



July 13, 2011

Ms. Brenda Edwards
U.S. Department of Energy
Building Technologies Program
Mailstop EE-2J
1000 Independence Avenue, SW
Washington, DC 20585

Re: Request for Information - Commercial and Industrial Pumps (Docket No. EERE-2011-BT-STD-0031/RIN 1904-AC54)

Dear Ms. Edwards:

These comments are submitted by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) in response to the U.S. Department of Energy's (DOE) notice appearing in the Federal Register on June 13, 2011 requesting information regarding product markets, energy use, test procedures, and energy efficient product designs for commercial and industrial pumps.

AHRI is the trade association representing manufacturers of heating, cooling, water heating, and commercial refrigeration equipment including manufacturers of commercial HVAC pumps. More than 300 members strong, AHRI is an internationally recognized advocate for the industry, and develops standards for and certifies the performance of many of the products manufactured by our members. In North America, the annual output of the HVACR industry is worth more than \$20 billion. In the United States alone, our members employ approximately 130,000 people, and support some 800,000 dealers and contractors.

AHRI has reviewed the request of information (RFI) and believes that the preliminary analysis conducted by DOE is based on outdated information and cannot be used as a basis to initiate a rulemaking on commercial pumps. As discussed in more detail below, the energy consumption of commercial pumps is already regulated by most building energy codes in the U.S. Therefore, we see no compelling reasons why DOE should venture into regulating these products. As such, we recommend against DOE pursuing a rulemaking to develop test procedures and energy conservation standards on commercial pumps.

Commercial Building Heating, Ventilation and Air Conditioning Pumps

DOE appears to justify its intention to regulate commercial pumps based on a 12-year old analysis conducted by Arthur D. Little Inc. (ADL) and a report prepared by UNIDO. Both the ADL and UNIDO analyses do not account for energy saving measures on

commercial pumps required by the major energy building codes in the U.S. Since 2001, ASHRAE 90.1 *Energy Standard for Buildings Except Low-Rise Residential Building*, requires HVAC pumping systems to be designed for variable fluid flow and capable of reducing pump flow rates to 50% of less of the design flow rate. These requirements have been refined over the years as reflected by the 2010 version of ASHRAE 90.1 which also requires chilled water pumps exceeding 5 hp to have controls and/or devices (such as variable speed control) that will result in pump motor demand of no more than 30% of design wattage at 50% of design water flow. These measures save a significant amount of energy and have not been accounted for in the DOE analysis.

The provisions of the Energy Policy and Conservation Act (EPCA) require states to adopt the latest approved version of ASHRAE 90.1 or its equivalent. In fact according to DOE¹, most states in the U.S. have either adopted ASHRAE 90.1-2001 or a more recent version, or an equivalent code such as the International Energy Conservation Code (IECC). The IECC has similar mandatory requirements than section 6.5.4 of ASHRAE 90.1 on hydronic system design and so does California Title 24. The mandatory state adoption of building energy codes indirectly regulates the energy consumption of commercial pumps as all major energy codes in the U.S. do require today that pumps be designed and equipped with energy saving measures.

Summary

From our review of the RFI, it is clear that the analysis conducted by the DOE has misrepresented the energy savings that could potentially be achieved by regulating commercial pumps in HVACR applications. The DOE analysis is based on an outdated report that does not reflect current design practices for commercial pumps. All commercial building energy codes currently used in the U.S. already regulate the energy consumption of commercial pumps. Therefore, we believe that a rulemaking is unnecessary, duplicative and will not achieve any additional energy savings. We urge DOE to abandon the idea of regulating commercial pumps and instead focus its scarce resources on other more pressing issues.

AHRI appreciates the opportunity to provide these comments. If you have any questions regarding this submission, please do not hesitate to contact me.

Sincerely,



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¹ <http://www.energycodes.gov/states/>