

# Rules and Regulations

This section of the **FEDERAL REGISTER** contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.

The Code of Federal Regulations is sold by the Superintendent of Documents. Prices of new books are listed in the first **FEDERAL REGISTER** issue of each week.

## DEPARTMENT OF AGRICULTURE

### Rural Utilities Service

#### 7 CFR Part 1792

RIN 0572-AC01

### Seismic Safety

**AGENCY:** Rural Utilities Service, USDA.

**ACTION:** Notice of confirmation of direct final rule.

**SUMMARY:** The Rural Utilities Service, an agency which administers the U.S. Department of Agriculture's Rural Development Utilities Programs (hereinafter "USDA Rural Development" or the "Agency,") gives notice that no adverse comments were received regarding the direct final rule amending its regulations to update the seismic safety requirements of the Agency, and confirms the effective date of the direct final rule.

**DATES:** The direct final rule published in the **Federal Register** on October 16, 2006 (71 FR 60657), and will be effective on November 30, 2006.

**FOR FURTHER INFORMATION CONTACT:** Mr. Donald Heald, Structural Engineer, Transmission Branch, Electric Staff Division, USDA Rural Development, 1400 Independence Avenue, SW., STOP 1569, Washington, DC 20250-1569. Telephone: (202) 720-9102. Fax: (202) 720-7491.

### SUPPLEMENTARY INFORMATION:

#### Background

In the mid eighties, the Federal Emergency Management Agency (FEMA) contracted the Building Seismic Safety Council (BSSC) to develop the National Earthquake Hazards Reduction Program (NEHRP) Provisions for new buildings. One of the primary goals of the program is to reduce or mitigate losses from earthquakes. The NEHRP *Recommended Provisions for Seismic*

*Regulations for New Buildings and Other Structures* are recommended provisions that have been adopted in recent times by model codes and standards. The first edition of the NEHRP Provisions was dated 1985. The document is updated on a 3-year cycle. The 2000 edition of the NEHRP provisions is the fifth update of the document.

Executive Order 12699, Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction, requires that all new federally owned, leased, assisted, and other regulated buildings be designed and constructed in accordance with the appropriate seismic standards. The Interagency Committee on Seismic Safety in Construction (ICSSC) has recommended the use of building codes which are substantially equivalent to the *2000 National Earthquake Hazards Reduction Program Provisions for the Development of Seismic Regulations for New Buildings* (commonly called the NEHRP Provisions).

The National Institute of Standards and Technology (NIST) had previously contracted to evaluate the equivalency of the latest edition of the NEHRP Provisions available at the time and the latest editions of national building codes and standards. The four previous comparisons involved the *BOCA National Building Code* (BOCA/NBC), the *Standard Building Code* (SBC), the *Uniform Building Code* (UBC), ASCE 7, *Minimum Design Loads for Buildings and Other Structures* (ASCE 7) and *CABO One- and Two-family Dwelling Code* (OTFDC), the *International Building Code* (IBC), and the *International Residential Code* (IRC).

NIST contracted to determine whether or not the seismic and material design provisions of the *International Building Code* (IBC), 2003 edition; the *NFPA 5000 Building Construction and Safety Code*, 2003 edition; the *International Residential Code for One- and Two-Family Dwellings*, 2003 edition, and ASCE 7-02, *Minimum Design Loads for Buildings and Other Structures*, are substantially equivalent to, or exceed, the 2000 NEHRP Provisions.

For purposes of USDA Rural Development, the following documents have been found to be substantially equivalent to the 2000 NEHRP: *International Building Code* (IBC), 2003 edition; the *NFPA 5000 Building*

## Federal Register

Vol. 71, No. 232

Monday, December 4, 2006

*Construction and Safety Code*, 2003 edition, and ASCE 7-02, *Minimum Design Loads for Buildings and Other Structures*. Although these documents were found to be equivalent in intent and equivalent in design values, there were some exceptions within each document. Because of the structure of our agency requirements, it is recommended that the above documents be accepted as substantially equivalent.

### Confirmation of Effective Date

This is to confirm the effective date of November 30, 2006, for the direct final rule 7 CFR 1792, Seismic Safety, published in the **Federal Register** on October 16, 2006.

Dated: November 28, 2006.

**James M. Andrew,**

*Administrator, Rural Utilities Service.*

[FR Doc. E6-20482 Filed 12-1-06; 8:45 am]

**BILLING CODE 3410-15-P**

## DEPARTMENT OF ENERGY

### Office of Energy Efficiency and Renewable Energy

#### 10 CFR Parts 433, 434, and 435

[Docket No. EE-RM/STD-02-112]

#### RIN 1904-AB13

**SUMMARY:** The U.S. Department of Energy (DOE) is publishing this interim final rule to implement provisions in the Energy Policy Act of 2005 that require DOE to establish revised energy efficiency performance standards for the construction of all new Federal buildings, including both commercial and multi-family high-rise residential buildings and low-rise residential buildings.

**AGENCY:** Office of Energy Efficiency and Renewable Energy, Department of Energy.

**ACTION:** Interim final rule; request for comments.

**SUMMARY:** The U.S. Department of Energy (DOE) is publishing this interim final rule to implement provisions in the Energy Policy Act of 2005 that require DOE to establish revised energy efficiency performance standards for the construction of all new Federal buildings, including both commercial and multi-family high-rise residential buildings and low-rise residential buildings.

**DATES:** The amendment made by this interim final rule is effective January 3, 2007. The incorporation by reference of certain publications in the interim final

rule is approved by the Director of the Federal Register as of January 3, 2007.

**Comment Date:** Comments must be received by DOE no later than February 2, 2007. If you submit information that you believe to be exempt by law from public disclosure, you should submit one complete copy, as well as one copy from which the information claimed to be exempt by law from public disclosure has been deleted. DOE is responsible for the final determination with regard to disclosure or nondisclosure of the information and for treating it accordingly under the DOE Freedom of Information regulations at 10 CFR 1004.11.

**ADDRESSES:** You may submit comments, identified by any of the following methods:

- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.

- *E-mail:* [cyrus.nasseri@ee.doe.gov](mailto:cyrus.nasseri@ee.doe.gov). Include EE-RM/STD-02-112 and/or RIN 1904-AB13 in the subject line of the message.

- *Postal Mail:* Mr. Cyrus Nasseri, U.S. Department of Energy, Federal Energy Management Program, Mailstop EE-2L, Energy Standard for New Federal Commercial and Multi-Family High-Rise Residential Buildings and Energy Standards for New Federal Low-Rise Residential Buildings, EE-RM/STD-02-112 and/or RIN 1904-AB13, 1000 Independence Avenue, SW., Washington, DC 20585-0121.

Telephone: (202) 586-9138. Please submit one signed paper original.

- *Hand Delivery/Courier:* Mr. Cyrus Nasseri, U.S. Department of Energy, Federal Energy Management Program, Room 1M-048, 1000 Independence Avenue, SW., Washington, DC 20585-0121.

