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July 25, 2017

The Honorable Lisa Murkowski  
Chairman  
The Honorable Maria Cantwell  
Ranking Member  
Committee on Energy and Natural Resources  
United States Senate

The Honorable Greg Walden  
Chairman  
The Honorable Frank Pallone, Jr.  
Ranking Member  
Committee on Energy and Commerce  
House of Representatives

Subject: *Department of Energy: Energy Conservation Program: Energy Conservation Standards for Walk-In Cooler and Freezer Refrigeration Systems*

Pursuant to section 801(a)(2)(A) of title 5, United States Code, this is our report on a major rule promulgated by the Department of Energy (DOE) entitled “Energy Conservation Program: Energy Conservation Standards for Walk-In Cooler and Freezer Refrigeration Systems” (RIN: 1904-AD59). We received the rule on July 10, 2017. It was published in the *Federal Register* as a final rule on July 10, 2017. 82 Fed. Reg. 31,808. The effective date of the rule is September 8, 2017.

The final rule imposes a series of energy conservation standards pertaining to certain discrete classes of refrigeration systems used in various consumer products and certain commercial and industrial equipment, including walk-in coolers and walk-in freezers. DOE determined that these standards are consistent with recommendations presented by a working group that included refrigeration system manufacturers, installers, and energy efficiency advocates, and will result in the significant conservation of energy and achieve the maximum improvement in energy efficiency that is technologically feasible and economically justified. DOE is adopting energy conservation standards for the following classes of walk-in coolers and walk-in freezers (collectively, WICFs or walk-ins) refrigeration systems: low-temperature dedicated condensing refrigeration systems and both medium- and low-temperature unit coolers. These standards will be in addition to the standards that DOE has already promulgated for medium-temperature dedicated condensing refrigeration systems. The adopted standards are expressed in terms of an annual walk-in energy factor (AWEF). AWEF is an annualized refrigeration efficiency metric that expresses the ratio of the heat load that a system can reject (in Btus) to the energy required to reject that load (in watt-hours). These standards apply to all applicable WICF refrigeration systems manufactured in, or imported into, the United States.

Enclosed is our assessment of DOE's compliance with the procedural steps required by section 801(a)(1)(B)(i) through (iv) of title 5 with respect to the rule. Our review of the procedural steps taken indicates that DOE complied with the applicable requirements.

If you have any questions about this report or wish to contact GAO officials responsible for the evaluation work relating to the subject matter of the rule, please contact Shirley A. Jones, Assistant General Counsel, at (202) 512-8156.

signed

Robert J. Cramer  
Managing Associate General Counsel

Enclosure

cc: Daniel Cohen  
Assistant General Counsel for Legislation,  
Regulation and Energy Efficiency  
Department of Energy

REPORT UNDER 5 U.S.C. § 801(a)(2)(A) ON A MAJOR RULE  
ISSUED BY THE  
DEPARTMENT OF ENERGY  
ENTITLED  
“ENERGY CONSERVATION PROGRAM:  
ENERGY CONSERVATION STANDARDS FOR  
WALK-IN COOLER AND FREEZER REFRIGERATION SYSTEMS”  
(RIN: 1904-AD59)

(i) Cost-benefit analysis

The Department of Energy (DOE) analyzed the costs and benefits of this final rule. Using a 7 percent discount rate for benefits and costs other than greenhouse gas (GHG) reductions (for which DOE used average social costs with a 3 percent discount rate), DOE estimated the costs of the standards adopted in this rule for the considered walk-in coolers and walk-in freezers (collectively, WICFs or walk-ins) refrigeration systems will be \$34 million per year in increased equipment costs, while the annual benefits will be \$169 million in reduced equipment operating costs, \$95 million in GHG reductions, and \$4.2 million in reduced emissions of nitrogen oxides. In this case, DOE calculated that the net benefit will be \$234 million per year. Using a 3 percent discount rate for all benefits and costs, DOE estimated the costs of the standards adopted in this final rule for the considered WICF refrigeration systems will be \$36 million per year in increased equipment costs, while the annual benefits will be \$213 million in reduced operating costs, \$95 million in carbon dioxide GHG reductions, and \$5.8 million in reduced emissions nitrogen oxides. In this case, DOE calculated that the net benefit will be \$279 million per year.

(ii) Agency actions relevant to the Regulatory Flexibility Act (RFA), 5 U.S.C. §§ 603-605, 607, and 609

DOE prepared a final regulatory flexibility analysis that included a discussion of (1) the need for and objectives of the rule, (2) significant issues raised in response to the initial regulatory flexibility analysis, (3) a description of the estimated number of small entities regulated, (4) a description and estimate of compliance requirements, if any, for different groups of small entities, and (5) significant alternatives to the rule.

(iii) Agency actions relevant to sections 202-205 of the Unfunded Mandates Reform Act of 1995, 2 U.S.C. §§ 1532-1535

DOE concluded that this final rule may require expenditures of \$100 million or more in any one year by the private sector. Such expenditures may include (1) investment in research and development and in capital expenditures by WICF refrigeration systems manufacturers in the years between the final rule and the compliance date for the new standards and (2) incremental additional expenditures by consumers to purchase higher-efficiency WICF refrigeration systems, starting on the compliance date for the applicable standard. DOE stated that it met the requirements of the Act in the discussion of the economic analysis of this final rule. DOE also determined that this final rule establishes energy conservation standards for WICF refrigeration systems that are designed to achieve the maximum improvement in energy efficiency that DOE has determined to be both technologically feasible and economically justified.

(iv) Other relevant information or requirements under acts and executive orders

Administrative Procedure Act, 5 U.S.C. §§ 551 et seq.

On September 13, 2016, DOE published a notice of proposed rulemaking. 81 Fed. Reg. 62,979. A public meeting on the proposed rule was held on September 29, 2016. DOE considered oral and written comments, data, and information from interested parties before developing this final rule.

Paperwork Reduction Act (PRA), 44 U.S.C. §§ 3501-3520

DOE has established regulations for the certification and recordkeeping requirements for all covered consumer products and commercial equipment, including WICF refrigeration systems. This requirement has been approved by the Office of Management and Budget (OMB) under OMB control number 1910-1400. DOE estimates the public reporting burden for the certification to average 30 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Statutory authorization for the rule

DOE promulgated this final rule under the authority of sections 6291 to 6317 of title 42 and section 2461 note of title 28, United States Code.

Executive Order No. 12,866 (Regulatory Planning and Review)

DOE determined this final rule is economically significant under the Order. DOE provided the rule to OMB for review.

Executive Order No. 13,132 (Federalism)

DOE determined that this final rule will 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.