this title,” after “the Secretary shall” and struck out “promptly” after “Congress”.


Subsec. (a). Pub. L. 102–486, § 152(b)(2), (3), in heading substituted “requirement” for “goal” and in par. (1) inserted before period at end “and so that the energy consumption per gross square foot of its Federal buildings in use during the fiscal year 2000 is at least 20 percent less than the energy consumption per gross square foot of its Federal buildings in use during fiscal year 1985”.

Subsecs. (b), (c). Pub. L. 102–486, § 152(b)(4), added subsec. (b) and (c).

Former subsec. (b) redesignated (d).

Subsec. (d). Pub. L. 102–486, § 152(b)(4), (c)(1), redesignated subsec. (b) as (d) and in introductory provisions substituted “The Secretary shall consult with the Secretary of Defense and the Administrator of General..."
Services in developing guidelines for the implementation of this part. To meet the requirements of this section, for “To achieve the goal established in subsection (a) of this section.”

Subsec. (d)(1). Pub. L. 102–486, §152(c)(2), added par. (1) and struck out former par. (1) which read as follows: “prepare or update, within 6 months after November 5, 1988, a plan describing how the agency intends to meet such goal, including how it will implement this part, designate personnel primarily responsible for achieving such goal, and identify high priority projects.”

Subsec. (d)(2). Pub. L. 102–486, §152(c)(3), inserted before semicolon at end “and update such surveys as needed, incorporating any relevant information obtained from the survey conducted pursuant to section 8250b of this title.”

Subsec. (d)(3) to (5). Pub. L. 102–486, §152(c)(4), (5), added pars. (3) and (4), redesignated former par. (4) as (5), and struck out former par. (3) which read as follows: “using such surveys, apply energy conservation measures in a manner which will attain the goal established in subsection (a) of this section in the most cost-effective manner practicable; and.”

1989—Pub. L. 100–615 amended section generally, substituting energy management goals statement for statement of purpose to promote (1) use of commonly accepted methods to establish and compare life cycle costs of operating Federal buildings, and life cycle fuel and energy requirements of such buildings, with and without special features for energy conservation and (2) use of solar heating and cooling and other renewable energy sources in Federal buildings.

**Effective Date of 2007 Amendment**

Amendment by Pub. L. 110–140 effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110–140, set out as an Effective Date note under section 1824 of Title 2, The Congress.

**Reporting Baseline**


**AMENDMENTS**


Subsec. (b)(2). Pub. L. 102–486, §152(d)(2), substituted “agency shall, after January 1, 1994, fully consider the efficiency of all potential building space at the time of renewing or entering into a new lease.” for “agency shall give appropriate preference to buildings which minimize life cycle costs.”

1988—Pub. L. 100–615 amended section generally, substituting provisions relating to establishment and use of life cycle cost methods and procedures for provisions defining terms (1) Secretary, (2) life cycle cost, (3) preliminary energy audit, (4) energy survey, (5) Federal building, (6) construction, and (7) energy performance target.

**Effective Date of 2007 Amendment**

Amendment by Pub. L. 110–140 effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110–140, set out as an Effective Date note under section 1824 of Title 2, The Congress.

§8254. Establishment and use of life cycle cost methods and procedures

(a) Establishment of life cycle cost methods and procedures

The Secretary, in consultation with the Director of the Office of Management and Budget, the Secretary of Defense, the Director of the National Institute of Standards and Technology, and the Administrator of the General Services Administration, shall—

(1) establish practical and effective present value methods for estimating and comparing life cycle costs for Federal buildings, using the sum of all capital and operating expenses associated with the energy system of the building involved over the expected life of such system or during a period of 40 years, whichever is shorter, and using average fuel costs and a discount rate determined by the Secretary; and

(2) develop and prescribe the procedures to be followed in applying and implementing the methods so established.

(b) Use of life cycle cost methods and procedures

(1) The design of new Federal buildings, and the application of energy conservation measures to existing Federal buildings, shall be made using life cycle cost methods and procedures established under subsection (a) of this section.

(2) In leasing buildings for its own use or that of another agency, each agency shall, after January 1, 1994, fully consider the efficiency of all potential building space at the time of renewing or entering into a new lease.

(c) Use in non-Federal structures

The Secretary shall make available information to the public on the use of life cycle cost methods in the construction of buildings, structures, and facilities in all segments of the economy.


**AMENDMENTS**


Subsec. (b)(2). Pub. L. 102–486, §152(d)(2), substituted “agency shall, after January 1, 1994, fully consider the efficiency of all potential building space at the time of renewing or entering into a new lease.” for “agency shall give appropriate preference to buildings which minimize life cycle costs.”

1988—Pub. L. 100–615 amended section generally, substituting provisions relating to establishment and use of life cycle cost methods and procedures for provisions defining terms (1) Secretary, (2) life cycle cost, (3) preliminary energy audit, (4) energy survey, (5) Federal building, (6) construction, and (7) energy performance target.

**Effective Date of 2007 Amendment**

Amendment by Pub. L. 110–140 effective on the date that is 1 day after Dec. 19, 2007, see section 1601 of Pub. L. 110–140, set out as an Effective Date note under section 1824 of Title 2, The Congress.

§8255. Budget treatment for energy conservation measures

The President shall transmit to the Congress, along with each budget that is submitted to the Congress under section 1105 of title 31, a statement of the amount of appropriations requested in such budget, if any, on an individual agency basis, for—

(1) electric and other energy costs to be incurred in operating and maintaining agency facilities; and

(2) compliance with the provisions of this part, the Energy Policy and Conservation Act (42 U.S.C. 6201 et seq.), and all applicable Executive orders, including Executive Order 12003 (42 U.S.C. 6201 note) and Executive Order 12759 (56 Fed. Reg. 12627).