

April 14, 2005

DECISION AND ORDER
OFFICE OF HEARINGS AND APPEALS

Application for Exception

Petitioner: NORDYNE, Inc.

Date of Filing: August 27, 2004

Case Numbers: TEE-0013

This Decision and Order considers an Application for Exception filed by NORDYNE, Inc. (NORDYNE), 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). NORDYNE manufactures air conditioning and heating equipment for the residential, light commercial and manufactured housing markets. In its exception request, NORDYNE asserts that it will suffer a serious hardship, inequity 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 NORDYNE's exception request were granted, the firm would receive exception relief from the revised standard for certain of its products until January 1, 2010. As set forth in this Decision and Order, we have concluded that NORDYNE's Application for Exception should be granted in part.

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 for new central air conditioners and to 13 SEER/7.7 HSPF for new 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.

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.^{1/} However, 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 for the 13 SEER standard the agency had adopted. On January 13, 2004, the U.S. Appeals Court for the Second Circuit in New York ruled in favor of the complainants, finding that agency's attempt to withdraw the Air Conditioner Standards, in favor of the less stringent standards of the Amended Rule, was 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.^{2/}

^{1/} 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.

^{2/} 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).

However, DOE recognized the special problems of space constrained products in meeting the 13 SEER standard. Therefore, on August 17, 2004, the agency, consistent with its earlier rulemaking decisions, issued a Technical Amendment that established a 12 SEER standard for products meeting the following definition:

Space constrained product means a central air conditioner or heat pump:

- (1) That has rated cooling capacities no greater than 30,000 BTU/hr;
- (2) That has an outdoor or indoor unit having at least two overall exterior dimensions or an overall displacement that:
 - (i) Is substantially smaller than those of other units that are:
 - (A) Currently usually installed in site-built single family homes; and
 - (B) Of a similar cooling, and, if a heat pump, heating capacity; and
 - (ii) If increased, would certainly result in considerable increase in the usual cost of installation or would certainly result in significant loss in the utility of the product to the consumer; and
- (3) Of a product type that was available for purchase in the United States as of December 1, 2000.

10 C.F.R. § 430.2, 69 Fed. Reg. 50997 (August 17, 2004); *see* 10 C.F.R. § 430.32(c)(2).

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 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).

NORDYNE produces split-system and packaged air conditioners and heat pumps for the residential and manufactured housing markets from 1 to 5 ton cooling capacities, and commercial units up to 15 tons cooling capacity. NORDYNE manufactures these products at four factories located in Missouri and Western Tennessee, with nearly

2,000 employees, and markets them under a variety of brand names.^{3/} NORDYNE's products are primarily distributed and sold domestically; however, the firm also exports products to Asia, the Middle East and Latin America. NORDYNE is currently the major producer of air conditioning and heating products for the manufactured home industry in the United States.

In its Application for Exception, NORDYNE contends that compliance with the new 13 SEER rule, effective January 2006, will cause the firm to incur a serious hardship and unfair distributions with regard to two of its product offerings: (1) air conditioner and heat pump models produced for manufactured homes, and (2) compact air handlers produced for small apartment spaces. These products are discussed separately below.

Air Conditioner and Heat Pump Models for Manufactured Homes. NORDYNE produces 10 and 12 SEER split-system and packaged units, both with a maximum capacity of 4 tons, for manufactured homes. The firm asserts that it can meet the 13 SEER rule up to 2½ tons (30,000 BTU) for these units but claims that due to space constraints associated with these products, it is not economically feasible to accomplish 13 SEER for 3 and 5 ton models.^{4/}

With respect to its split-system models, NORDYNE states that space is restricted by the interior design of manufactured homes. More specifically, NORDYNE states that a manufactured home typically provide an alcove space for its furnace and air conditioner evaporator coil which is 20 inches wide, 24 inches deep and 84 inches high, and the coil must fit into this space with a 6-inch minimum top clearance. Application at 2. NORDYNE states that the unit discharges into a 5-inch air duct below the floor, and thus air flow is also constrained. *Id.* NORDYNE asserts that efficiency improvements in air conditioning systems are primarily achieved by increasing coil sizes and using more efficient compressors and motors. However, in manufactured housing applications, the indoor coil size cannot be increased which in turn limits the size of the outdoor unit that can be used in order to avoid unbalancing the system. Application at 3. According to NORDYNE, a 13 SEER efficiency level might be achievable for its 3-ton and larger systems by using an indoor blower brushless DC, variable speed motor and a two-stage compressor. NORDYNE maintains, however, that adding these features would increase the cost of these units by \$720 and the pass

^{3/} According to NORDYNE's exception application, the firm markets residential air conditioners and heat pumps under the Maytag, Frigidaire, Tappan, Westinghouse, Philco, Kelvinator, Gibson, Interherm and Miller brand names. Application at 2.