**Instructions:** All submissions must include the agency name and docket number or Regulatory Information Number (RIN) for this rulemaking.

**Docket:** For access to the docket to read background documents or comments received by DOE, go to the U.S. Department of Energy, Forrestal Building, Room 1M-048 (Resource Room of the Federal Energy Management Program), 1000 Independence Avenue, SW., Washington, DC, (202) 586-9127, between 9 a.m. and 4 p.m., Monday through Friday, except Federal holidays. Please call Mr. Cyrus Nasseri at the above telephone number for additional information regarding visiting the Resource Room.

**FOR FURTHER INFORMATION CONTACT:** Cyrus Nasseri, U.S. Department of Energy, Office of Energy Efficiency and

Renewable Energy, Federal Energy Management Program, EE-2L, 1000 Independence Avenue, SW., Washington, DC 20585-0121, (202) 586-9138, e-mail: [cyrus.nasseri@ee.doe.gov](mailto:cyrus.nasseri@ee.doe.gov), or Stephen P. Walder, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Federal Energy Management Program, EE-2L, 1000 Independence Avenue, SW., Washington, DC 20585-0121, (202) 586-9209, e-mail: [stephen.walder@ee.doe.gov](mailto:stephen.walder@ee.doe.gov), or Chris Calamita, Esq., U.S. Department of Energy, Office of the General Counsel, Forrestal Building, GC-72, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586-9507, e-mail: [Christopher.Calamita@hq.doe.gov](mailto:Christopher.Calamita@hq.doe.gov).

**SUPPLEMENTARY INFORMATION:** In this rule, DOE incorporates by reference into Title 10, Code of Federal Regulations (CFR), Parts 433 and 435, *ANSI/ASHRAE/IESNA Standard 90.1-2004, Energy Standard for Buildings Except Low-Rise Residential Buildings*, January 2004, American Society of Heating Refrigerating and Air-Conditioning Engineers, Inc., ISSN 1041-2336, and *ICC International Energy Conservation Code (IECC), 2004 Supplement Edition*, January 2005, International Code Council, ISBN 7801S04.

You can view copies of these standards in the resource room of the Building Technologies Program, Room IJ-018 at the U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585, between the hours of 9 a.m. and 4 p.m., Monday through Friday, except Federal holidays. Please call Ms. Brenda Edwards-Jones at (202) 586-2945 for additional information regarding visiting the resource room.

You can purchase copies of ASHRAE Standard 90.1-2004 from ASHRAE Publication Sales, 1791 Tullie Circle, NE, Atlanta, GA 30329, <http://resourcecenter.ashrae.org/store/ashrae/>; and copies of the 2004 International Energy Conservation Code, chapters 1-4 from the International Code Council, Publications, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, <http://www.iccsafe.org/e/category.html>.

#### I. Introduction

#### II. Discussion of Today's Action

#### III. Section 109 of the Energy Policy Act of 2005 Requirements Not Addressed in Today's Rule

#### IV. Reference Resources

#### V. Procedural Requirements

#### VI. Congressional Notification

#### VII. Approval of the Office of the Secretary

## I. Introduction

Section 305 of the Energy Conservation and Production Act (Pub. L. 94-385, ECPA) was amended by Title I of the Energy Policy Act of 1992 (Pub. L. 102-486). Section 305(a)(1) of ECPA requires DOE to establish building energy efficiency standards for all new Federal buildings. (42 U.S.C. 6834(a)(1).) Section 305(a)(1) requires standards for Federal buildings that contain energy efficiency measures that are technologically feasible and economically justified but, at a minimum, require the subject buildings to meet the energy saving and renewable energy specifications in the applicable voluntary consensus energy code specified in section 305(a)(2). (42 U.S.C. 6834(a)(1) and (2).) Until amended by the Energy Policy Act of 2005 (Pub. L. 109-58), section 305(a)(2) set the minimum or baseline standards as the CABO (Council of American Building Officials) Model Energy Code, 1992 (for residential buildings) and ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) Standard 90.1-1989 (for commercial and multi-family high rise residential buildings). Section 305(a)(2)(C) of ECPA requires that DOE consider, in consultation with the Environmental Protection Agency and other Federal agencies, and where appropriate, measures regarding radon and other indoor air pollutants.

Section 306(a)(1) of ECPA provides that each Federal agency must adopt procedures to ensure that new Federal buildings will meet or exceed the Federal building energy efficiency standards established under section 305. (42 U.S.C. 6835(a)(1).) Additionally, section 306(a)(2) extends the requirements for new Federal buildings established under section 305 to buildings under the jurisdiction of the Architect of the Capitol. (42 U.S.C. 6835(a)(2).) Section 306(b) bars the head of a Federal agency from expending Federal funds for the construction of a new Federal building unless the building meets or exceeds the applicable Federal building energy standards established under section 305. (42 U.S.C. 6835(b).)

DOE established Federal building standards under ECPA and initially placed both the commercial and residential standards in Part 435 of Title 10 of the CFR. In a final rule published on October 6, 2000, DOE established new energy efficiency standards for new Federal commercial and multi-family high-rise residential buildings (65 FR 59999). DOE placed the revised Federal commercial and multi-family high-rise

residential building standards in a new 10 CFR Part 434, entitled "Energy Code for New Federal Commercial and Multi-Family High Rise Residential Buildings." The standards for Federal low-rise residential buildings remain in 10 CFR Part 435.

Section 109 of the Energy Policy Act of 2005 amended section 305 of ECPA. (42 U.S.C. 6835.) Section 109 replaced the minimum standards referenced in section 305(a)(2)(A) with references to updated building codes that are widely used today. For residential buildings, CABO Model Energy Code, 1992, was replaced with the 2004 International Energy Conservation Code (IECC). For commercial and multi-family high rise buildings, ASHRAE Standard 90.1-1989 was replaced with ASHRAE Standard 90.1-2004.

Section 109 of the Energy Policy Act of 2005 also added a new section 305(a)(3)(A) that requires DOE to, by rule, establish revised Federal building energy efficiency performance standards not later than August 8, 2006. (42 U.S.C. 6834(a)(3)(A).) Under the revised standards, new Federal buildings must be designed to achieve energy consumption levels that are at least 30 percent below the updated minimum standards referenced in section 305(a)(2), if life-cycle cost-effective. (42 U.S.C. 6834(a)(3)(A)(i)(I).) Additionally, Federal agencies must apply, if life-cycle cost-effective, sustainable design principles to the siting, design, and construction of all new and replacement buildings. (42 U.S.C. 6834(a)(3)(A)(i)(II).)

If water is used to achieve energy efficiency, water conservation technologies shall be applied to the extent that such technologies are life-cycle cost-effective. (42 U.S.C. 6834 (a)(3)(A)(ii).)

