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[6450-01-P]

DEPARTMENT OF ENERGY

10 CFR Part 430

[Docket Number EERE-2014-BT-STD-0048]

RIN: 1904-AD37

Energy Conservation Program: Energy Conservation Standards for Residential Central Air Conditioners and Heat Pumps; Request for Information

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Request for information (RFI).

SUMMARY: The U.S. Department of Energy (DOE) is initiating an effort to determine whether to amend the current energy conservation standards for residential central air conditioner and heat pump products. According to the Energy Policy and Conservation Act's 6-year review requirement (42 U.S.C. 6295(m)(1)), DOE must publish a notice of proposed rulemaking to propose new standards for residential central air conditioner and heat pump products or a notice of determination that the existing standards do not need to be amended by June 6, 2017. This RFI seeks to solicit information from the public to help DOE determine whether amended standards for residential central air conditioner and heat pump products would result in a significant amount of additional energy savings and whether those standards would be technologically feasible and economically justified.

DATES: Written comments and information are requested on or before **[INSERT DATE 30 DAYS FOLLOWING PUBLICATION IN FEDERAL REGISTER]**.

ADDRESSES: Interested parties are encouraged to submit comments electronically. However, comments may be submitted by any of the following methods:

- Federal eRulemaking Portal: www.regulations.gov. Follow the instructions for submitting comments.
- E-mail to the following address: CACHeatPump2014STD0048@ee.doe.gov. Include docket number EERE-2014-BT-STD-0048 and/or RIN 1904-AD37 in the subject line of the message. All comments should clearly identify the name, address, and, if appropriate, organization of the commenter.
- Postal Mail: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, Mailstop EE-2J, Request for Information for Energy Conservation Standards for Residential Central Air Conditioners and Heat Pumps, Docket No. EERE-2014-BT-STD-0048 and/or RIN 1904-AD37, 1000 Independence Avenue, SW., Washington, DC 20585-0121. Please submit one signed paper original.
- Hand Delivery/Courier: Ms. Brenda Edwards, U.S. Department of Energy, Building Technologies Program, Sixth Floor, 950 L'Enfant Plaza, SW., Washington, DC 20024. Please submit one signed paper original.

Instructions: All submissions received must include the agency name and docket number and/or RIN for this rulemaking. No telefacsimiles (faxes) will be accepted.

Docket: The docket is available for review at www.regulations.gov, including Federal Register notices, comments, and other supporting documents/materials. All documents in the docket are listed in the www.regulations.gov index. However, not all documents listed in the index may be publicly available, such as information that is exempt from public disclosure.

A link to the docket webpage can be found at: http://www.regulations.gov/#!docketDetail;D=EERE-2014-BT-STD-0048. This webpage contains a link to the docket for this notice on the www.regulations.gov website. The www.regulations.gov webpage contains simple instructions on how to access all documents, including public comments, in the docket.

For information on how to submit a comment, review other public comments and the docket, or participate in the public meeting, contact Ms. Brenda Edwards at (202) 586-2945 or by e-mail: Brenda.Edwards@ee.doe.gov.

FOR FURTHER INFORMATION CONTACT: Direct requests for additional information may be sent to

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SUPPLEMENTARY INFORMATION:

Table of Contents

I. Introduction
A Authority and Background
B. Rulemaking Process
II Request for Information and Comments
A. Market Assessment and Screening Analysis
B. Engineering Analysis
C. Markups Analysis
D. Energy Use Analysis
E. Life-Cycle Cost and Payback Period Analysis
F. Shipments Analysis
G. National Impact Analysis
H. Manufacturer Impact Analysis
I. Submission of Comments

I. Introduction

A. Authority and Background

Title III, Part B of the Energy Policy and Conservation Act of 1975 (EPCA or the Act), Pub. L. 94-163, (42 U.S.C. 6291-6309, as codified) sets forth a variety of provisions designed to improve energy efficiency and established the Energy Conservation Program for Consumer Products Other Than Automobiles, a program covering major household appliances (collectively referred to as "covered products"), including residential central air conditioners and heat pumps that are the subject of this rulemaking. (42 U.S.C. 6292(a)(3))

EPCA prescribed energy conservation standards for central air conditioners and heat pumps and directed DOE to conduct two cycles of rulemakings to determine whether to amend

these standards. (42 U.S.C. 6295(d)(1)–(3)) DOE completed the second of the two rulemaking cycles by publishing a direct final rule on June 27, 2011 (2011 Direct Final Rule). 76 FR 37414. The DFR amended standards for central air conditioners and heat pumps manufactured on or after January 1, 2015. These amended standards differ by region. (10 CFR 430.32(c)(2)-(5)) DOE seeks comment from interested parties as to whether DOE should consider and analyze amended standards on a national basis or amended standards that differ by region for central air conditioners and heat pumps.