^{4/} NORDYNE states that although the market wants them, the firm does not produce 12 SEER, 5 ton units in either split system or packaged models for manufactured homes, due to technical challenges and the space constraints described below. Application at 2, 3.

through of this added cost would impose a substantial burden on consumers of manufactured homes, which are marketed in the affordable category of homes.

With regard to packaged systems, NORDYNE claims that installation of larger units is constrained by the lack of space between homes in typical manufactured home communities. NORDYNE states that the unit must be placed on a ground pad adjoining the manufactured home and in some cases positioned so that part of the unit extends beneath the home. Application at 4. According to NORDYNE, many communities limit the permissible height of the unit and require the connecting flexible ducts be hidden beneath the skirting surrounding the home. *Id.*

NORDYNE maintains that the pass through to consumers of increased costs associated with adding 13-SEER 3 to 5 ton equipment and making the required design changes would cause a further drop in sales in this already depressed market. Application at 4. NORDYNE further contends that “[g]iven the projected added expense to achieve 13-SEER in 3 to 5 ton air conditioners and heat pumps, the payback in energy savings will not be realized over the useful life of this equipment in most areas of the United States.” *Id.* In addition, NORDYNE submits that due to the noted space constraints, replacement of worn out 12 SEER systems with 13-SEER models would impose a serious burden on manufactured homeowners. In this regard, NORDYNE maintains that “[r]etrofitting these homes to accommodate larger and more expensive 13-SEER equipment may require changing the walls, raising the home, modifying the duct work and flue systems and would likely cause many homeowners to make repair decisions on inefficient, obsolete systems rather than replacing them.” *Id.*

NORDYNE therefore requests that the firm be granted exception relief establishing a 12 SEER standard until January 2010, for its 3 to 5 ton split-system models and packaged units designed for manufactured homes. In this regard, NORDYNE notes that the Environmental Protection Agency (EPA) is requiring that refrigerant R-22, a hydrochlorofluorocarbon (HCFC), the primary cooling agent presently used in air conditioning equipment, be phased out by January 1, 2010. In most air conditioning products, R-22 will be replaced by refrigerant R-410A which promises to deliver higher efficiencies in more compact systems. Thus NORDYNE contends that “[e]stablishing a 12 SEER requirement until January 1, 2010 would provide the opportunity to develop and introduce new cost effective, high efficiency equipment designs based on R-410 refrigerant.” Application at 4. NORDYNE argues that at the same time, the approval of the requested exception relief would enable the manufactured home industry to adopt home designs to accommodate more efficient air conditioners and heat pumps, and supporting duct work. *Id.* at 5.

Compact Air Handlers for Small Apartments. NORDYNE produces compact air handler models, in both air conditioner and heat pump configurations, with 10-SEER efficiencies up to 2.5 ton capacities. Application at 5. These units are 15 inches deep,

20 inches wide and 36 inches tall, and designed for installation in alcoves or utility closets sized for the unit, primarily in small apartment spaces, condominiums and dormitories. Similar to its argument with respect to manufactured homes, NORDYNE maintains that the compact nature of the product and allowable installation space preclude the use of larger indoor coils, and these units are unable to achieve 13 SEER efficiency without further technological development which cannot be completed by January 2006.^{5/} *Id.*

According to NORDYNE, several other companies produce similar products but they are larger than NORDYNE's compact air handler which has its own replacement market. Thus NORDYNE maintains that "ours is a unique niche market product which satisfies a bona fide consumer need," and "[i]n order to remain a viable supplier to this niche market segment we cannot increase the size of this product." Application at 5. NORDYNE therefore requests exception relief establishing an 11 SEER standard for these models until January 1, 2010. Similar to the exception relief requested for its manufactured home systems, NORDYNE argues that granting exception relief for its compact air handlers until January 1, 2010 "would satisfy the replacement market requirements until new product designs with R-410A refrigerant are developed, which promise more compact systems." *Id.* NORDYNE states further that before final adoption of the 13 SEER rule, the firm retooled its manufacturing plant, at considerable expense to produce its compact air handler models more cost effectively. Thus NORDYNE contends that in absence of exception relief, the firm may be forced to cease production and scrap the tooling, which "would cause economic hardship to our customers and those in lower income levels who benefit from this product as well as a loss of sales for our business, and a corresponding loss of jobs." Application at 6.

