

December 20, 2005

DECISION AND ORDER  
OFFICE OF HEARINGS AND APPEALS

Application for Exception

Case Name: Energy Savings Products, Ltd.

Date of Filing: September 28, 2005

Case Number: TEE-0026

This Decision and Order considers an Application for Exception filed by Energy Savings Products, Ltd. (ESP) seeking exception relief from the provisions of 10 C.F.R. Part 430, pertaining to energy conservation standards for central air conditioners and heat pumps (Air Conditioner Standards). ESP is a manufacturer of small duct, high velocity (SDHV) air conditioning equipment. In its exception request, ESP asserts that the firm will suffer a gross inequity, serious hardship and an unfair distribution of burdens if forced to comply with the 13 SEER energy efficiency standard effective January 2006, 10 C.F.R. § 430.32(c). If its Application for Exception were granted, the firm would receive exception relief from the revised standard. As set forth in this Decision and Order, we have concluded that ESP's Application for Exception should be granted.

**I. Background**

**A. Air Conditioner Standards**

The Air Conditioner Standards in 10 C.F.R. Part 430 were published as a final rule by the Department of Energy (DOE) on January 22, 2001, 66 Fed. Reg. 7170, as mandated by Congress in Part B of Title III of the Energy Policy and Conservation Act, as amended, 42 U.S.C. §§ 6291-6309 (EPCA). In the EPCA, Congress directed, *inter alia*, that DOE administer an energy conservation program for specified consumer products, including central air conditioners and heat pumps. The conservation program prescribed by the EPCA consists essentially of three parts: testing, labeling, and Federal energy conservation standards. The DOE measures the energy efficiency in the seasonal cooling performance of central air conditioners in terms of a Seasonal

Energy Efficiency Ratio (SEER) while the seasonal heating performance of heat pumps is measured by the Heating Seasonal Performance Factor (HSPF).

Since 1992, the Federal energy conservation standards for central air conditioners were set at a minimum of 10 SEER/6.8 HSPF for split system air conditioners and heat pumps, and 9.7 SEER/6.6 HSPF for single package air conditioners and heat pumps, pursuant to the National Appliance Energy Conservation Act of 1987, Pub. L. 100-12 (NAECA). However, the present Air Conditioner Standards will increase that level to 13 SEER as the mandatory efficiency standard for most central air conditioners and central air conditioning heat pumps manufactured for sale in the United States as of January 23, 2006. For split-system air conditioners, the most common type of residential air conditioning equipment, the 13 SEER revised standard represents a 30 percent improvement in energy efficiency. As noted above, the Air Conditioner Standards were issued in final form on January 22, 2001.

However, on May 23, 2002, the DOE published another rulemaking in which it sought to withdraw and amend the 13 SEER established for air conditioners under the Air Conditioner Standards. Energy Conservation Program for Consumer Products: Central Air Conditioners and Heat Pumps Energy Conservation Standards, 67 Fed. Reg. 36368 (2002) (Amended Rule). The Amended Rule proposed to increase the 1992 minimum energy efficiency levels by 20 percent and establish 12 SEER and 7.4 HSPF for most central air conditioners and central air conditioning heat pumps.<sup>1/</sup> In addition, the Amended Rule gave special recognition to small duct, high velocity (SDHV) systems, which the rule defined as follows:

*Small duct, high velocity system* means a heating and cooling product that contains a blower and indoor coil combination that:

- (1) Is designed for, and produces, at least 1.2 inches of external static pressure when operated at the certified air volume rate of 220-350 CFM per rated ton of cooling; and
- (2) When applied in the field, uses high velocity room outlets generally greater than 1000 fpm which have less than 6.0 square inches of free area.

Amended Rule, 10 C.F.R. § 430.2, 67 Fed. Reg. at 36406. In response to comments received from manufacturers and trade associations, the DOE agreed that it was

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<sup>1/</sup> In the Amended Rule, the DOE stated its intention to withdraw the 13 SEER standard because it: (1) was promulgated without consulting with the Attorney General on potential anti-competitive effects, (2) contained a material defect in the statement of basis and purpose required by the Administrative Procedure Act, (3) contained an effective date in conflict with the Congressional Review Act, and (4) was based upon an erroneous conclusion that the 13 SEER standard was economically justified under the EPCA. 67 Fed. Reg. at 36368-69.

unlikely that SDHV systems would be able to meet the 12 SEER minimum requirement the agency proposed to establish for conventional air conditioners, and that SDHV systems would therefore require special consideration. The DOE concluded, in pertinent part:

Although DOE has concluded that SDHV systems warrant their own product class, it has yet to determine an appropriate minimum efficiency standard for them. Therefore, this final rule provides that the NAECA-prescribed minimum standards covering all product types (e.g. 10 SEER/6.8 HSPF for split system air conditioners) will remain applicable to SDHV systems. DOE intends to conduct a separate rulemaking for SDHV systems to establish appropriate minimum efficiency standards for this class of product.