## II. Discussion of Today's Action

DOE is issuing today's action as an interim final rule. Today's final rule deals solely with the energy efficiency of new Federal buildings, which are public property. Matters that relate to public property are excepted from prior notice and comment requirements. (5 U.S.C. 553(a)(2).) Additionally, the explicitness of the direction provided to DOE for this rule in Section 109 of the Energy Policy Act of 2005 supports issuance of an interim final rule, as a matter of policy. The interim final rule incorporates updated versions of ANSI/ASHRAE/IESNA Standard 90.1-2004, and the IECC standard as directed by statute. The interim final rule also establishes a requirement for new Federal buildings to achieve a level of energy efficiency 30 percent greater than that of the ANSI/ASHRAE/IESNA or

IECC levels, as appropriate, when life-cycle cost-effective, again as directed by the statute. DOE also decided that the interim final rule approach offered the best opportunity to achieve the goals of Section 109 of the Energy Policy Act of 2005 as soon as possible.

This interim final rule incorporates by reference ANSI/ASHRAE/IESNA Standard 90.1-2004, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, and the 2004 *International Energy Conservation Code* as prescribed by Congress in section 109 of the Energy Policy Act of 2005, into 10 CFR Parts 433 and 435, respectively. Under today's interim final rule, new Federal commercial and multi-family high-rise residential buildings, for which design for construction begins on or after the effective date of today's interim final rule, must be designed to comply with the ASHRAE standard. New Federal low-rise residential buildings, for which design for construction begins on or after the effective date of today's interim final rule, must be designed to comply with the IECC standard.

In addition to complying with the appropriate incorporated standard, a new Federal building must also be designed to achieve an energy consumption level that is at least 30 percent below the level achieved under that standard, if life-cycle cost-effective. Congress expressly specified a minimum performance requirement of a 30 percent improvement, if life-cycle cost effective. Although the statute requires DOE to establish performance standards that are "at least" 30 percent below the levels in the incorporated ASHRAE and IECC standards, the standards that DOE establishes today do not require Federal agencies to consider the life-cycle cost effectiveness of improvements beyond the 30 percent level.

It is DOE's view that had Congress sought to require improvements at a maximum level of life-cycle cost effectiveness, it would have mandated designs to achieve that level and would not have specified the 30 percent minimum. Moreover, absent some direction in the statute, DOE is unable to specify in today's rule an energy consumption level that is greater than 30 percent below the levels achieved under the incorporated standards, but less than the maximum level that would be cost effective. However, as indicated by the words "at least," Federal agencies are not precluded from designing buildings to achieve greater improvements, and DOE encourages agencies to design new Federal buildings to achieve lower energy

consumption levels if life-cycle cost effective.

Further, the experiences of ASHRAE (with the development of their Advanced Energy Design Guides for small office and small retail buildings) and the New Buildings Institute's (NBI) Advanced Buildings program indicate that a savings 30 percent beyond that achieved through the incorporated standards is achievable in most building types with measures that are relatively "standard;" i.e., with measures that are widely available and with which the general industry is familiar. The 30-percent requirement should not necessitate consideration of measures that are limited in availability or with which the general industry is unfamiliar.

If the additional 30 percent savings is not life-cycle cost-effective, an agency must evaluate the cost-effectiveness of alternative designs at successive decrements below 30 percent (e.g., 25 percent, 20 percent, etc.) in order to identify the most energy-efficient design that is life-cycle cost-effective for that building. However, the building must remain compliant with the ANSI/ASHRAE/IESNA Standard 90.1-2004, or IECC standard, as applicable. By requiring consideration of the life-cycle cost effectiveness of improvements if a 30 percent improvement is not life-cycle cost effective, today's final rule ensures that all readily available energy saving measures are considered.

Today's rule also specifies that the methodology defined in 10 CFR part 436, subpart A, be used to establish the life-cycle cost-effectiveness of design measures used to achieve energy consumption levels below the criteria found in the minimum level standards described above. This is done to be consistent with Executive Order 13123, which requires Federal agencies to use this methodology in the design of new Federal buildings, and to respond to the requirements in the Energy Policy Act of 2005 that requirements of the new standards be life-cycle cost-effective. Federal agencies may choose to use one of four methods listed in 10 CFR part 436 to demonstrate life-cycle cost-effectiveness. These methods include lower life-cycle costs, positive net savings, savings-to-investment ratio that is estimated to be greater than one, and an adjusted internal rate of return that is estimated to be greater than the discount rate as listed in OMB Circular Number A-94 "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs."

In applying this methodology to analysis of new Federal buildings, agencies must estimate the life-cycle

costs and energy consumption of the planned building as designed and an otherwise identical building just meeting the minimum criteria set forth in the applicable baseline ASHRAE or IECC standard. The agencies must try to find a design that reduces energy consumption by a total of 30 percent or more without increasing the planned building's expected life-cycle cost. DOE intends to provide additional guidance and tools to assist Federal agencies in meeting these new building design requirements.

Today's rule does not take a prescriptive approach as to how the 30 percent reduction is to be obtained. The baseline standards contain a limited set of mandatory requirements, such as sealing leaks in the building envelope and air duct systems. Beyond this, there are no restrictions on how the Federal agency achieves cost-effective energy savings. DOE believes that Federal agencies should be given the flexibility necessary to determine the most effective ways to achieve energy savings above that of the incorporated standards, rather than relying on prescriptive requirements that may not be appropriate in all cases.

Today's interim final rule is effective beginning 30 days following **Federal Register** publication. All new Federal buildings for which design for construction begins on or after that date must comply with the requirements established in this rule. All new Federal buildings for which design for construction has begun prior to that date must comply with the requirements in 10 CFR part 434 or subpart C of part 435, as applicable.

DOE is accepting comments on this interim final rule. The interim final rule will take effect on the date listed above in the **DATES** heading, and will become part of the CFR. Following close of the comment period, DOE will issue a notice of final rulemaking. If no comments are received, the notice of final rulemaking will adopt as final the interim final rule without change. If comments are received, DOE will respond to issues raised by the comments in the notice of final rulemaking, and either adopt as final the interim final rule without change, or adopt the final rule with change in response to comments.

### III. Section 109 of the Energy Policy Act of 2005 Requirements Not Addressed in Today's Rule

Today's rule does not address the requirement that, if life-cycle cost-effective for new Federal buildings, agencies must apply sustainable design principles to the siting, design, and

construction of all new and replacement buildings. Today's rule also does not address the requirement that "if water is used to achieve energy efficiency, the revised standards also must require water conservation technologies to be applied to the extent that such technologies are life-cycle cost-effective." Finally, today's rule does not consider measures with regard to radon and other indoor air pollutants. (42 U.S.C. 6834 (a)(3)(A)(ii)) The developmental process for addressing these complicated issues will take more time and DOE will issue a rulemaking notice containing provisions on these subjects at a later date. DOE is proceeding with the implementation of only the energy efficiency element from the directives of section 305(a) of the Energy Policy Act of 2005 in this interim final rule so that energy efficiency in Federal buildings can be improved as soon as possible.