C. Comments

Comments have been filed in the proceeding by nine interested parties, including: (1) four competitors, Rheem Air Conditioning (Rheem), Carrier Corporation (Carrier), Trane Residential Systems (Trane), and Lennox International, Inc. (Lennox); (2) three public interest groups, Natural Resources Defense Council (NRDC), American Council for an Energy-Efficient Economy (ACE), and Alliance to Save Energy (ASE); one trade association, Manufactured Housing Institute (MHI); and a public utility, Tennessee Valley Authority (TVA). All of these parties oppose NORDYNE's Application for Exception, with the exception of MHI and TVA which support granting of exception relief for air conditioning and heat pump systems designed for manufactured homes.

^{5/} Unlike split system units for manufactured homes, NORDYNE states that alternative means to achieve 13 SEER appear not to be feasible, irrespective of cost: "[I]n these air handlers the use of brushless DC, variable speed blower motors is problematic because the available motor/electronic control assemblies will not fit in the available space." Application at 5.

The principal factors raised in these comments are summarized below.

Competitors. Rheem states in its comments that it competes directly with NORDYNE, and that Rheem is committed to providing customers with a full line of products meeting their needs at the 13 SEER standard effective in January 2006. Rheem asserts that granting a waiver to NORDYNE would inequitably allow the firm to manufacture and sell lower efficiency products at a lower cost than Rheem and other competitors. Rheem Comments at 1. Regarding manufactured homes, Rheem maintains that the space constraints are very similar for conventional homes, that NORDYNE is not unique inasmuch as all designers and builders have and will adapt to larger/higher efficiency equipment for new construction at higher cost, and these costs “should have been adequately addressed with the DOE analysis justifying the higher 13 SEER minimum standard for both split systems and packaged systems.” *Id.* at 2. Regarding NORDYNE’s compact air handler, Rheem states that it makes a product that is competitive with NORDYNE and believes that it can redesign its product to meet the customer needs at 13 SEER. Rheem further argues that NORDYNE must bear the burden of its decision to retool its air handler product line after the 13 SEER standard was proposed. In this regard, Rheem asserts that “[t]he 13 SEER standard has been well known as a potential for a long time [and,t]he fact that [NORDYNE] re-designed to a lower SEER was their business decision and carried risks they should accept.” *Id.*

Carrier opposes NORDYNE’s exception request principally on the ground that if an exception were approved, a “loophole would be created by allowing condensing units and/or small package units, other than 13 SEER, to be manufactured and available on the marketplace after January 23, 2006.” Carrier Comments at 1 (hereinafter referred to as the “leakage” issue). Carrier submits that the marketplace has no means to distinguish lower-priced units produced by NORDYNE for limited applications and “[o]nce a unit less than 13 SEER is made available, it can be installed in any application and subvert the intent of the NAECA.” *Id.* Contrary to NORDYNE’s claim, Carrier maintains that 13 SEER is achievable for manufactured homes “with today’s technology and can be applied in a cost effective manner.” *Id.* at 3. Regarding NORDYNE’s compact air handler, Carrier argues that DOE has been fully aware that the 13 SEER standard would present challenges for all manufacturers of 10 SEER products of this nature and NORDYNE’s circumstances form no basis for exception relief. *See id.* at 3-4.

Trane and Lennox reiterate many of the arguments raised by Rheem and Carrier, claiming that granting the requested exception relief would give NORDYNE an unjustified competitive advantage. Trane and Lennox contend that DOE recognized the unique problems of space constrained products and therefore established a 12 SEER standard for products meeting the regulatory definition of “*Space constrained product.*” 10 C.F.R. §§ 430.2, 430.32(c)(2). Trane and Lennox argue, however, that

NORDYNE is inappropriately trying to expand this definition to include its 3 to 5 ton models which have capacities greater than 30,000 BTU/hr.^{6/} *See* Trane Comments at 2; Lennox Comments at 1. Trane and Lennox also raise the leakage issue. In this regard, Trane states that “[t]here is no way to assure that an air conditioner shipped for a [manufactured home] retrofit will not wind up on a conventional house . . . [and, t]hus the majority of the industry will be faced with the challenge to trying to sell a 13 SEER system against lower cost systems presumable designed for [manufactured homes].” Trane Comments at 6; *see also* Lennox Comments at 1.

