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Washington, DC 20548

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April 16, 2014

The Honorable Mary Landrieu  
Chair  
The Honorable Lisa Murkowski  
Ranking Member  
Committee on Energy and Natural Resources  
United States Senate

The Honorable Fred Upton  
Chairman  
The Honorable Henry Waxman  
Ranking Member  
Committee on Energy and Commerce  
House of Representatives

Subject: *Department of Energy: Energy Conservation Program: Energy Conservation Standards for Commercial Refrigeration Equipment*

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 (Energy) entitled "Energy Conservation Program: Energy Conservation Standards for Commercial Refrigeration Equipment" (RIN: 1904-AC19). We received the rule on April 1, 2014. It was published in the *Federal Register* as a final rule on March 28, 2014, with a stated effective date of May 27, 2014, and a compliance date of March 27, 2017. 79 Fed. Reg. 17,726.

The final rule adopts more-stringent energy conservation standards for some classes of commercial refrigeration equipment. Energy determined that the amended energy conservation standards for these products would result in significant conservation of energy and are technologically feasible and economically justified.

Enclosed is our assessment of Energy'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 Energy 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  
COMMERCIAL REFRIGERATION EQUIPMENT"  
(RIN: 1904-AC19)

(i) Cost-benefit analysis

The Department of Energy (Energy) analyzed the costs and benefits of this final rule. Energy calculated the impact of the rule on customers of commercial refrigeration equipment by equipment class. The average life-cycle cost savings ranged from \$18 to \$5,001 in 2012 dollars, and the median payback period ranged from 1.1 years to 7.2 years. Energy also calculated the impact on manufacturers. Energy estimates that the industry net present value for manufacturers of commercial refrigeration equipment is \$2,660 million in 2012 dollars. Energy expects the industry net present value to decrease by 3.53 percent to 6.60 percent and industry conversion costs to total \$184 million. Additionally, based on interviews with the manufacturers of commercial refrigeration equipment, Energy does not expect significant loss of domestic employment.

Energy also estimated the national benefits and costs. Energy determined that the lifetime savings for commercial refrigeration equipment purchased in the 30-year period that begins in the year of compliance with amended standards (2017–2046) amount to 2.89 quadrillion British thermal units (quads). The annualized energy savings (0.10 quads) are equivalent to 0.5 percent of total U.S. commercial primary energy consumption in 2014. The cumulative net present value of total consumer costs and savings of the standards for commercial refrigeration equipment ranges from \$4.93 billion (at a 7 percent discount rate) to \$11.74 billion (at a 3 percent discount rate). In addition, Energy expects the standards will have significant environmental benefits: the energy savings will result in cumulative emission reductions of approximately 142 million metric tons (Mt) of carbon dioxide (CO<sub>2</sub>), 762 thousand tons of methane, 207 thousand tons of sulfur dioxide (SO<sub>2</sub>), 94 tons of nitrogen oxides (NO<sub>x</sub>), and 0.25 tons of mercury (Hg). Through 2030, the estimated energy savings would result in cumulative emissions reductions of 48 Mt of CO<sub>2</sub>. The value of the CO<sub>2</sub> reductions is calculated using a range of values per metric ton of CO<sub>2</sub> (otherwise known as the Social Cost of Carbon, or SCC) developed by a recent federal interagency process. Using discount rates appropriate for each set of SCC values, Energy estimates that the net present monetary value of the CO<sub>2</sub> emissions reductions is between \$1.0 billion and \$14.0 billion. Energy also estimates that the net present monetary value of the NO<sub>x</sub> emissions reductions is \$33 million at a 7 percent discount rate, and \$104 million at a 3 percent discount rate.