### IV. Reference Resources

The Department has prepared a list of resources to help Federal agencies achieve building energy efficiency levels of at least 30 percent below that of ASHRAE Standard 90.1-2004 or the 2004 IECC. These resources come in many forms—design guidance, case studies and in a variety of media—in printed document or on Web site. Resources are provided in three categories—for all buildings, specifically for commercial and high-rise multi-family residential buildings, and specifically for low-rise residential buildings.

#### Resources for All Buildings

Energy Efficient Products—U.S. DOE Federal Energy Management Program and U.S. Environmental Protection Agency (EPA) ENERGY STAR Program  
<http://www.eere.energy.gov/femp/procurement/> and <http://www.energystar.gov/products>

Federal agencies are required by the Energy Policy Act of 2005 to specify FEMP-designated or ENERGY STAR equipment, including building mechanical and lighting equipment and builder-supplied appliances, for purchase and installation in all new construction. This equipment is generally more efficient than the corresponding requirements of ASHRAE Standard 90.1-2004 and the 2004 IECC, and may be used to achieve part of the savings required of Federal building designs. (Today's rule does not specifically address the use of this equipment, but the Web site is listed for the convenience of the agencies and to point out that this is a very useful

resource for achieving part of the energy savings required by the rule.)

Life-Cycle Cost Analysis—U.S. DOE Federal Energy Management Program

[http://www.access.gpo.gov/nara/cfr/waisidx\\_04/10cfr436\\_04.html](http://www.access.gpo.gov/nara/cfr/waisidx_04/10cfr436_04.html)

The life-cycle cost analysis rules promulgated in 10 CFR Part 436 Subpart A, *Methodology and Procedures for Life Cycle Cost Analysis*, conform to requirements in the Federal Energy Management Improvement Act of 1988 and subsequent energy conservation legislation, as well as Executive Order 13123, *Greening the Government through Efficient Energy Management*. The life-cycle cost guidance and required discount rates and energy price projections are determined annually by FEMP and the Energy Information Administration, and published in the Annual Supplement to The National Institute of Science and Technology Handbook 135: "Energy Price Indices and Discount Factors for Life-Cycle Cost Analysis."

<http://www.eere.energy.gov/femp/pdfs/ashb06.pdf>. FEMP also provides guidance on the LCC requirements of Executive Order 13123 at

<http://www1.eere.energy.gov/femp/program/lifecycle.html> and [http://www1.eere.energy.gov/femp/information/download\\_bfcc.html](http://www1.eere.energy.gov/femp/information/download_bfcc.html).

ENERGY STAR Buildings—The U.S. Environmental Protection Agency and U.S. Department of Energy

[https://www.energystar.gov/index.cfm?c=bldrs\\_lenders\\_raters.homes\\_guidelns09](https://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.homes_guidelns09) (homes) and [https://www.energystar.gov/index.cfm?c=new\\_bldg\\_design.bus\\_target\\_finder](https://www.energystar.gov/index.cfm?c=new_bldg_design.bus_target_finder) (non-residential buildings)

ENERGY STAR is a Government-backed program helping businesses and individuals protect the environment through superior energy efficiency. The EPA specifications for ENERGY STAR-labeled homes, effective as of the date of this rule, provide a useful prescriptive guide for meeting the Federal energy efficiency standard for low-rise residential buildings. The benchmarking tool and other information at the ENERGY STAR TargetFinder Web site can be useful in determining an annual energy target for the building design and computer simulations, evaluating cost-effectiveness of efficiency measures, and tracking the building's actual energy performance after construction.

High Performance Buildings—U.S. DOE Building Technologies Program  
<http://www.eere.energy.gov/buildings/highperformance/>

A collection of design approaches, tools, technologies and case studies focused on high performance buildings that achieve savings of 30 percent to 50 percent better than generally accepted good practice.

Building Energy Software Tools—U.S. DOE Building Technologies Program  
[http://www.eere.energy.gov/buildings/tools\\_directory/](http://www.eere.energy.gov/buildings/tools_directory/)

This directory provides information on building software tools for evaluation energy efficiency, renewable energy, and sustainability in buildings.

*Resources for Commercial and High-Rise Multi-Family Residential Buildings*

ASHRAE Standard 90.1–2004—ASHRAE

<http://www.ashrae.org> (search for Standard 90.1–2004) or  
<http://resourcecenter.ashrae.org/store/ashrae/newstore.cgi?itemid=27679&view=item&page=1&loginid=6683225&words=Standard%2090.1-2004&method=and&>

The Minimum Energy Performance Standard for commercial and high-rise multi-family buildings is ANSI/ASHRAE/IESNA Standard 90.1–2004. This link also contains a link to a read-only version of Standard 90.1–2004.

Whole Building Design Guide—National Institute of Building Sciences

<http://www.wbdg.org>

A portal providing one-stop access to up-to-date information on a wide range of building-related guidance, criteria and technology from a ‘whole buildings’ perspective.

Advanced Energy Design Guide—ASHRAE

<http://www.ashrae.org> (search for Advanced Energy Design Guide) or  
<http://resourcecenter.ashrae.org/store/ashrae/newstore.cgi?itemid=23307&view=item&page=1&loginid=6683251&words=Advanced%20Energy%20Design%20Guide&method=and&>

A set of design guides for users who wish to go beyond Standard 90.1, targeted at 30 percent better than ASHRAE Standard 90.1–1999 (which translates to about 25 percent better than ASHRAE standard 90.1–2004).

Advanced Buildings™  
 E-Benchmark™—New Buildings Institute  
<http://www.poweryourdesign.com>

A set of guidelines for the design, construction, and operation of new and renovated nonresidential buildings targeted at 30 percent better than ASHRAE Standard 90.1–1999 (which translates to about 25 percent better than ASHRAE Standard 90.1–2004).

Labs for the 21st Century—U.S. EPA and U.S. DOE

<http://www.labs21century.gov/>

A Web site focused on improving the energy efficiency and environmental performance of laboratory space. This site includes training and educational resources and design tools focused on laboratories.

Leadership in Energy and Environmental Design (LEED)—U.S. Green Building Council (USGBC)

<http://www.usgbc.org/DisplayPage.aspx?CategoryID=19>

The LEED Green Building Rating System® is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. USGBC members, representing every sector of the building industry, developed and continue to refine LEED.

*Resources for Low-Rise Residential Buildings*

2004 Supplement to the 2003 IECC—ICC

<http://www.iccsafe.org> (search for 2004 IECC) or <http://www.iccsafe.org/dyn/prod/7801S04.html>

The Minimum Energy Performance Standard for low-rise residential buildings is the International Code Council (ICC) 2004 IECC Supplement.

Residential Energy Services Network (RESNET)

<http://www.natresnet.org/programs/software/directory.htm>

RESNET is responsible for home energy rating systems used for energy efficient mortgages. RESNET activities include adopting standards that set the national procedures for home energy ratings and procedures for certifying raters. Since the home energy ratings utilize the 2004 IECC as the baseline, RESNET accredited software programs may be appropriate for calculating energy consumption to determine compliance with this rule.