Public Interest Groups. NRDC asserts that NORDYNE has simply not made a sufficient showing to substantiate its claim the firm will incur a serious hardship, inequity or unfair distribution of burdens as a result of the 13 SEER rule. NRDC states that the new construction of manufactured homes and small apartments will allow the space required for installation of 13 SEER components. NRDC Comments at 2. With regard to the retrofit issue, NRDC states:

For retrofit systems, it is important to note that with a mean life of 18 years, the average conditioner being replaced over the next 4 years will have been purchased between 1988 and 1992. During this period of time, the typical efficiency of air conditioners was about SEER 8.5. Thus, all of the concerns that NORDYNE raises about size will be true to a greater or lesser extent regardless of the SEER 13 standard.

NRDC Comments at 2.

ACE “is strongly opposed to any exemption that would allow continued installation of units with SEER less than 13 for new construction, whether for manufactured housing or small apartments.” ACE Comments at 1. ACE asserts that installation of units under 13 SEER in new construction would “lock in” high energy consumption for the life of the structure, while the manufactured home and small apartment construction industries have multiple options to increase efficiency such as marginally increasing cabinet size and installing high performance insulation and duct work. *Id.* at 2. ACE also raises the leakage issue. *Id.* However, ACE recognizes that retrofitting 13 SEER equipment in existing manufactured homes may pose a unique problem due to space constraints. ACE therefore indicates that it might be willing to support a proposal to

^{6/} Trane raises an interesting argument with regard to NORDYNE’s claim that installation of larger packaged air conditioners and heat pumps is constrained by the small lot sizes in manufactured home communities. According to Trane, market data shows that 67% of manufactured homes are located on private land rather than confined communities and therefore “the installation of a single-package air conditioner for most [manufactured homes] is by no means space constrained by lot size.” *Id.* at 6.

permit manufacture of units that could only be sold for replacement of existing units in manufactured housing. *Id.*^{7/}

ASE reiterates a number of the points raised by other commenters, further noting that if a four-year period of exception relief were granted to NORDYNE, “another 600,000 housing units will be added to those having space constraint problems when it comes time to replace them at the end of their useful life.” ASE Comments at 2. Similar to ACE, however, ASE would be willing to support an enforceable program for replacement of existing systems to the extent NORDYNE is able to “make a convincing case that special treatment of replacements in existing space-constrained applications is warranted.” ASE Comments at 3.

Comments in favor. MHI and TVA support the granting of NORDYNE’s exception request. MHI is a trade association representing the manufactured home industry,^{8/} and maintains that the industry would suffer a “great hardship” if an efficiency rating greater than 12 SEER were imposed. MHI Comments at 2. MHI asserts that many of its members have indicated that an increase to 13 SEER would increase the appliance cost alone by an average of \$700. *Id.* In addition, MHI asserts that any increase in equipment size would require larger interior compartments thus reducing usable living space or requiring a larger building envelope carrying a higher initial base cost to the home buyer. *Id.* According to MHI, the manufactured housing industry is experiencing its lowest sales levels since 1963. MHI asserts that the market is very price sensitive since a vast majority of manufactured home buyers are in the middle to low-income range. *Id.* at 2. Thus, MHI argues that significant price increases in air conditioners and heat pumps could further decrease sales in an already depressed market. *Id.* at 3. With regard to existing homes, MHI states that replacement of worn out air conditioners with 13 SEER systems would require enlarging the closet or alcove, entailing a replacement cost beyond the practical means of the most homeowners. MHI maintains that, as a result, homeowners may choose to repair existing units or switch to less efficient forms of heating and cooling rather than installing a 13 SEER system. *Id.* at 2-3.

^{7/} ACE suggests that DOE may be able to: (1) cap sales of 12 SEER systems designed to fit existing manufactured house closets, or (2) create a turn-in program for present manufactured home owners. ACE notes, however, enforcement details would have to be worked out in order to avoid migration of these units into the new home market. ACE Comments at 2.

^{8/} MHI states that its members produce over 80% of the HUD-code manufactured homes built in the United States and that currently there are 60 manufactured home corporations with over 200 manufacturing facilities throughout the country. MHI Comments at 1.

