DEPARTMENT OF ENERGY

Office of Energy Efficiency and Renewable Energy

10 CFR Part 430

Appliance and Equipment Energy Efficiency Standards: Public Workshop to Discuss Test Procedure Issues for Fluorescent and Incandescent Lamps

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

ACTION: Notice of public workshop.

SUMMARY: The Department of Energy (the Department) will hold a public workshop to discuss certain issues concerning test procedures for fluorescent and incandescent lamps. The issues for discussion and comment are the impact of measurement tolerances, testing and compliance of incandescent lamps at design voltage, voltage range of incandescent lamps, and the definitions of basic model and colored lamp. All persons are hereby given notice of the opportunity to submit written comments concerning these issues, and to attend the public workshop.

DATES: The public workshop will be held on Wednesday, July 19, 1995. Five copies of any written comments must be received by July 28, 1995.

ADDRESSES: Please label your written comments as "Comments on the Fluorescent and Incandescent Lamp Test Procedures" and submit them to Ms. Sandy Cooper, Office of Energy Efficiency and Renewable Energy, Mail Station EE–431, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585. Telephone: (202) 586–7574; Telefax: (202) 586– 4617.

The workshop will begin at 9:30 a.m. at the U.S. Department of Energy, Conference and Training Center, 1110 Vermont Avenue, NW., Suite 500, Room E, Washington, DC. Telephone: (202) 653–6788 or (202) 653–6789. Telefax: (202) 653–6799.

Copies of the comments on the Interim Final Rule for fluorescent and incandescent lamps are available in the DOE Freedom of Information Reading Room, U.S. Department of Energy, Forrestal Building, Room 1E–190, 1000 Independence Avenue, SW., Washington, DC, (202) 586–6020, between the hours of 9 a.m. and 4 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Terry Logee, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Forrestal Building, Mail Station EE–431, 1000 Independence Avenue SW., Washington, DC 20585, (202) 586– 1689

- James Raba, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Forrestal Building, Mail Station EE–431, 1000 Independence Avenue SW., Washington, DC 20585, (202) 586– 8654
- Eugene Margolis, Esq., U.S. Department of Energy, Office of General Counsel, Forrestal Building, Mail Station GC– 72, 1000 Independence Avenue SW., Washington, DC 20585, (202) 586– 9507.

SUPPLEMENTARY INFORMATION:

1. Authority

Part B of Title III of the Energy Policy and Conservation Act (EPCA), Pub. L. 94–163, as amended, created the Energy Conservation Program for Consumer Products other than Automobiles (Program). The products currently subject to this Program include certain fluorescent and incandescent lamps, and medium base compact fluorescent lamps among others. EPCA sets minimum energy conservation standards for general service fluorescent and incandescent reflector lamps, and requires the Department of Energy to develop test procedures.

2. Background

On September 28, 1994, the Department published an interim final rule defining "basic models" and establishing test procedures for general service fluorescent and incandescent lamps, and for medium based compact fluorescent lamps. 59 FR 49468. Also on September 28, 1994, the Department published a notice of proposed rulemaking to define colored fluorescent and incandescent lamps, and to define the exemption from energy conservation standards for a rough or vibration service incandescent reflector lamp. 59 FR 49478. The Department received eight comments on the interim final rule and the notice of proposed rulemaking, including comments from manufacturers, a national trade association, a professional society, a utility, and another Federal agency.

Certain comments included requests that: (1) The Department's test procedures be modified to make greater allowances for measurement uncertainty and manufacturing variance; (2) the Department permit testing and compliance for incandescent lamps at design voltage; (3) the Department define the term "basic model" as a class of lamps with similar lumen output and color rendering index; (4) the Department expand the voltage range from 115 through 130 volts in EPACT to 100 through 150 volts; (5) the Department define colored lamps as the ratio of two collinear distances on the chromaticity diagram or define colored lamps according to application specific requirements; and, (6) the Department define an exemption for the bulged reflector (BR) bulb shape incandescent reflector lamp. With respect to these points, the Department has determined that it should gather additional information and data, and further discussion should occur, before a final rule is issued.

3. Discussion

The purpose of the workshop is to gather information and data that will assist the Department in addressing the six aforementioned requests.

The National Electrical Manufacturers Association (NEMA), speaking for lamp manufacturers, claims that there are several sources of lamp testing variability. Reference lamp calibration errors and test procedure errors within and among laboratories cause measurement uncertainties. Manufacturing process and materials variations also contribute to testing variability. NEMA believes that these errors cannot be accounted for by sample size and confidence limits alone. NEMA recommends that a cumulative tolerance factor be used to determine compliance with the standard and it cites a tolerance factor of $\pm 2.95\%$ for general service fluorescent lamps. NEMA further recommends that the Department collaborate with industry, the National Voluntary Laboratory Accreditation Program (NVLAP) and the National Institute of Standards and Technology (NIST), to specify the applicable tolerance factors.

All parties should note that section 325(i)(1)(A) of the EPCA states that general service fluorescent lamps and incandescent reflector lamps "shall meet or exceed * * * lamp efficacy and CRI [color rendering index] standards.' Thus, the statute may prevent the Department from applying a negative tolerance factor to lamps. Participants at the workshop should be prepared to discuss whether the existing statistical sampling plan and confidence level approach or some other approach can provide adequate recognition of the manufacturing variances and measurement uncertainties in lamp testing and, if so, how. The Department would like to ascertain the magnitude of the measurement uncertainty in lamp testing and the magnitude of the