Building America—U.S. Department of Energy

[http://www.eere.energy.gov/buildings/building\\_america/](http://www.eere.energy.gov/buildings/building_america/)

Building America is a private/public partnership that develops energy

solutions for new and existing homes. The Building America project combines the knowledge and resources of industry leaders with DOE’s technical capabilities. Together, they act as a catalyst for change in the home-building industry.

Energy & Environmental Building Association (EEBA)

<http://www.eeba.org/>

EEBA’s mission is to provide education and resources to transform the residential design, development and construction industries to profitably deliver energy efficient and environmentally responsible buildings and communities.

The Partnership for Advancing Technology in Housing (PATH)—U.S. Department of Housing and Urban Development

[http://www.pathnet.org/sp.asp?mc=about\\_path](http://www.pathnet.org/sp.asp?mc=about_path)

PATH is dedicated to accelerating the development and use of technologies that radically improve the quality, durability, energy efficiency, environmental performance, and affordability of America’s housing. PATH is a voluntary partnership between leaders of the homebuilding, product manufacturing, insurance, and financial industries and representatives of Federal agencies concerned with housing.

## V. Procedural Requirements

*A. Review under Executive Order 12866, “Regulatory Planning and Review”*

Today’s interim final rule is a “significant regulatory action” under section 3(f)(1) of Executive Order 12866, “Regulatory Planning and Review.” 58 FR 51735 (October 4, 1993). Accordingly, today’s action was subject to review by the Office of Information and Regulatory Affairs in the Office of Management and Budget (OMB). OMB has completed its review.

*B. Review under the Regulatory Flexibility Act*

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires the preparation of an initial regulatory flexibility analysis for any rule that by law must be proposed for public comment, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities. As required by Executive Order 13272, *Proper Consideration of Small Entities in Agency Rulemaking*, 67 FR 53461 (August 16, 2002), DOE published procedures and policies on February 19,

2003, to ensure that the potential impacts of its rules on small entities are properly considered during the rulemaking process. 68 FR 7990. The Department has made its procedures and policies available on the Office of General Counsel's Web site: <http://www.gc.doe.gov>.

Today's rule on energy efficiency performance standards for the design and construction of new Federal buildings is not subject to any legal requirement to publish a general notice of proposed rulemaking. Therefore, the Regulatory Flexibility Act does not apply.

#### *C. Review Under the Paperwork Reduction Act of 1995*

This rulemaking will impose no new information or record keeping requirements. Accordingly, Office of Management and Budget (OMB) clearance is not required under the Paperwork Reduction Act. (44 U.S.C. 3501 *et seq.*)

#### *D. Review Under the National Environmental Policy Act of 1969*

The Department prepared an Environmental Assessment (EA) (DOE/EA-1463) entitled, Draft Environmental Assessment for Interim Final Rule, 10 CFR Part 433, "Energy Efficiency Standards for New Federal Commercial and Multi-Family High-Rise Residential Buildings," and 10 CFR Part 435, "Energy Efficiency Standards for New Federal Low-Rise Residential Buildings," pursuant to the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR Parts 1500–1508), the National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321 *et seq.*), and DOE's NEPA Implementing Procedures (10 CFR Part 1021).

The EA addresses the possible environmental effects attributable to the implementation of the interim final rule. The only impact would be a decrease in outdoor air pollutants resulting from decreased fossil fuel burning for energy use in Federal buildings.

To identify the potential environmental impacts that may result from implementing the interim final rule on new Federal commercial buildings, DOE compared the interim final rule with a "no-action alternative" of using the current Federal standards—10 CFR Part 434 and 10 CFR Part 435. DOE also compared the interim final rule to the prevailing national voluntary building energy codes, which also are the minimum requirements for the interim final rule. For commercial and

high-rise multi-family residential buildings, the American National Standards Institute (ANSI)/American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE)/Illuminating Engineering Society of North America (IESNA) ASHRAE/IESNA Standard 90.1–2004 (ASHRAE 2004) is the minimum requirement for the DOE preferred alternative. For low-rise residential buildings, the International Code Council (ICC) International Energy Conservation Code (IECC) 2004 Supplement Edition (ICC 2004) is the minimum requirement for the DOE preferred alternative. For the purpose of this environmental assessment, DOE also investigated the impact of buildings achieving energy consumption below Standard 90.1–2004 or the 2004 IECC in increments of 10 percent, up to 50 percent.

For low-rise residential buildings, the Federal government is estimated to construct about 2000 housing units annually that would be subject to this rule. Avoided carbon dioxide emissions are estimated at 763 metric tons of carbon in the first year the interim final rule is in effect, if 30 percent savings in energy consumption over the 2004 IECC are achieved. Avoided nitrogen oxide and sulfur dioxide emissions are estimated to be each 4 tons in the first year the rule is in effect.

For commercial and high-rise multi-family residential buildings, the Federal government is estimated to construct 28 million square feet of Federal commercial buildings annually. Federal high-rise residential buildings are rare. Assuming a 30 percent savings in energy consumption over 90.1–2004, avoided carbon dioxide emissions (relative to the existing 10 CFR Part 434) are estimated at 35,800 metric tons of carbon in the first year the interim final rule is in effect, with the savings compounding in future years as more and more Federal construction occurs. Avoided nitrogen oxide emissions are estimated to be 317 tons in the first year the rule is in effect, while the avoided sulfur dioxide emissions are estimated at 625 tons.

Copies of the EA are available for review at <http://www.eere.energy.gov/femp/about/legislation.html>, or by contacting Cyrus Nasseri, Office of Federal Energy Management, Mail Station, EE-2L, 1000 Independence Avenue, 20585-0121, (202) 586-9138. Comments on the EA may be submitted to DOE at this address by the comment date noted above under the **DATES** heading. DOE will consider all comments received before approving or modifying the EA, as appropriate.

#### *E. Review Under Executive Order 13132, "Federalism"*

Executive Order 13132, "Federalism," 64 FR 43255 (August 4, 1999), imposes certain requirements on agencies formulating and implementing policies or regulations that preempt State law or that have federalism implications. The Executive Order requires agencies to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and to carefully assess the necessity for such actions. The Executive Order also requires agencies to have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications. On March 14, 2000, DOE published a statement of policy describing the intergovernmental consultation process it will follow in the development of such regulations. (65 FR 13735). DOE examined this rule and determined that it does not preempt State law and does not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of Government. No further action is required by Executive Order 13132.

#### *F. Review Under Executive Order 12988, "Civil Justice Reform"*

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, "Civil Justice Reform," 61 FR 4729 (February 7, 1996), imposes on Federal agencies the general duty to adhere to the following requirements: (1) Eliminate drafting errors and ambiguity; (2) write regulations to minimize litigation; and (3) provide a clear legal standard for affected conduct, rather than a general standard and promote simplification and burden reduction. Section 3(b) of Executive Order 12988 specifically requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) Clearly specifies the preemptive effect, if any; (2) clearly specifies any effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct, while promoting simplification and burden reduction; (4) specifies the retroactive effect, if any; (5) adequately defines key terms; and (6) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires Executive agencies to

review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law; this rule meets the relevant standards of Executive Order 12988.