TVA, an electric utility company, has a program designed to promote energy conservation by providing financial incentives for customers to replace electric resistance furnaces as the primary heat source with more efficient electric heat pumps. As part of this program, TVA offers a \$300 incentive for a 12 SEER heat pump installed in manufactured homes no older than six years, within its service area. TVA Comments at 1. TVA contends that “[b]y imposing significant additional cost premiums on heat pump equipment for manufactured homes, application of the 13 SEER efficiency standard will create an affirmative obstacle to our program and will hinder our efforts to promote energy conservation in the region.” *Id.*

D. Response

NORDYNE responded to the comments in opposition to its exception request in two separate submissions dated October 27, 2004 (Response I) and November 30, 2004 (Response II). In these submissions, NORDYNE reasserts its claim that the firm should be granted exception relief for the reasons described in its Application for Exception. In Response I, NORDYNE concedes that the products for which it requests exception relief do not meet the DOE definition of “*Space constrained product*,” 10 C.F.R. § 430.2,9/ but argues that DOE did not follow proper notice and comment procedures before adopting this rule. Response I at 5-7. NORDYNE continues to argue that the space difficulties are substantially greater for manufactured homes than site-built homes, and cannot be overcome without unreasonable additional cost. *See* Response I at 9-11; Response II at 2-3. Regarding the leakage issue, NORDYNE offers the following solution:

With respect to split systems, NORDYNE is willing to use outdoor units that are comparable to outdoor units used in 13 SEER non-space constrained systems, and indoor units built specifically for manufactured housing. This approach should eliminate any incentive for redeployment of the outdoor compressor units. There is little reason for leakage, as the indoor units are specifically designed for the small alcove space available in manufactured housing. Moreover NORDYNE is willing to take further measures to mitigate any possibility of leakage, including labeling of products, inserting warnings in instruction manuals and other literature, and informing those distributors that sell these units that the units may not be sold for use in the site-built market. With respect to single package units, NORDYNE would be willing to take similar steps to

9/ NORDYNE states that its compact air handler for which it seeks exception relief is rated below 30,000 BTU/hr. NORDYNE notes, however, that it did not begin producing this product until 2001, and it therefore does not meet the definition requirement (3) that it be “[o]f a product type that was available for purchase in the United States as of December 1, 2000.” *See* Response I at 3, note 10.

mitigate any possibility of leakage.

Response I at 10-11. On December 7, 2004, we convened a conference at NORDYNE's request, 10 C.F.R. § 1003.61, at which NORDYNE made an oral presentation and submitted additional documentation, principally describing the manufactured home industry, in support of its Application for Exception. Finally, on December 22, 2004, NORDYNE submitted a letter addendum further elaborating its position that the firm should be granted exception relief. In this letter, NORDYNE clarifies that it is seeking the following exception relief from the 13 SEER rule for its 3 to 5 ton systems, for the period January 23, 2006 through January 1, 2010:

- | | |
|---|-------------------|
| 1) split-system air conditioners for manufactured homes | 12 SEER |
| 2) split-system heat pumps for manufactured homes | 12 SEER, 7.4 HSPF |
| 3) packaged air conditioners for manufactured homes | 12 SEER |
| 4) packaged heat pumps for manufactured homes | 12 SEER, 7.4 HSPF |
| 5) apartment air handler/air conditioner | 11 SEER |
| 6) apartment air handler/heat pump | 11 SEER, 7.1 HSPF |

NORDYNE Addendum at 1.

II. Analysis

We have carefully considered the Application for Exception filed by NORDYNE and concluded that the firm should be granted exception relief with respect to split-system air conditioners and heat pumps in 3 to 5 ton models, produced for manufactured housing,. However, we have determined that NORDYNE's Application for Exception should be denied in all other respects. The bases for our determination are discussed below.

A. Split-Systems for Manufactured Housing

While NORDYNE's 3 to 5 ton split-system models designed for manufactured homes do not fit the definition of a "*space constrained product*," 10 C.F.R. § 430.2, we find that NORDYNE and the manufactured home industry are facing a significantly greater burden in adapting to the space requirements necessary for 13 SEER equipment. NORDYNE has established in its exception application and supplemental materials that the standard alcove and closet space provided in manufactured homes simply will not allow installation of a larger indoor coil. NORDYNE states in its application that 13 SEER might be achievable for its 3-ton and larger systems by using an indoor blower brushless DC, variable speed motor and a two-stage compressor, but that

adding these features would result in an increased cost of \$720.^{10/} We find that such an increase in the cost of each unit would not only reduce NORDYNE'S product sales, but impose an inequitable financial burden on producers and consumers of manufactured homes.^{11/}