EPCA requires that, not later than 6 years after the issuance of a final rule establishing or amending a standard, DOE publish a NOPR proposing new standards or a notice of determination that the existing standards do not need to be amended. (42 U.S.C. 6295(m)(1)) Based on this provision, DOE must publish by June 6, 2017 either a NOPR proposing new standards for residential central air conditioners and heat pumps or a notice of determination that the existing standards do not need to be amended. Today's notice seeks input from the public to assist DOE with its determination on whether amended standards pertaining to residential central air conditioners and heat pumps are warranted. In making this determination, DOE must evaluate whether more amended standards would (1) yield a significant savings in energy use and (2) be both technologically feasible and economically justified. (42 U.S.C. 6295(o)(3)(B))

B. Rulemaking Process

DOE must follow specific statutory criteria for prescribing new or amended standards for covered products. EPCA requires that any new or amended energy conservation standard be designed to achieve the maximum improvement in energy or water efficiency that is

technologically feasible and economically justified. To determine whether a standard is economically justified, EPCA requires that DOE determine whether the benefits of the standard exceed its burdens by considering, to the greatest extent practicable, the following:

1. The economic impact of the standard on the manufacturers and consumers of the affected products;

2. The savings in operating costs throughout the estimated average life of the product compared to any increases in the initial cost, or maintenance expense, likely to result from the imposition of the standard;

3. The total projected amount of energy savings likely to result directly from the imposition of the standard;

4. Any lessening of the utility or the performance of the products likely to result from the imposition of the standard;

5. The impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the imposition of the standard;

6. The need for national energy and water conservation; and

7. Other factors the Secretary of Energy (Secretary) considers relevant. (42 U.S.C. 6295 (o)(2)(B)(i))

DOE fulfills these and other applicable requirements by conducting a series of analyses throughout the rulemaking process. Table I.1 shows the individual analyses that are performed to satisfy each of the requirements within EPCA.

Table I.1 EPCA Requirements and Corresponding DOE Analysis

EPCA Requirement	Corresponding DOE Analysis
Technological Feasibility	• Market and Technology Assessment • Screening Analysis • Engineering Analysis
Economic Justification:	
1. Economic impact on manufacturers and consumers	• Manufacturer Impact Analysis • Life-Cycle Cost and Payback Period Analysis • Life-Cycle Cost Subgroup Analysis • Shipments Analysis
2. Lifetime operating cost savings compared to increased cost for the product	• Markups for Product Price Determination • Energy and Water Use Determination • Life-Cycle Cost and Payback Period Analysis
3. Total projected energy savings	• Shipments Analysis • National Impact Analysis
4. Impact on utility or performance	• Screening Analysis • Engineering Analysis
5. Impact of any lessening of competition	• Manufacturer Impact Analysis
6. Need for national energy and water conservation	• Shipments Analysis • National Impact Analysis
7. Other factors the Secretary considers relevant	• Emissions Analysis • Utility Impact Analysis • Employment Impact Analysis • Monetization of Emission Reductions Benefits • Regulatory Impact Analysis

As detailed throughout this RFI, DOE is specifically publishing this notice as the first step in the analysis process and is specifically requesting input and data from interested parties to aid in the development of the technical analyses.

II. Request for Information and Comments

In the next section, DOE has identified a variety of questions that DOE would like to

receive input on to aid in the development of the technical and economic analyses regarding whether new standards for residential central air conditioners and heat pumps may be warranted. In addition, DOE welcomes comments on other issues relevant to the conduct of this rulemaking that may not specifically be identified in this notice.

A. Market Assessment and Screening Analysis

The market and technology assessment provides information about the residential central air conditioner and heat pump industry that would be used throughout the rulemaking process. For example, this information may address technological improvements used in the design and manufacturing of such products. DOE uses qualitative and quantitative information to characterize the structure of the residential central air conditioner and heat pump industry and market. In this analysis, DOE will identify and characterize the manufacturers of residential central air conditioners and heat pumps, estimate market shares and trends, address regulatory and non-regulatory initiatives intended to improve energy efficiency or reduce energy consumption, and explore the potential for technological improvements in the design and manufacturing of residential central air conditioners and heat pumps. DOE will also review product literature, industry publications, and company websites. Additionally, DOE will also consider conducting interviews with manufacturers to assess the overall market for residential central air conditioners and heat pumps.