*G. Review Under the Unfunded Mandates Reform Act of 1995*

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA) (Pub. L. 104-4) requires each Federal agency to assess the effects of Federal regulatory actions on State, local, and tribal governments and the private sector. For a proposed regulatory action likely to result in a rule that may cause the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector of \$100 million or more in any one year (adjusted annually for inflation), section 202 of UMRA requires a Federal agency to publish a written statement that estimates the resulting costs, benefits, and other effects on the national economy. (2 U.S.C. 1532(a) and (b)) The UMRA also requires a Federal agency to develop an effective process to permit timely input by elected officers of State, local, and tribal governments on a proposed “significant intergovernmental mandate,” and requires an agency plan for giving notice and opportunity for timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect small governments. On March 18, 1997, DOE published a statement of policy on its process for intergovernmental consultation under UMRA (62 FR 12820) (also available at <http://www.gc.doe.gov>). This interim final rule contains neither an intergovernmental mandate nor a mandate that may result in the expenditure of \$100 million or more in any year, so these requirements under the Unfunded Mandates Reform Act do not apply.

*H. Review Under the Treasury and General Government Appropriations Act of 1999*

Section 654 of the Treasury and General Government Appropriations Act of 1999 (Pub. L. 105-277) requires Federal agencies to issue a Family Policymaking Assessment for any rule that may affect family well-being. This interim final rule would not have any impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

*I. Review Under Executive Order 12630, “Governmental Actions and Interference With Constitutionally Protected Property Rights”*

The Department has determined, under Executive Order 12630, “Governmental Actions and Interference with Constitutionally Protected Property Rights,” 53 FR 8859 (March 18, 1988), that this rule would not result in any takings which might require compensation under the Fifth Amendment to the United States Constitution.

*J. Review Under the Treasury and General Government Appropriations Act, 2001*

Section 515 of the Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516, note) provides for agencies to review most disseminations of information to the public under guidelines established by each agency pursuant to general guidelines issued by OMB. OMB’s guidelines were published at 67 FR 8452 (February 22, 2002), and DOE’s guidelines were published at 67 FR 62446 (October 7, 2002). DOE has reviewed today’s interim final rule under the OMB and DOE guidelines and has concluded that it is consistent with applicable policies in those guidelines.

*K. Review Under Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use”*

Executive Order 13211, “Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use,” 66 FR 28355 (May 22, 2001), requires Federal agencies to prepare and submit to the Office of Information and Regulatory Affairs (OIRA), Office of Management and Budget, a Statement of Energy Effects for any proposed significant energy action. A “significant energy action” is defined as any action by an agency that promulgated or is expected to lead to promulgation of a final rule, and that: (1) Is a significant regulatory action under Executive Order 12866, or any successor order; and (2) is likely to have a significant adverse effect on the supply, distribution, or use of energy, or (3) is designated by the Administrator of OIRA as a significant energy action. For any proposed significant energy action, the agency must give a detailed statement of any adverse effects on energy supply, distribution, or use should the proposal be implemented, and of reasonable alternatives to the action and their expected benefits on energy supply, distribution, and use.

This interim final rule would not have a significant adverse effect on the supply, distribution, or use of energy and, therefore, is not a significant energy action. Accordingly, DOE has not prepared a Statement of Energy Effects.

**VI. Congressional Notification**

As required by 5 U.S.C. 801, DOE will report to Congress on the promulgation of this rule prior to its effective date. The report will state that it has been determined that the rule is not a “major rule” as defined by 5 U.S.C. 804(2).

**VII. Approval of the Office of the Secretary**

The Secretary of Energy has approved publication of today’s interim final rule.

**List of Subjects in 10 CFR Parts 433, 434, and 435**

Buildings, Energy conservation, Engineers, Federal buildings and facilities, Housing, Incorporation by reference.

Issued in Washington, DC, on November 22, 2006.

**Alexander A. Karsner,**  
*Assistant Secretary, Energy Efficiency and Renewable Energy.*

- For the reasons set forth in the preamble, DOE amends chapter II of title 10 of the Code of Federal Regulations as set forth below:
- 1. Part 433 is added to read as follows:

**PART 433—ENERGY EFFICIENCY STANDARDS FOR THE DESIGN AND CONSTRUCTION OF NEW FEDERAL COMMERCIAL AND MULTI-FAMILY HIGH-RISE RESIDENTIAL BUILDINGS**

Sec.

- 433.1 Purpose and scope.
- 433.2 Definitions.
- 433.3 Materials incorporated by reference.
- 433.4 Energy efficiency performance standard.
- 433.5 Performance level determination.
- 433.6 Sustainable principles for siting, design and construction. [Reserved]
- 433.7 Water used to achieve energy efficiency. [Reserved]
- 433.8 Life-cycle costing.

**Authority:** 42 U.S.C. 6831–6832, 6834–6835; 42 U.S.C. 7101 *et seq.*

**§ 433.1 Purpose and scope.**

This part establishes an energy efficiency performance standard for the new Federal commercial and multi-family high-rise buildings, for which design for construction began on or after January 3, 2007, as required by section 305(a) of the Energy Conservation and Production Act, as amended (42 U.S.C. 6834(a)).

**§ 433.2 Definitions.**

For purposes of this part, the following terms, phrases and words are defined as follows:

**ANSI** means the American National Standards Institute.

**ASHRAE** means the American Society of Heating, Refrigerating and Air-Conditioning Engineers.

**Baseline building** means a building that is otherwise identical to the proposed building but is designed to meet but not exceed the energy efficiency specifications of *ANSI/ASHRAE/IESNA Standard 90.1-2004, Energy Standard for Buildings Except Low-Rise Residential Buildings*, January 2004 (incorporated by reference, see § 433.3).

**Commercial and multi-family high-rise residential building** means all buildings other than low-rise residential buildings.

**DOE** means the U.S. Department of Energy.

**Federal agency** means any department, agency, corporation, or other entity or instrumentality of the executive branch of the Federal Government, including the United States Postal Service, the Federal National Mortgage Association, and the Federal Home Loan Mortgage Corporation.

**IESNA** means Illuminating Engineering Society of North America.

**Life-cycle cost** means the total cost related to energy conservation measures of owning, operating and maintaining a building over its useful life as determined in accordance with 10 CFR part 436.

**Life-cycle cost-effective** means that the proposed building has a lower life-cycle cost than the life-cycle costs of the baseline building, as described by 10 CFR 436.19, or has a positive estimated net savings, as described by 10 CFR 436.20; or has a savings-to-investment ratio estimated to be greater than one, as described by 10 CFR 436.21; or has an adjusted internal rate of return, as described by 10 CFR 436.22, that is estimated to be greater than the discount rate as listed in OMB Circular Number A-94 (Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs.)

**Low-rise residential building** means any building three stories or less in height above grade that includes sleeping accommodations where the occupants are primarily permanent in nature (30 days or more).