Amended Rule, 67 Fed. Reg. at 36398.

However, a separate rulemaking for SDHV systems was never completed. In late 2002, the Natural Resources Defense Council, consumer groups and attorneys general from 10 states brought suit in federal court challenging the DOE's attempt to substitute the 12 SEER standard under the Amended Rule for the 13 SEER standard the agency had previously adopted in the Air Conditioner Standards. On January 13, 2004, the U.S. Appeals Court for the Second Circuit in New York ruled in favor of the complainants, finding that the May 23, 2002, final rules promulgated by DOE withdrawing the standards it published as a final rule on January 22, 2001, and replacing them with less stringent standards, were not a valid exercise of DOE's authority under the EPCA. *National Resources Defense Council, et al. v. Abraham*, 355 F.3d 179 (2nd Cir. 2004). By invalidating the Amended Rule, the court's ruling effectively reinstated the Air Conditioner Standards and the 13 SEER rule, effective January 23, 2006, for most central air conditioners including SDHV systems.<sup>2/</sup>

#### B. Application for Exception

Persons subject to the various product efficiency standards of Part 430 may apply to the DOE Office of Hearings and Appeals (OHA) for exception relief. *See Amana Appliances*, 27 DOE ¶ 81,006 (1999); *Midtown Development, L.L.C.*, 27 DOE ¶ 81,013 (2000); *Diversified Refrigeration, Inc.*, 28 DOE ¶ 81,005 (2001). In this regard, section 504 of the Department of Energy Organization Act authorizes OHA to make adjustments of any rule or order issued under the EPCA, consistent with the other

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<sup>2/</sup> On April 2, 2004, the DOE announced that it would not challenge the court's ruling but would enforce the 13 SEER standard for residential central air conditioners. *See Energy Conservation Program for Consumer Products: Central Air Conditioners and Heat Pumps Energy Conservation Standards*, 69 Fed. Reg. 50997, 50998 (August 17, 2004).

purposes of the Act, if necessary to prevent special hardship, inequity, or unfair distribution of burdens. 42 U.S.C. § 7194(a). *See generally* 10 C.F.R. Part 1003, Subpart B (OHA Procedural Regulations).

ESP is a manufacturer of SDHV equipment sold under the brand name “Hi-Velocity Systems.” ESP is headquartered in Alberta, Canada but markets its Hi-Velocity product line through 58 wholesalers and distributors located in Canada and the United States. ESP’s Hi-Velocity Systems are marketed in four basis models, the HV-50, HV-70, HV-100, and HV-140, ranging in capacities from 1.5 ton to 5 ton cooling capacities. ESP’s High-Velocity Systems are primarily designed for space-saving, retrofit applications. According to ESP, its SDHV products are “uniquely created to be installed through walls, floors, and ceilings with the potential of the fan coil unit being located in space constrained locations such as attics and closets.” ESP Application for Exception at 2.

ESP contends in its Application for Exception that the firm will suffer a gross inequity, serious hardship and unfair distribution of burdens as a result of exception relief granted to its principal competitors in the SDHV market, SpacePak and Unico, Inc. (Unico). *See SpacePak/Unico, Inc.*, 29 DOE ¶ 81,002 (2004) (*SpacePak/Unico*). In that case, we granted SpacePak and Unico exception relief from the revised 13 SEER rule effective January 23, 2006, permitting those firms to produce and market SDHV systems having a SEER rating of not less than 11.0, and an HSPF rating of 6.8, until such time as the agency establishes a separate standard for SDHV systems. ESP claims in its Application for Exception that the approval of this exception relief places ESP at a competitive disadvantage. ESP asserts:

ESP is in direct competition with SpacePak and Unico, Inc. as the main suppliers of SDHV systems and faces the same hardships of trying to meet the new SEER requirements as identified in the DOE’s final rule published on August 17, 2004. With the exceptions granted to both the above mentioned parties . . . , ESP should also be granted exception relief with their Hi-Velocity Systems product line.

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It would be a severe financial burden for ESP, as well as related Suppliers, Agents, Wholesalers, and Installers who sell and install the ESP system on a daily basis if we were not granted exception relief as SpacePak and Unico. Failure to allow Energy Saving Products Ltd. exception relief will produce serious hardship and unfair distribution of burdens while adversely affecting ESP, if forced to comply with the new SEER rule, effective January 2006. . . . While no standard test procedures are in place for the SDHV systems we feel it would be unfair to allow the SpacePak/Unico Exception and ESP not be granted exception relief. In

so doing, this would allow an anti-competitive process and unfair market distribution by removing competition for the SDHV market.