Product Classes

When evaluating and establishing energy conservation standards, DOE may divide covered products into product classes by the type of energy used or by capacity or other

performance-related features that would justify a different standard. In making a determination whether a performance-related feature justifies a different standard, DOE must consider factors such as the utility to the consumer of the feature and other factors DOE determines are appropriate. (42 U.S.C. 6295(q)) The energy conservation standards for residential central air conditioners and heat pumps established by the 2011 Direct Final Rule will become effective on January 1, 2015. 10 CFR Part 430.32(c)(2) lists the seven product classes for residential central air conditioners and heat pumps and their corresponding energy conservation standards. The product classes are:

(1) Split system air conditioners

(2) Split system heat pumps

(3) Single-package air conditioners

(4) Single-package heat pumps

(5) Small duct, high velocity (SDHV) systems

(6) Space-constrained air conditioners

(7) Space-constrained heat pumps

For this rulemaking, DOE plans to maintain the existing product classes for residential central air conditioners and heat pumps, as presented above.

Issue A.1 DOE requests feedback on whether it should consider any changes to the existing product classes for residential central air conditioners and heat pumps.

Technology Assessment and Screening Analysis

The purpose of the technology assessment is to develop a preliminary list of technologies that could potentially be used to improve the efficiency of residential central air conditioners and heat pumps. The purpose of the screening analysis is to screen out technologies that are not appropriate for consideration in the engineering analysis due to the following four factors: (1) technological feasibility, (2) practicability to manufacture, install, and service, (3) impacts on product utility to consumers, and (4) health and safety. (10 CFR 430, subpart C, appendix A, section (4)(a)(4)) The technologies that pass the screening are called design options and are considered in the engineering analysis. DOE uses information about existing and past technology options and prototype designs to help identify technologies that manufacturers could use to meet and/or exceed energy conservation standards.

The 2011 Direct Final Rule identified several design options that are employed in central air conditioners and heat pumps. The design options used in the 2011 Direct Final Rule analyses may still be representative of the range of design options currently employed by product manufacturers, as listed below:

A. Higher-efficiency compressors
B. Higher-efficiency fan motors
C. Higher-efficiency fan blades
D. Improvements to baseline coils
E. Micro-channel heat exchangers
F. Flat-tube heat exchangers
G. Heat pump defrost controls

H. Inverter technology

I. High-efficiency expansion valves

However, DOE understands that manufacturers typically introduce new design options into the market as technology evolves over time.

Issue A.2 DOE requests comment on whether DOE should consider design options other than those considered in the analyses supporting the 2011 Direct Final Rule, as listed above.

B. Engineering Analysis

The engineering analysis estimates the cost-efficiency relationship of products at different levels of increased energy efficiency. This relationship serves as the basis for the cost-benefit calculations for consumers, manufacturers, and the nation. In determining the cost-efficiency relationship, DOE estimates the increase in manufacturer cost associated with increasing the efficiency of products above the baseline to the maximum technologically feasible ("max-tech") efficiency level for each product class. The baseline model is used as a reference point for each product class in the engineering analysis and the life-cycle cost and payback-period analyses.

Efficiency Levels

For each established product class, DOE selects a baseline model as a reference point against which any changes resulting from energy conservation standards can be measured. The baseline model in each product class represents the characteristics of common or typical products in that class. Typically, a baseline model is one that meets the current minimum energy

conservation standards by a small or zero margin.

In the 2011 Direct Final Rule, DOE established minimum energy conservation standards that will become effective on January 1, 2015.[1] DOE would consider these minimum energy conservation standards as the baseline efficiency levels for any analyses conducted to consider amending the standards.

During the 2011 DFR rulemaking, DOE also established maximum-technology (max-tech) efficiency levels for residential central air conditioner and heat pump product classes. DOE determined each max-tech level by researching the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) directory[2] and the major manufacturers' product literature.