The remaining option, available for new construction, is for manufactured home builders to increase the interior space allotted for installation of air conditioning and heating equipment. As pointed out by NORDYNE's competitors, the construction industry for site-built homes is also facing interior redesign costs as a result of the move to larger 13 SEER efficiency equipment. However, we believe that the manufactured home industry is more severely impacted by increases in size and cost, first, because manufactured homes place a higher premium upon available living space, and second, because manufactured homes are primarily marketed to low-income consumers.^{12/} Moreover, while design modifications may alleviate the 13 SEER installation difficulties for new manufactured housing, the serious problem remains that existing homes will be unable to retrofit larger 13 SEER systems without making structural changes at substantial, and perhaps prohibitive, cost to the homeowner. This serious problem has been acknowledged by many of the interested parties filing comments in this proceeding,^{13/} and indeed two of the public interest groups indicate

^{10/} In Response I, NORDYNE slightly revised its estimates stating that these efficiency enhancing technologies could drive the retail price of each unit up by as much as \$718 per unit, noted that if markup multipliers from DOE's Technical Support Document are used, the incremental cost of adding these components would be \$753. Response I at 10, Technical Support Document: Energy Efficiency Standard for Consumer Products: Residential Central Air Conditioners and Heat Pumps, DOE, Chap. 10 at 10-6 (May 2002).

^{11/} In the Final Rule, DOE estimated that adopting the 13 SEER standard would increase the cost of the typical split-system air conditioner by \$335 and the typical heat pump by \$332.. See 66 Fed. Reg. 7170, 7171 (January 22, 2001).

^{12/} Statistical information compiled by MHI for 2003, shows that new site-built homes sold at an average price of \$183,371 and had an average living space of 2,315 square feet, while new manufactured homes sold at an average cost of \$31,700 and had an average living space of 1,095 square feet. This data further indicates that in 2002, the median household income of manufactured home owners was \$28,000. See QuickFacts: Trends and Information About the Manufactured Housing Industry, at 2, 4, available at www.manufacturedhousing.org.

^{13/} NORDYNE's competitors point out that retrofit issues in the replacement market exist for site-built homes as well. See, e.g., Trane Comments at 4. However, we do not find that the replacement issues faced by a site-built homes are nearly as pervasive or universal as for manufactured housing which, by design, allow the minimum space necessary for installation of heating and cooling equipment.

that some form of exception relief may be appropriate to address this issue. *See* ACE Comments at 2; ASE Comments at 3.

Thus we believe that several factors favor the granting of exception relief. We have previously recognized that the same factors considered by the agency in promulgating energy conservation standards are useful in evaluating claims for exception relief. *See SpacePak/Unico Inc.*, 29 DOE ¶ 81,002 (2004). These factors are specified in Section 325 of the EPCA and include economic impact on the manufacturers and consumers, net consumer savings, energy savings, impacts on product utility, impact on competition, need for energy conservation, and other relevant factors. EPCA § 325(o)(2)(B)(1), 42 U.S.C. § 6295(o)(2)(B)(1). In the present case, we find that the failure to provide exception relief will result in a gross inequity and serious hardship to producers of manufactured housing and their consumers. The manufactured housing market constitutes only 8% of the total housing market,^{14/} and the limited exception relief granted in this decision, 12 SEER, is only incrementally below the 13 SEER revised standard. Thus, we do not believe that the approval of exception relief will severely impede the energy conservation goals of EPCA. Finally, for the reasons below, we have concluded that the approval of exception relief will not detrimentally impact competition within the air conditioning industry.

NORDYNE is the major supplier of air conditioning and heating equipment for manufactured housing which is a relatively small market. Nonetheless, many of the parties filing comments in this proceeding have raised the “leakage” issue, i.e. that air conditioning and heat pump units intended for manufactured homes will find their way into the site-built home market. However, we are satisfied that NORDYNE has adequately addressed this concern. NORDYNE states:

With respect to split systems for manufactured homes, we [propose] pairing an outdoor unit comparable to those used in 13 SEER site-built systems with the most economically feasible indoor unit possible, for an overall efficiency of 12 SEER. Since the outdoor units for our 12 SEER manufactured housing systems would be comparable to the outdoor units for 13 SEER site-built housing systems – with the same compressor, fan and coil design – there would be no efficiency difference between the outdoor units. More importantly, because the technology would be the same, the costs and likely pricing of the units would also be expected to be very similar. Therefore, there would be no economic reason for misapplication of the outdoor units for manufactured housing.

^{14/} MHI reports that “[i]n 2000, 22 million Americans (about 8.0 percent of the U.S. population) lived full-time in 10 million manufactured homes.” Fast Facts, MHI. (*see* MHI website, note 12, *supra*).

