DEPARTMENT OF ENERGY

Office of Energy Efficiency and Renewable Energy

10 CFR Part 430

[Docket No. EE-RM-93-501]

Energy Conservation Program for Consumer Products: Test Procedures for Furnaces/Boilers, Vented Home Heating Equipment, and Pool Heaters

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

ACTION: Proposed rule; reopening of comment period.

SUMMARY: On Monday, August 23, 1993, the Department of Energy (DOE or Department) published a proposed rule amending furnace and boiler, vented home heating equipment, and pool heater test procedures (58 FR 44538). Among the various proposed technical changes and revisions, that notice proposed a revision to the existing Energy Factor and proposed a new energy efficiency descriptor, Annual Efficiency. A multiplication factor (Ffactor), which represented the ratio of the energy consumed at the power plant to generate the auxiliary electric energy delivered to the fossil-fueled appliance to the useful heat equivalent of that electrical energy delivered at the appliance, was applied to the auxiliary energy in the calculation of the proposed Energy Factor and Annual Efficiency. Today's notice announces a reopening of the comment period to seek comment on an alternative definition of the F-factor based on the ratio of the national average cost of the auxiliary electrical energy to the national average cost of the fossil fuel energy on a common unit energy basis. DOE is soliciting comments, data, and information respecting this alternative energy cost factor.

DATES: Written comments in response to this document must be received by February 21, 1995.

ADDRESSES: Written comments and statements shall be submitted to: U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, "Test Procedures for Furnaces/Boilers, Vented Home Heating Equipment, and Pool Heaters," (Docket No. EE–RM–93–501), Mail Stop EE–43, Room 5E–066, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586–7574.

Copies of the transcript of the public hearing and the comments received may be read and/or photocopied at the DOE Freedom of Information Reading Room, U.S. Department of Energy, Forrestal Building, Room 1E–190, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586–6020, between the hours of 9 a.m. and 4 p.m., Monday through Friday, except Federal holidays.

The Department proposed to incorporate by reference in the Final Rule the following standards:

1. American National Standards Institute/American Society of Heating, Refrigerating, and Air-Conditioning Engineers Standard 103–1993.

2. American National Standards Institute Standard Z21.56–1990.

Copies of these standards may be viewed at the Department of Energy Freedom of Information Reading Room at the address stated above. Copy of the American National Standards Institute/ American Society of Heating, Refrigerating, and Air-Conditioning Engineers Standards 103, may be obtained from the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, 1791 Tullie Circle, Atlanta, Georgia 30329. A copy of the American National Standard Institute Standard Z21.56 may be obtained from American National Standards Institute, 11 West 42nd Street, New York, New York 10036.

FOR FURTHER INFORMATION CONTACT:

Cyrus H. Nasseri, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Mail Station, EE-431, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586-9138, FAX (202) 586-4617. Eugene Margolis, Esq., U.S. Department of Energy, Office of General Counsel, Mail Station, GC-72, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586-9507.

SUPPLEMENTARY INFORMATION:

I. Introduction

II. Discussion of Comments

III. Discussion of Issues for Further Comment

I. Introduction

On August 23, 1993, DOE published in the **Federal Register** a Notice of Proposed Rulemaking and public hearing for furnaces/boilers, vented home heating equipment, and pool heaters (hereafter referred to as the 1993 Proposed Rule) to amend the furnace, vented home heating equipment and pool heater test procedures (58 FR 44538). A public hearing was held in Washington, DC on January 5, 1994. Among the various proposed technical changes and revisions, a revision to the existing Energy Factor and a new energy efficiency descriptor, named Annual Efficiency, were proposed. An intent of

these proposed descriptors was to account for the electrical consumption of a furnace in its efficiency rating. To accomplish this, a multiplication factor (F-factor), which represented the ratio of the energy consumed at the power plant to generate the auxiliary electric energy consumed by the fossil fueled appliance to that auxiliary electrical energy, was applied to the auxiliary energy in the calculation of the proposed Energy Factor and Annual Efficiency.

The current DOE test procedure includes for information the computation of the annual fossil fuel and auxiliary electrical energy consumptions of fossil-fueled furnaces and boilers and an Energy Factor which includes both the fossil fuel and the auxiliary electrical energy consumption of the appliances. The Energy Factor is defined as the ratio of the annual output of energy delivered to the heated space by fossil-fueled appliances to the total annual energy input to the appliances including auxiliary electrical energy.

DOE proposed in the 1993 Proposed Rule the definition of Energy Factor as defined in ANSI/ASHRAE Standard 103–1988, with the provision that nonweatherized warm air furnaces are located indoors and all combustion and ventilation air is admitted through grills and ducts from the outdoors and does not communicate with air in the conditioned space [Isolated Combustion Systems (ICS)]. In addition, for those appliances such as mobile home furnaces and vented home heating equipment that are primarily installed indoors, DOE proposed a new descriptor, Annual Efficiency. The new annual efficiency descriptor was identical in form to the Energy Factor but for non-weatherized furnaces. For boilers and for weatherized warm air furnaces, Annual Efficiency and Energy Factor would be identical.

For fossil-fueled furnaces and boilers, the proposal defined "Energy Factor" as a term that gives credit for the electrical energy recovered as usable heat, such as from a blower motor that is in the circulating air stream. In addition, an Ffactor, representing the ratio of the energy consumed at the power plant to generate the auxiliary electric energy delivered to the fossil-fueled appliance to that auxiliary electrical energy, was applied to the auxiliary energy in the calculation of the proposed Energy Factor and Annual Efficiency. A typical value of 3.0 for the F-factor is presented as one used in California.

II. Discussion of Comments

This notice addresses comments received on the proposed Energy Factor and Annual Efficiency descriptors and,