Using a 7 percent discount rate for benefits and costs other than CO<sub>2</sub> reduction, for which Energy used a 3 percent discount rate along with the average SCC series that uses a 3 percent discount rate, the cost of the amended standards in this rule is \$256 million per year in increased equipment costs, while the benefits are \$710 million per year in reduced equipment operating costs, \$246 million in CO<sub>2</sub> reductions, and \$3.01 million in reduced NO<sub>x</sub> emissions. In this case, the net benefit amounts to \$704 million per year. Using a 3 percent discount rate for

all benefits and costs and the average SCC series, the cost of the standards in this rule is \$264 million per year in increased equipment costs, while the benefits are \$900 million per year in reduced operating costs, \$246 million in CO<sub>2</sub> reductions, and \$5.64 million in reduced NO<sub>x</sub> emissions. For this rule, Energy found that the net benefit amounts to \$888 million per year.

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

Energy prepared a final regulatory flexibility analysis for this final rule. That analysis included (1) a description and estimated number of the small entities regulated; (2) a description and estimate of the compliance requirements; (3) a description of any duplication, overlap, and conflict with other rules and regulations; and (4) 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

Energy concluded that this final rule will likely require expenditures of \$100 million or more on the private sector. Such expenditures include investment in research and development and in capital expenditures by commercial refrigeration equipment manufacturers in the years between the final rule and the compliance date for the new standards and incremental additional expenditures by consumers to purchase higher-efficiency commercial refrigeration equipment, starting at the compliance date for the applicable standard. Energy stated that it complied with the requirements of the Act through its Regulatory Impact Analysis, including a discussion of the alternatives considered, accompanying the final rule.

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

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

On April 30, 2010, Energy published “Rulemaking Framework for Commercial Refrigeration Equipment.” See, 75 Fed. Reg. 24,824 (May 6, 2010). On May 18, 2010, Energy held a public meeting on the framework. Energy collected additional information and performed additional analysis and held a second public meeting on April 19, 2011. On September 11, 2013, Energy published a notice of proposed rulemaking. 78 Fed. Reg. 55,890. Energy received written comments on the proposed rule. Energy also held a public meeting on the proposed rule on October 3, 2013.

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

Energy determined that this final rule includes an information collection requirement under the Act. The information collection requirement has been approved by the Office of Management and Budget (OMB) under OMB Control Number 1910–1400. Energy estimates the average public reporting burden will be 20 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

Energy promulgated this final rule under the authority of sections 6291 to 6317 of title 42, United States Code.

National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321–4347

Energy determined that this final rule fits within the category of actions included in Categorical Exclusion (CX) B5.1 and otherwise meets the requirements for application of a CX because it establishes energy conservation standards for consumer products or industrial equipment and for which none of the exceptions identified in CX B5.1(b) apply. Therefore, Energy did not prepare an Environmental Assessment or Environmental Impact Statement for this rule.

Executive Order No. 12,630 (Government Takings)

Energy determined that this final rule will not result in any takings that might require compensation under the Fifth Amendment to the United States Constitution.

Executive Order Nos. 12,866 and 13,563 (Regulatory Planning and Review)

Energy determined that this final rule is economically significant under the Order, and therefore it was submitted to OMB for review.

Executive Order No. 12,988 (Civil Justice Reform)

Energy determined that it completed the required review and that, to the extent permitted by law, this final rule meets the relevant standards of the Order.

Executive Order No. 13,132 (Federalism)

On March 14, 2000, Energy published a statement of policy describing the intergovernmental consultation process it will follow in the development of regulations. 65 Fed. Reg. 13,735. According to Energy, the Energy Policy and Conservation Act (EPCA) governs and prescribes federal preemption of state regulations as to energy conservation for the products that are the subject of this final rule, and states can petition Energy for exemption from such preemption to the extent, and based on criteria, set forth in EPCA. 42 U.S.C. § 6297. Energy determined that no further action is required by the Order.

Executive Order No. 13,211 (Energy Supply, Distribution, or Use)

Energy has concluded that this final rule is not a significant energy action because the amended standards are not likely to have a significant adverse effect on the supply, distribution, or use of energy. Energy did not prepare a Statement of Energy Effects on this rule.