**New Federal building** means any building to be constructed by, or for the use of, any Federal agency which is not legally subject to State or local building codes or similar requirements.

**Proposed building** means the building design of a new Federal commercial and multi-family high-rise building proposed for construction.

**§ 433.3 Materials incorporated by reference.**

(a) **General.** DOE incorporates by reference the energy performance standard listed in paragraph (b) of this section into 10 CFR part 433. The Director of the Federal Register has approved the material listed in paragraph (b) of this section for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Any subsequent amendment to this material by the standard-setting organization will not affect the DOE building energy performance standard unless and until DOE amends its building energy performance standards. DOE incorporates the material as it exists on the date specified in the approval and a notice of any change in the material will be published in the **Federal Register**.

(b) **List of standards incorporated by reference.** *ANSI/ASHRAE/IESNA Standard 90.1-2004, Energy Standard for Buildings Except Low-Rise Residential Buildings*, January 2004, American Society of Heating Refrigerating and Air-Conditioning Engineers, Inc., ISSN 1041-2336.

(c) **Availability of references.** The building energy performance standard incorporated by reference is available for inspection at:

(1) National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html)

(2) U.S. Department of Energy, Forrestal Building, Room 1M-048 (Resource Room of the Federal Energy Management Program), 1000 Independence Avenue, SW., Washington, DC 20585-0121, (202) 586-9138, between 9 a.m. and 4 p.m., Monday through Friday, except Federal holidays.

(d) **Obtaining copies of standards.** The building energy performance standard incorporated by reference may be obtained from the American Society of Heating Refrigerating and Air-Conditioning Engineers, 1791 Tullie Circle, NE., Atlanta, GA, 30329, <http://resourcecenter.ashrae.org/store/ashrae/>.

**§ 433.4 Energy efficiency performance standard.**

(a) All Federal agencies shall design new Federal commercial and multi-family high-rise residential buildings, for which design for construction began on or after January 3, 2007, to:

(1) Meet *ANSI/ASHRAE/IESNA Standard 90.1-2004, Energy Standard for Buildings Except Low-Rise Residential Buildings*, January 2004 (incorporated by reference, see 433.3); and

(2) If life-cycle cost-effective, achieve energy consumption levels, calculated consistent with paragraph (b) of this section, that are at least 30 percent below the levels of the baseline building.

(b) Energy consumption for the purposes of calculating the 30 percent savings shall include space heating, space cooling, ventilation, service water heating, lighting and all other energy consuming systems normally specified as part of the building design except for receptacle and process loads.

(c) If a 30 percent reduction is not life-cycle cost-effective, the design of the proposed building shall be modified so as to achieve an energy consumption level at the maximum level of energy efficiency that is life-cycle cost-effective, but at a minimum complies with paragraph (a) of this section.

**§ 433.5 Performance level determination.**

(a) Each Federal agency shall determine energy consumption levels for both the baseline building and proposed building by using the Performance Rating Method found in Appendix G of *ANSI/ASHRAE/IESNA Standard 90.1-2004, Energy Standard for Buildings Except Low-Rise Residential Buildings*, January 2004 (incorporated by reference, see (433.3)), except the formula for calculating the Performance Rating in paragraph G1.2 shall read as follows:

Percentage improvement =  $100 \times \frac{(\text{Baseline building consumption} - \text{Proposed building consumption})}{(\text{Baseline building consumption} - \text{Receptacle and process loads})}$ .

(b) Each Federal agency shall consider laboratory fume hoods and kitchen ventilation systems as part of the ASHRAE-covered HVAC loads subject to the 30 percent savings requirements, rather than as process loads.

**§ 433.6 Sustainable principles for siting, design and construction. [Reserved]****§ 433.7 Water used to achieve energy efficiency. [Reserved]****§ 433.8 Life-cycle costing.**

Each Federal agency shall determine life-cycle cost-effectiveness by using the procedures set out in subpart A of part 436. A Federal agency may choose to use any of four methods, including lower life-cycle costs, positive net savings, savings-to-investment ratio that is estimated to be greater than one, and an adjusted internal rate of return that is estimated to be greater than the discount rate as listed in OMB Circular Number A-94 "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs."

**PART 434—ENERGY CODE FOR NEW FEDERAL COMMERCIAL AND MULTI-FAMILY HIGH RISE RESIDENTIAL BUILDINGS**

- 2. Amend part 434 by revising the part heading to read as set forth above.
- 3. The authority citation for part 434 continues to read as follows:

**Authority:** 42 U.S.C. 6831–6832, 6834–6836; 42 U.S.C. 8253–54; 42 U.S.C. 7101, *et seq.*

- 4. Section 434.100 is revised to read as follows:

**§ 434.100 Purpose.**

The provisions of this part provide minimum standards for energy efficiency for the design of new Federal commercial and multi-family high rise residential buildings, for which design for construction began before January 3, 2007. The performance standards are designed to achieve the maximum practicable improvements in energy efficiency and increases in the use of non-depletable sources of energy. This rule is based upon the ASHRAE/IESNA Standard 90.1-1989 and addenda b, c, d, e, f, g, and i. (This document is available from the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 1791 Tullie Circle NE, Atlanta, GA.) It is not incorporated by reference in this document, but is mentioned for informational purposes only.

- 5. In § 434.101, revise paragraph 101.1 to read as follows:

**§ 434.100 Scope.**

101.1 This part provides design requirements for the building envelope, electrical distribution systems and equipment for electric power, lighting, heating, ventilating, air conditioning, service water heating and energy

management. It applies to new Federal multi-family high rise residential buildings and new Federal commercial buildings, for which design for construction began before January 3, 2007.

\* \* \* \* \*

**PART 435—ENERGY EFFICIENCY STANDARDS FOR NEW FEDERAL LOW-RISE RESIDENTIAL BUILDINGS**

- 6. The authority citation for part 435 continues to read as follows:

**Authority:** 42 U.S.C. 6831–6832, 6834–6835; 42 U.S.C. 8253–54; 42 U.S.C. 7101 *et seq.*

- 7. Amend part 435 to add Subpart A to read as follows:

**Subpart A—Mandatory Energy Efficiency Standards for Federal Low-Rise Residential Buildings.**

## Sec.

- 435.1 Purpose and scope.
- 435.2 Definitions.
- 435.3 Material incorporated by reference.
- 435.4 Energy efficiency performance standard.
- 435.5 Performance level determination.
- 435.6 Sustainable principles for siting, design and construction. [Reserved]
- 435.7 Water used to achieve energy efficiency. [Reserved]
- 435.8 Life-cycle costing.

**§ 435.1 Purpose and scope.**

This part establishes energy efficiency performance standard for the construction of new Federal low-rise residential buildings as required by section 305(a) of the Energy Conservation and Production Act, as amended (42 U.S.C. 6834(a)).