ESP Application for Exception at 2-3.

Several interested parties filed comments on ESP's exception request. The vast majority of these parties are suppliers and customers<sup>3/</sup> of Hi-Velocity Systems products, and express their support for ESP's exception request. However, two other interested parties filed more substantive comments. On October 7, 2005, the American Council for an Energy-Efficient Economy (ACEEE)<sup>4/</sup> filed comments on ESP's application. Quoting the DOE regulatory definition of "*Small duct, high velocity systems*," ACEEE states in its brief comments that it "will not oppose the waiver request for the 'Hi-Velocity Systems, Small Duct, High Velocity System' for units/systems that comply with the DOE specification." ACEEE Comments at 1.

Finally, on October 24, 2005, Unico filed comments opposing ESP's Application for Exception. Unico is ESP's principal competitor in the SDHV market. While Unico generally supports the approval of exception relief for SDHV air conditioners, as granted to the firm in *SpacePak/Unico*, the firm argues that "there is no evidence that ESP's products provide the benefits or satisfies the rationale in the previous Exceptions granted in the past to Unico, Inc., and SpacePak for their SDHV air conditioning products and systems." Unico Comments at 1. Unico asserts that ESP has provided "no data or proof of performance efficiency" with regard to its Hi-Velocity line of products and therefore maintains that exception relief should be denied "until such time as ESP has submitted proof that its products meet the requirements for testing and rating of SDHV products." Unico Comments at 2, 3.

In response to Unico's comments, ESP filed a supplement to its Application for Exception on November 18, 2005. ESP November 18 Submission. In this submission, ESP sets forth test data and supporting documentation regarding the structural design and performance efficiency of the firm's Hi-Velocity Systems line of products.

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<sup>3/</sup> The Hi-Velocity Systems suppliers and customers of that have filed comments in support of ESP include: 1) Spencer-LeMaire Industries (Alberta, Canada); 2) Powder Station (Alberta, Canada); 3) Trinity Electronics (Alberta, Canada); 4) Drader Manufacturing Industries (Alberta, Canada); 5) Scan Copy Print (Alberta, Canada); 6) Custom Coils, Inc. (Jacksonville, Texas); 7) Vitran (Alberta, Canada), and 8) Plastic Systems, Inc. (Seattle, Washington).

<sup>4/</sup> The ACEEE is a nonprofit, public-interest organization which seeks to promote energy efficiency as a means of achieving economic prosperity and environmental protection. The ACEEE has been involved in the promulgation of legislation and rulemakings establishing the federal efficiency standards.

## II. Analysis

We have carefully considered the Application for Exception filed by ESP. For the reasons stated in *SpacePak/Unico*, we have determined that ESP should be granted exception relief from the 13 SEER rule for its Hi-Velocity Systems line of products that fall within the DOE regulatory definition of “*Small duct, high velocity system*,” 10 C.F.R. § 430.2. In that case, we stated in pertinent part:

The DOE recognized in the Amended Rule that due to its unique design characteristics, SDHV equipment cannot meet the higher efficiency levels applicable to conventional air conditioning systems. An SDHV system consists of a conventional outdoor (condensing) unit, produced by other manufactures, and a special indoor (blower-coil) unit and air distribution system produced respectively by ESP. Unlike conventional air conditioners that use large ducts, the indoor coil section of an SDHV system is compactly designed to facilitate retrofit installation in tight spaces, resulting in smaller face area and more rows of tubing than conventional systems. The compact fan coil design and small ducts contribute to high static pressure loss that must be overcome by the blower, requiring greater fan power, and thus make it more difficult for SDHV systems to increase energy efficiency.

The Amended Rule was invalidated by the federal court on procedural grounds and the proper interpretation of section 325(o)(1) of the EPCA. However, we are persuaded that the agency’s observations with respect to SDHV equipment in the Amended Rule remain accurate. The DOE agreed with the SDHV manufacturers and industry associations that these manufacturers would be unable to meet the 12 SEER minimum requirement which the agency sought to establish in 2002. The record of this proceeding supports the DOE’s conclusion. We therefore find that they will be unable to meet the 13 SEER standard due to become effective in January 2006, under the revised Air Conditioner Standards.