DOE also set regional cooling performance standards for split system air conditioners as a function of a Seasonal Energy Efficiency Ratio (SEER) in the states of Virginia, Maryland, Kentucky, North and South Carolina, Tennessee, Georgia, Florida, Alabama, Mississippi, Arkansas, Louisiana, Texas, and Oklahoma (South), and regional performance standards for split system and single-package air conditioners as a function of SEER and Energy Efficiency Ratio (EER) in the states of Arizona, California, Nevada, or New Mexico (Southwest). In both cases, DOE has identified baseline and max-tech efficiency levels for the respective SEER and EER values. Table II.1 summarizes these efficiency levels.

[1] In addition, the American Manufacturing Technical Corrections Act of 2012 established minimum energy conservation standards for small duct, high velocity systems that will become effective on January 1, 2015. These were added to the code of regulations in a December 3, 2013 Technical Amendment. 78 FR 72533.

[2] AHRI is the trade association representing manufacturers of HVACR and water heating equipment within the global industry. Products of different manufacturers are certified to AHRI and listed in the AHRI directory: https://www.ahridirectory.org/ahridirectory/pages/home.aspx

Table II.1 Baseline and Max-Tech Efficiency Levels of Covered Products

SEER or EER (Btu/hr-W)			
Product Class		**Baseline**	**Max-Tech**
Split system air conditioner	SEER	13.0	26.0
<45,000 Btu/hr	*EER*	*12.2*	*16.5*
≥45,000 Btu/hr	*EER*	*11.7*	*13.0*
Single-package air conditioner	SEER	14.0	20.0
	EER	*11.0*	*13.0*
Split system heat pump	SEER	14.0	24.0
Single-packaged heat pump	SEER	14.0	16.4
Small-duct, high-velocity systems	SEER	12.0	12.5
Space constrained air conditioner	SEER	12.0	14.0
Space constrained heat pump	SEER	12.0	12.0

Issue B.1 DOE requests comment on the baseline and max-tech efficiency levels for each product class.

C. Markups Analysis

To carry out the life-cycle cost (LCC) and payback period (PBP) calculations, DOE needs to determine the cost to the residential consumer of baseline products that satisfies the currently applicable standards, and the cost of the more-efficient unit the consumer would purchase under potential amended standards. By applying a multiplier called a "markup" to the manufacturer's selling price, DOE is able to estimate the residential consumer's price.

For the 2011 Direct Final Rule, DOE used two distribution channels to characterize how products pass from the manufacturer to the customer: replacement applications and new

construction. 76 FR 37464-65 (June 27, 2011). For residential central air conditioning and heat pump products installed in replacement applications, the manufacturer sells the equipment to a wholesaler, who in turn sells it to a mechanical contractor, who in turns sells it to the consumer. For products installed in new construction applications, an additional link in the distribution chain for the general contractor is added. In this new construction distribution channel, the manufacturer sells the equipment to a wholesaler, who in turn sells it to a mechanical contractor, who in turn sells it to a general contractor, who in turns sells it to the consumer.

To be consistent with the approach followed in the 2011 rulemaking and for other energy consuming product rulemakings, DOE plans to estimate the manufacturer markup based on publicly available data (e.g., SEC 10-K reports, corporate annual reports) and feedback obtained from manufacturers during interviews. DOE also plans to estimate average wholesaler, mechanical contractor, and general contractor markups based on available income statement data (e.g., Heating, Air-conditioning & Refrigeration Wholesalers International (HARDI) Profit Planning Reports, Air Conditioning Contractors of America (ACCA), U.S. Census Bureau).

Issue C.1 DOE seeks input on distribution channels relevant for residential central air conditioners and heat pumps as well as the percent of equipment being distributed through the channels.

Issue C.2 DOE seeks recent data to establish the markups for the parties involved with the distribution of the equipment addressed by today's notice.

D. Energy Use Analysis

The purpose of the energy analysis is to assess the energy-savings potential of different product efficiencies. DOE uses the annual energy consumption and energy-savings potential in the LCC and PBP analyses to establish the savings in consumer operating costs at various product efficiency levels. As part of the energy use analysis, certain assumptions may be required regarding product application, including how and under what conditions the product is operated.

DOE's energy use analysis estimates the range of energy use of residential central air conditioner and heat pump products in the field, i.e., as they are actually used by consumers. Because energy use by such products varies greatly based on efficiency level, consumer usage patterns, and environmental attributes, DOE will establish a range of energy use.