NORDYNE Addendum at 4. The specifications provided NORDYNE indicate that the 13 SEER outdoor unit it proposes to use is virtually identical to a 13 SEER model designed for site-built homes, in terms of dimensions, coil fins and rows, compressor, the fan blade and motor. *Id.* One difference is that refrigerant line connection is different for the manufactured home unit, which is an additional disincentive for deploying these units into the site-built home market. *Id.* at 5.

NORDYNE also proposes to affix a label to every air conditioner and heat pump designated for installation in a manufactured home covered by the requested exception relief, stating:

Note to the Installer: Do not install this unit in any home other than a H.U.D. Code manufactured home. Doing so would be a violation of a U.S. Department of Energy ruling, effective January 23, 2006, and will VOID the warranty on this product.

Addendum at 5. NORDYNE proposes similar language to be included in the consumer warranty as well as in its product distribution agreements. *Id.* On the basis of the foregoing, we find that the danger of leakage of outdoor units intended for manufactured homes will be negligible and that exception relief should not be precluded for this reason.

In summary, we conclude that granting exception relief for split systems in manufactured homes will not have a significant adverse impact upon competition within the air conditioner industry or meaningfully impede the agency's efforts to promote energy conservation in the nation as a whole. Moreover, the exception relief (12 SEER) we approve in this decision is modest and consistent with the standard established by the agency for a "*Space constrained product*" meeting the regulatory definition. *See* 10 C.F.R. § 430.2, 69 Fed. Reg. 50997 (August 17, 2004).^{15/}

B. Packaged Systems for Manufactured Homes

With respect to packaged systems, however, we have concluded that NORDYNE has

^{15/} In the cited Technical Amendment, DOE established a 12 SEER standard for "Space constrained products – air conditioners" and a 12 SEER/7.4 HSPF standard for "Space constrained products – heat pumps." The agency further recognized that appropriate lead time, up to five years from adoption of the 12 SEER standard for these products, is necessary to enable manufacturers to come into compliance. *See* 69 Fed. Reg. at 50998. We therefore believe that the period of exception relief requested by NORDYNE, until January 1, 2010, for manufactured home split system units to come into compliance with the 13 SEER rule, is reasonable under the circumstances presented in this case.

not established that manufactured homes are universally confronted with severe exterior space constraints that impede installation of 13 SEER units. In its application, NORDYNE claims that installation of larger units is constrained by the lack of space between homes in typical manufactured home communities. During our conference, NORDYNE presented schematics and photographs showing that certain manufactured home communities will indeed have challenges. Notwithstanding, it appears that these communities are the exception rather than the norm. According to year 2001 statistics compiled by MHI, “67 percent of new manufactured homes are located on private property, and 33 percent of new manufactured homes were located in communities.” Fast Facts, MHI (*see* note 14, *supra*). It is further obvious that not all manufactured home communities will have the severe difficulties cited by NORDYNE. Under these circumstances, we have no basis for concluding that the exterior limitations of manufactured homes are substantially greater than those of many site-built homes on a pervasive scale and, consequently, we do not accept NORDYNE’s claim that exception relief should be granted on this ground.

C. Compact Air Handlers for Small Apartments

Finally, we are also unable to approve exception relief for NORDYNE’s compact air handler. NORDYNE requests that an 11 SEER standard be established for this product. As pointed out by Carrier, “NORDYNE could continue to sell this air handler to address replacement needs, as the air handler does not have a SEER rating – only the systems rated with the air handler have SEER ratings.” Carrier Comments at 3. However, NORDYNE maintains that, based upon its testing, systems employing its compact air handler will not be able to meet the 13 SEER standard effective in January 2006, and consequently in the absence of exception relief, NORDYNE will be unable to sell complete systems incorporating its compact air handler. *See* Response II at 4. NORDYNE’s describes this product as a “niche” market since “no other companies produce such small models with front return.” Response I at 7.

However, the record indicates that NORDYNE’s compact air handler is a “niche” market only recently created by NORDYNE itself^{16/}, at a time when it was not prudent to do so. NORDYNE concedes that it did not begin producing this product until 2001, *see* Response I at 3, note 3, after the agency had published the 13 SEER

^{16/} Unlike manufactured homes, NORDYNE does not contend that small apartments are uniformly designed such that only NORDYNE’s product will fit in the allotted space. NORDYNE concedes that “[w]e are aware that similar units are manufactured by several other companies, but they are all larger than these NORDYNE models, as far as we know.” Application at 5. Indeed, Rheem asserts in its comments that it makes a product slightly larger but competitive with NORDYNE’s compact air handler, and Rheem believes it “can redesign the product to meet the customer needs at 13 SEER.” Rheem Comments at 2.