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The SDHV manufacturing is a niche industry comprising less than ½ of 1 percent of the residential cooling market. SDHV systems are used primarily to retrofit older buildings that were constructed without conventional air duct systems that might be used for central air conditioning. Thus, the unavailability of these systems in the marketplace would negatively impact domestic consumers. At the same time, we find that granting exception relief to SDHV manufacturers will not have a significant impact upon competition within the air conditioner

industry and will not impede the agency's efforts to promote energy conservation in the nation as a whole.

*SpacePak/Unico*, 29 DOE at 82,507 (footnote omitted). These considerations apply with equal validity in the present case. In addition, the approval of exception relief for ESP's SDHV products, commensurate with the relief granted to SpacePak and Unico, furthers the important statutory goal of maintaining competition within the marketplace. *See* EPCA, § 325(o)(2)(B)(1), 42 U.S.C. § 6295(o)(2)(B)(1).

In its comments, Unico asserts that ESP did not submit sufficient design and performance data with its Application for Exception to support its claim for exception relief. However, ESP provided supplemental information, including product test data, in its subsequent November 18 Submission. This submission establishes that ESP's Hi-Velocity products are SDHV systems designed to produce 1.5 inches of external static pressure operated at a certified air volume rate of 250 CFM per ton, and using 2 in. room outlets with an area of 3.14 square inches and an outlet velocity of 1470 FPM. *See* ESP November 18 Submission at 1; Attachments 1 - 4. Thus, we find that ESP has shown that its Hi-Velocity Systems meet the DOE regulatory definition of "*Small duct, high velocity system*," 10 C.F.R. § 430.2.

Unico additionally argues in its comments that in order for ESP to receive exception relief, "it should be determined that ESP's overall performance efficiencies be established to be at least equivalent to those of Unico and SpacePak." Unico Comments at 3. We disagree. As pointed out by ACEEE in its comments, the critical issue is whether ESP's Hi-Velocity Systems meet the DOE definition of "*Small duct, high velocity system*," 10 C.F.R. § 430.2. The primary basis for our granting exception relief in *SpacePak/Unico* was the agency's finding in the Amended Rule that SDHV systems meeting that definition will be unable to meet the 13 SEER standard due to energy inefficiencies inherent in their design and application. By granting exception relief to SpacePak and Unico, it was not intended that SDHV systems produced by those firms would become the standard by which exception relief might be approved for other SDHV manufacturers.<sup>5/</sup>

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<sup>5/</sup> Unico also takes issue with data presented on ESP's website indicating that "ESP's air handlers, when matched to a typical condensing unit, will have the same and, in many cases, *greater* capacity and efficiency than the system consisting of the same condensing unit used by ESP." Unico Comments at 1 (emphasis in original). Unico asserts that these claims are inconsistent with standard testing results. The information presented on ESP's website is apparently unverified. In its November 18 Submission, however, ESP has provided copies of test results for its Hi-Velocity SDHV systems that were submitted and accepted by DOE in 1995. November 18 Submission, Attachments 6 and 7. These test results indicate that the SEER ratings of ESP's High-Velocity units are consistent with other SDHV systems.

Accordingly, we have determined that ESP should be granted exception relief for its Hi-Velocity SDHV systems consistent with the exception relief we approved in *SpacePak/Unico*. In that case, we determined that in place of the general 13 SEER rule, an 11.0 SEER standard be established for SDHV systems manufactured for sale by SpacePak and Unico, effective January 23, 2006, and a corresponding 6.8 HSPF efficiency standard for SDHV air conditioning heat pumps. *See* 29 DOE at 82,507-08. This same exception relief will be granted for ESP's High-Velocity Systems. Similarly, the exception relief approved for ESP will remain in effect until such time as the agency modifies the general energy efficiency standard for central air conditioners and establishes another standard for SDHV systems that comports with the EPCA.

It Is Therefore Ordered That:

- (1) The Application for Exception filed by Energy Savings Products, Ltd . (ESP) on September 28, 2005, is hereby granted as set forth in Paragraph (2) below.
- (2) Notwithstanding the requirements of 10 C.F.R. § 430.32(c), on or after January 23, 2006, ESP is hereby authorized to manufacture for sale in the United States commerce small duct, high velocity (SDHV) systems, as defined in section 430.2, having a Seasonal Energy Efficiency Ratio of not less than 11.0, and a Heating Seasonal Performance Factor (HSPF) of not less than 6.8. This exception relief will remain in effect until such time as the agency modifies the general energy efficiency standard for central air conditioners and establishes a different standard for SDHV systems that comports with the EPCA.
- (3) Any person aggrieved by the approval of exception relief in this Decision and Order may file an appeal with the Office of Hearings and Appeals in accordance with 10 C.F.R. Part 1003, Subpart C.

George B. Breznay  
Director  
Office of Hearings and Appeals

Date: December 20, 2005