Because DOE has set regional cooling-performance standards for split system and single-package air conditioners as function of SEER and EER, DOE will analyze the impact of increasing SEER and EER on cooling energy savings.

Issue D.1 DOE requests stakeholder input regarding the impact of changes in SEER and EER on cooling energy savings.

In the 2011 Direct Final Rule, DOE estimated that, based on stakeholder input, seven-percent of central air conditioner and heat pump shipments were utilized in commercial building applications. DOE utilized simulations of a reference office building modeled with EnergyPlus

to estimate the representative space-cooling and space-heating energy consumption of central air conditioners and heat pumps in commercial buildings. For this rulemaking, DOE is considering using the same methodology to estimate energy use in commercial building applications.

Issue D.2 DOE requests stakeholder comment on whether a significant enough percentage of residential central air conditioners and heat pumps are utilized in commercial buildings to warrant considering their use in commercial applications.

E. Life-Cycle Cost and Payback Period Analysis

The purpose of the LCC and PBP analysis is to analyze the effects of potential amended energy conservation standards on consumers of residential central air conditioner and heat pump products by determining how a potential amended standard affects the consumers' operating expenses (usually decreased) and total installed costs (usually increased).

DOE intends to analyze the potential for variability and uncertainty by performing the LCC and PBP calculations on a representative sample of households from RECS for the considered product classes using Monte Carlo simulation and probability distributions. The analysis results are a distribution of results showing the range of LCC savings and PBPs for a given efficiency level relative to the baseline level. DOE plans to analyze all seven product classes of residential central air conditioner and heat pump products.

Inputs to the LCC and PBP analysis are categorized as: (1) inputs for establishing the purchase expense, otherwise known as the total installed cost, and (2) inputs for calculating the

operating expense. The primary inputs for establishing the total installed cost are the baseline consumer price, standard-level consumer price increases, and installation costs. Baseline consumer prices and standard-level consumer price increases will be determined by applying markups to manufacturer price estimates. The installation cost is added to the consumer price to arrive at a total installed cost.

In the 2011 Direct Final Rule, DOE derived the total installed cost from central air conditioner data in RS Means. 76 FR 37472 (June 27, 2011). DOE plans to use similar data sources for this rulemaking, with adjustments to reflect current-day labor and material prices as well as to scale installation cost for higher-efficiency products based on equipment weight.

Issue E.1 DOE seeks input on the appropriateness to estimate that changes in installation costs will scale with equipment weight.

The primary inputs for calculating the operating costs are product energy consumption, product efficiency, electricity and gas prices and forecasts, maintenance and repair costs, product lifetime, and discount rates. Both product lifetime and discount rates are used to calculate the present value of future operating expenses.

Maintenance costs are costs associated with maintaining the operation of the product. In the 2011 Direct Final Rule, DOE utilized sources of preventative maintenance pricing to determine maintenance costs. 76 FR 37476 (June 27, 2011). DOE also assumed that such maintenance costs do not change with efficiency. 76 FR 37471, 37476.

Issue E.2 DOE seeks stakeholder input on the appropriateness to assume that changes in maintenance costs will be negligible for more-efficient products.

Repair costs are costs associated with a major repair to the product. In the 2011 Direct Final Rule, DOE determined the costs of major repairs (e.g., compressor replacement) from RS Means and industry literature. 76 FR 37476 (June 27, 2011). DOE also assumed that repair costs vary in direct proportion with the product price at higher efficiency levels as replacement costs for more-efficient components are likely to be greater than components in baseline products. 76 FR 37471, 37476.

Issue E.3 DOE seeks stakeholder comment on the assumption that repair costs vary in direct proportion to product price.

DOE measures LCC and PBP impacts of potential standard levels relative to a base case that reflects the market in the absence of amended standards. DOE plans to develop market-share efficiency data (i.e., the distribution of product shipments by efficiency) for the product classes DOE is considering, for the year in which compliance with any amended or new standards would be required. By accounting for consumers who already purchase more efficient products, DOE avoids overstating the potential benefits from potential standards.

Issue E.4 DOE seeks stakeholder input and data on the fraction of central air conditioners and heat pumps that are sold above the minimum energy efficiency standards. DOE

requests such data to be provided by product class and, for split system air conditioners, by region. DOE also requests information on expected trends in product efficiency over the next five years.

F. Shipments Analysis

DOE uses shipment projections by product class and efficiency level in its analysis of the national impacts of potential standards, as well as in the manufacturer impact analysis.