**§ 435.2 Definitions.**

For purposes of this part, the following terms, phrases and words shall be defined as follows:

*Baseline building* means a new Federal low-rise residential building that is otherwise identical to the proposed building but is designed to meet but not exceed the energy efficiency specifications in the *ICC International Energy Conservation Code, 2004 Supplement Edition*, January 2005 (incorporated by reference, see § 435.3).

*DOE* means U.S. Department of Energy.

*Federal agency* means any department, agency, corporation, or other entity or instrumentality of the executive branch of the Federal Government, including the United States Postal Service, the Federal National Mortgage Association, and the Federal Home Loan Mortgage Corporation.

*ICC* means International Code Council.

*IECC* means International Energy Conservation Code.

*Life-cycle cost* means the total cost related to energy conservation measures of owning, operating and maintaining a building over its useful life as determined in accordance with 10 CFR part 436.

*Life-cycle cost-effective* means that the proposed building has a lower life-cycle cost than the life-cycle costs of the baseline building, as described by 10 CFR 436.19, or has a positive estimated net savings, as described by 10 CFR 436.20, or has a savings-to-investment ratio estimated to be greater than one, as described by 10 CFR 436.21; or has an adjusted internal rate of return, as described by 10 CFR 436.22, that is estimated to be greater than the discount rate as listed in OMB Circular Number A-94 "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs."

*Low-rise residential building* means any building three stories or less in height above grade that includes sleeping accommodations where the occupants are primarily permanent in nature (30 days or more).

*New Federal building* means any building to be constructed by, or for the use of, any Federal agency which is not legally subject to State or local building codes or similar requirements.

*Proposed building* means the building design of a new Federal low-rise residential building proposed for construction.

**§ 435.3 Material incorporated by reference.**

(a) *General.* DOE incorporates by reference the energy performance standard listed in paragraph (b) of this section into 10 CFR Part 435 subpart A. The Director of the Federal Register has approved the material listed in paragraph (b) of this section for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Any subsequent amendment to this material by the standard-setting organization will not affect the DOE building energy performance standard unless and until DOE amends its building energy performance standards. DOE incorporates the material as it exists on the date specified in the approval and a notice of any change in the material will be published in the **Federal Register**.

(b) *List of standards incorporated by reference.* *ICC International Energy Conservation Code (IECC), 2004 Supplement Edition*, January 2005,

International Code Council, ISBN 7801S04.

(c) *Availability of references.* The building energy performance standard incorporated by reference is available for inspection at:

(1) National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html)

(2) U.S. Department of Energy, Forrestal Building, Room 1M-048 (Resource Room of the Federal Energy Management Program), 1000 Independence Avenue, SW., Washington, DC 20585-0121, (202) 586-9138, between 9 a.m. and 4 p.m., Monday through Friday, except Federal holidays.

(d) *Obtaining copies of standards.* The building energy performance standard incorporated by reference may be obtained from the following source: the International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, <http://www.iccsafe.org/e/category.html>

#### **§ 435.4 Energy efficiency performance standard.**

(a) All Federal agencies shall design new Federal low-rise residential buildings, for which design for construction began on or after January 3, 2007, to:

(1) Meet *ICC International Energy Conservation Code, 2004 Supplement Edition*, January 2005 (incorporated by reference, see § 435.3), and

(2) If life-cycle cost-effective, achieve energy consumption levels, calculated consistent with paragraph (b) of this section, that are at least 30 percent below the levels of the baseline building.

(b) Energy consumption for the purposes of calculating the 30 percent savings shall include space heating, space cooling, and domestic water heating.

(c) If a 30 percent reduction is not life-cycle cost-effective, the design of the proposed building shall be modified so as to achieve an energy consumption level at the maximum level of energy efficiency that is life-cycle cost-effective, but at a minimum complies with paragraph (a) of this section.

#### **§ 435.5 Performance level determination.**

Each Federal agency shall determine energy consumption levels for both the baseline building and proposed building by using the Simulated Performance Alternative found in section 404 of the

*ICC International Energy Conservation Code, 2004 Supplement Edition*, January 2005 (incorporated by reference, see § 435.3).

#### **§ 435.6 Sustainable principles for siting, design and construction. [Reserved]**

#### **§ 435.7 Water used to achieve energy efficiency. [Reserved]**

#### **§ 435.8 Life-cycle costing.**

Each Federal agency shall determine life-cycle cost-effectiveness by using the procedures set out in subpart A of 10 CFR part 436. A Federal agency may choose to use any of four methods, including lower life-cycle costs, positive net savings, savings-to-investment ratio that is estimated to be greater than one, and an adjusted internal rate of return that is estimated to be greater than the discount rate as listed in OMB Circular Number A-94 “Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs.”

### **Subpart C—Mandatory Energy Efficiency Standards for Federal Residential Buildings.**

■ 8. Amend part 435 to revise the heading of Subpart C to read as set forth above.

■ 9. Amend § 435.300 to revise paragraphs (b) and (c) to read as follows:

#### **§ 435.300 Purpose.**

\* \* \* \* \*

(b) Voluntary energy conservation performance standards prescribed under this subpart shall be developed solely as guidelines for the purpose of providing technical assistance for the design of energy conserving buildings, and shall be mandatory only for the Federal buildings for which design for construction began before January 3, 2007.

(c) The energy conservation performance standards will direct Federal policies and practices to ensure that cost-effective energy conservation features will be incorporated into the designs of all new Federal residential buildings for which design for construction began January 3, 2007.

■ 10. Amend § 435.301 to revise paragraph (a) to read as follows:

#### **§ 435.301 Scope.**

(a) The energy conservation performance standards in this subpart will apply to all Federal residential buildings for which design of construction began before January 3, 2007 except multifamily buildings more than three stories above grade.

\* \* \* \* \*

■ 11. Amend § 435.303 to revise the section heading and paragraphs (a) and (b) to read as follows:

#### **§ 435.303 Requirements for the design of a Federal residential building.**

(a) The head of each Federal agency responsible for the construction of Federal residential buildings shall establish an energy consumption goal for each residential building to be designed or constructed by or for the agency, for which design for construction began before January 3, 2007.

(b) The energy consumption goal for a Federal residential building for which design for construction began before January 3, 2007, shall be a total point score derived by using the micro-computer program and user manual entitled “Conservation Optimization Standard for Savings in Federal Residences (COSTSAFR),” unless the head of the Federal agency shall establish more stringent requirements for that agency.

\* \* \* \* \*

[FR Doc. E6-20439 Filed 12-1-06; 8:45 am]  
BILLING CODE 6450-01-P

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

[Docket No. FAA-2006-26112; Directorate Identifier 2006-NE-35-AD; Amendment 39-14837; AD 2006-24-08]

RIN 2120-AA64

#### **Airworthiness Directives; Pratt & Whitney Canada (P&WC) PW535A Turbofan Engines**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule; request for comments.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as fuel manifold leakage that could result in engine fire, in-flight shutdown or damage to the airframe. This AD requires actions that are intended to address the unsafe condition described in the MCAI.

**DATES:** This AD becomes effective December 19, 2006. The Director of the