final rule.^{17/} It is well-settled in prior decisions of this office that a firm may not receive exception relief to alleviate a burden attributable to a discretionary business decision rather than the impact of DOE regulations. *See, e.g., Big Muddy Oil Processors, Inc.*, 12 DOE ¶ 81,006 at 82,521 (1984); *341 Tract Unit of the Citronelle Field: Exxon Co., USA, et al.*, 10 DOE ¶ 81,027 at 82,649-50 (1983). In unique mitigating circumstances, a firm might be granted exception relief where the business decision was the most viable among more precarious options. *See, e.g., Viking Range Corp.*, 28 DOE ¶ 81,002 (2000). However, NORDYNE has made no such showing in this case.^{18/}

III. Conclusion

On the basis of the foregoing, we conclude that NORDYNE will suffer a gross inequity and unfair distribution of burdens if required to adhere to the 13 SEER efficiency level effective January 23, 2006, with respect to 3 to 5 ton split system air conditioners and heat pumps for manufactured homes, and therefore should be granted exception relief from the 13 SEER Rule. 42 U.S.C. § 7194(a); 10 C.F.R. § 1003.25(b)(2). Effective January 23, 2006, an efficiency standard of 12 SEER is established for split system air conditioners and an efficiency standard of 12 SEER/7.4 HSPF is established for heat pumps, in 3 to 5 ton cooling capacities (36,000 Btu/hr or above), produced by NORDYNE for manufactured housing, as defined and regulated by the U.S. Department of Housing and Urban Development, 24 C.F.R. Part 3282. This exception relief is conditioned upon NORDYNE affixing a warning label on each product, and providing notice in all warranties and distribution agreements, stating that the product is: (i) designed exclusively for installation in manufactured housing, and (ii) any misuse of the product is a violation of DOE regulations and will result in forfeiture of all product warranties. This exception relief will remain in effect until January 1, 2010. NORDYNE's

^{17/} The agency issued the Notice of Proposed Rulemaking in October 2000, 65 Fed. Reg. 59589 (October 5, 2000), and had been in discussions with the air conditioning industry concerning the proposed rule change prior to that date. Thus NORDYNE had ample notice of the impending change in efficiency standards, and the firm does not argue this point.

^{18/} We agree with the observation of Carrier that “[s]ince the NORDYNE product is a recent offering of this unique size, a significant replacement market has not yet been developed.” Carrier Comments at 3. Moreover, NORDYNE will be able to market its compact air handler to meet replacement needs until the firm develops the technology to produce a 13 SEER system employing its compact air handler. Thus we are not persuaded that the denial of exception relief for NORDYNE's compact air handler will have a significant adverse impact upon previous consumers of this product. In sum, we believe that to allow NORDYNE to continue to market 11 SEER systems utilizing this product, as requested by the firm, is simply not justified under the circumstances presented in this case.

Application for Exception is denied in all other respects.

It Is Therefore Ordered That:

(1) The Application for Exception filed by NORDYNE, Inc. (NORDYNE) on August 27, 2004, is hereby granted as set forth in Paragraphs (2) and (3) below, and in all other respects denied.

(2) Notwithstanding the requirements of 10 C.F.R. § 430.32(c), on or after January 23, 2006 until January 1, 2010, NORDYNE is authorized to manufacture for sale split system air conditioners and heat pumps, in 3 to 5 ton cooling capacities (36,000 Btu/hr or above), for manufactured housing (24 C.F.R. Part 3282) having not less than the following Seasonal Energy Efficiency Ratio (SEER) and Heating Seasonal Performance Factor (HSPF) ratings: (1) split system air conditioners, 12 SEER; (2) split system heat pumps, 12 SEER, 7.4 HSPF.

(3) The exception relief granted in this decision conditioned upon NORDYNE affixing a warning label on each product, and providing notice in all warranties and distribution agreements, that the product is: (i) designed exclusively for installation in manufactured housing, and (ii) any misuse of the product is a violation of DOE regulations and will result in forfeiture of all product warranties. These requirements are in addition to other product labeling and notice requirements imposed by applicable federal regulations.

(4) 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 within thirty (30) days of service, in accordance with the procedures set forth in 10 C.F.R. Part 1003, Subpart C. Any person aggrieved or adversely affected by the denial of exception relief may file an appeal to the Federal Energy Regulatory Commission, in accordance with the procedural regulations of that agency.

George B. Breznay
Director
Office of Hearings and Appeals

Date: April 14, 2005