

DOE/EA-1748

**Finding of No Significant Impact for
10 CFR 431: Energy Conservation Standards for
Small Electric Motors**

March 2010

[6450-01-P]

DEPARTMENT OF ENERGY

10 CFR Part 431

[Docket Number: EERE-2007-STD-0007]

RIN 1904-AB70

Energy Conservation Program: Energy Conservation Standards for Small Electric Motors

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

ACTION: Finding of No Significant Impact: Energy Conservation Program

SUMMARY: The Energy Policy and Conservation Act, as amended (42 U.S.C. 6291 *et seq.* (EPCA), directs the Department of Energy (DOE) to adopt energy conservation standards for those small electric motors for which standards would be technologically feasible and economically justified, and would result in significant energy savings (42 U.S.C. 6317(b)(1)-(2)).¹ Based on an Environmental Assessment (EA), chapter 15 of the final rule technical support document (TSD) for small electric motors (SEMs), DOE has determined that the adoption of energy conservation standards for SEMs, as set forth in

¹ The small electric motors, covered in this Finding of No Significant Impact, are essentially general purpose, alternating current, single-speed, induction motors built in a National Electrical Manufacturers Association (NEMA) 42, 48, or 56 frame series, and range from 1/4 to three horsepower. These motors operate at 60 Hertz and have either single-phase or a three-phase (polyphase) electrical design. These motors are used as components that drive a wide variety of other commercial and industrial equipment, with the largest being pumping equipment, fans and blowers, compressors, conveyors, material handling machines, and other general industrial or miscellaneous applications.

the final rule entitled the “Energy Conservation Program: Energy Conservation Standards for Small Electric Motors,” would not be a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969 (NEPA). Therefore, an environmental impact statement (EIS) is not required, and DOE is issuing this Finding of No Significant Impact (FONSI).

ADDRESSES: Public Availability: Copies of the final rule TSD are available from the U.S. Department of Energy, Resource Room of the Building Technologies Program, 950 L’Enfant Plaza, SW., 6th Floor, Washington, DC 20024, (202) 586-2945, between 9 a.m. and 4 p.m., Monday through Friday, except Federal holidays. You may also obtain copies of the final rule TSD from the Office of Energy Efficiency and Renewable Energy’s website at: www1.eere.energy.gov/buildings/appliance_standards

FOR FURTHER INFORMATION CONTACT: James Raba, Project Manager, Energy Conservation Standards for Small Electric Motors, U.S. Department of Energy, Energy Efficiency and Renewable Energy, Building Technologies Program, 950 L’Enfant Plaza, SW., 6th Floor, Washington, DC 20024, Phone: (202) 586-8654. E-mail: Jim.Raba@ee.doe.gov; Michael Kido, Esq., U.S. Department of Energy, Office of General Counsel, GC-71, 1000 Independence Avenue, SW, Washington, DC 20585. Phone: (202) 586-9507. E-mail: Michael.Kido@hq.doe.gov.

For further information regarding the DOE NEPA process contact: Carol M. Borgstrom, Director, Office of NEPA Policy and Compliance (GC-20), U.S. Department

of Energy, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586-4600, or leave a message at (800) 472-2756. Additional information regarding DOE NEPA activities and access to many DOE NEPA documents are available on the Internet through the DOE NEPA website at: <http://www.gc.energy.gov/nepa/>.

SUPPLEMENTARY INFORMATION:

Description of the Proposed Action: The proposed action is the establishment of new energy conservation standards for small electric motors (SEM). DOE is adopting trial standard level (TSL) 4b for polyphase small electric motors, and TSL 7 for capacitor-start small electric motors.

Environmental Impacts: The EA evaluates the environmental impacts of a range of energy conservation standards for SEMs. The results are presented for each TSL that DOE considered for SEMs. Each TSL is an alternative action and the environmental impact of each alternative is compared to what would be expected to happen if no new standard were adopted, i.e., the “no action” alternative.

The primary environmental impact is decreased emissions from fossil fuel use and from fossil-fueled electricity generation. All of the TSLs considered for the small electric motors covered under this regulation would result in decreased fossil fuel use and in a reduction in emissions. The energy conservation standards adopted in the final rule would generally decrease air pollution by decreasing future energy demand. The environmental assessment (EA) addresses emissions of carbon dioxide (CO₂) and three criteria

pollutants—nitrogen oxides (NO_x), sulfur dioxide (SO₂), and mercury (Hg). The energy savings from new energy conservation standards for SEMs are expected to result in reduced power sector emissions of CO₂, NO_x, and Hg. Reduced NO_x emissions could also provide an economic benefit in the form of emission allowance credits. The results of this analysis show that the cumulative emissions reductions resulting from the SEM final rule are projected to be 112 million metric tons of CO₂, 81 kilotons of NO_x, and 0.49 ton of Hg. These emissions reductions and those from the other TSLs are not substantial enough to significantly affect the quality of the human environment. See chapter 15 of the SEM TSD Table 15.2.1, Table 15.2.2, Table 15.2.3, Table 15.2.4, Table 15.2.5, Table 15.7.1, and Table 15.7.2 for more information on the emissions reductions at all TSLs.

Determination

Based upon the EA, DOE has determined that the adoption of the energy conservation standards for SEMs would not constitute a major Federal action significantly affecting the quality of the human environment, within the meaning of NEPA. Therefore, an EIS is not required, and DOE is issuing this FONSI.

Issued in Washington, DC, on February 22, 2010.

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Energy Efficiency and Renewable Energy