In the 2011 Direct Final Rule, DOE developed a shipments model for residential central air conditioner and heat pump products driven by historical shipments data, which were used to build up a product stock and calibrate the shipments model. 76 FR 37482 (June 27, 2011). Shipments of each product class were projected for two market sectors that use these products: residential and commercial sectors; for three product placement channels in each market sector: new construction, existing owners, and new owners; and for three climatic regions: hot-dry, hot-humid, and rest of the U.S., which correspond to the regions for which DOE ultimately adopted regional standards.

Issue F.1 DOE seeks stakeholder input and data showing the distribution of shipments by product class, market sector, product placement channel, and climactic region.

In the 2011 Direct Final Rule, DOE modeled the decision to repair or replace equipment for existing owners and the impact that decision would have on the shipments model. 76 FR 37482-84. DOE investigated how increases in product purchase price and decreases in product

operating costs due to standards impact product shipments due to standards.

Issue F.2 DOE seeks input and data on factors that influence a consumer's decisions to repair or replace failed products. In particular, DOE is seeking historical repair cost data as a function of efficiency.

G. National Impact Analysis

The purpose of the national impact analysis (NIA) is to estimate aggregate impacts of potential efficiency standards at the national level. Impacts that DOE reports include the national energy savings (NES) from potential standards and the national NPV of the total consumer benefits. The NIA considers lifetime impacts of potential standards on residential central air conditioner and heat pump products shipped in a 30-year period that begins with the expected compliance date for new or amended standards. To develop the NES, DOE calculates annual energy consumption of products in the building stock for the base case and each standards case. To develop the national NPV of consumer benefits from potential standards, DOE calculates national annual energy expenditures and annual product expenditures for the base case and the standards cases. DOE calculates total annual energy expenditures using data on annual energy consumption in each case, forecasted average annual energy prices, and shipment projections. The difference each year between operating cost savings and increased product expenditures is the net savings or net costs.

A key component of DOE's estimates of NES and NPV is the product energy efficiency forecasted over time for the base case and for each of the standards cases. In the 2011 Direct

Final Rule, DOE based projections of base-case shipment-weighted efficiency (SWEF) for the single-packaged and split system air conditioner and heat pump product classes off SWEF growth rates determined from historical data provided by AHRI. 76 FR 37484-86 (June 27, 2011). Since DOE only received efficiency data at the national level, it assumed that the efficiency distributions and trends developed for the entire Nation are also representative at the regional level (i.e., efficiency distributions and trends do not vary by region). For this rulemaking, DOE plans on considering recent trends in efficiency and input from stakeholders to update product energy efficiency forecasts, and maintain the assumption that efficiency trends developed for the entire Nation are also representative at the regional level.

Issue G.1 DOE seeks stakeholder input and historical SWEF data for residential central air conditioner and heat pumps by product class and by region.

H. Manufacturer Impact Analysis

The purpose of the manufacturer impact analysis (MIA) is to estimate the financial impact of potential energy conservation standards on manufacturers of residential central air conditioners and heat pumps and to evaluate the potential impact of such standards on employment and manufacturing capacity. The MIA includes both quantitative and qualitative aspects. The quantitative part of the MIA primarily relies on the Government Regulatory Impact Model (GRIM), an industry cash-flow model used to estimate a range of potential impacts on manufacturer profitability. The qualitative part of the MIA addresses a proposed standard's potential impacts on manufacturing capacity and industry competition, as well as factors such as product characteristics, impacts on particular subgroups of firms, and important market and

product trends.

As part of the MIA, DOE intends to analyze impacts of potential energy conservation standards on small business manufacturers of covered products. DOE intends to use the Small Business Administration's small business size standards to determine whether manufacturers qualify as small businesses. The size standards are listed by North American Industry Classification System (NAICS) code and industry description[3]. Manufacturing of residential central air conditioners and heat pumps is classified under NAICS 333415, "Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing." The SBA sets a threshold of 750 employees or less for an entity to be considered as a small business for this category. This 750-employee threshold would include all employees in a business's parent company and any other subsidiaries.

DOE conducted a market survey using publicly available information to identify potential small manufacturers. DOE's used DOE's Compliance Certification Management System (CCMS), industry trade association membership directories (including AHRI), individual company websites, and market research tools (e.g., Hoovers reports) to create a list of companies that manufacture or sell products covered by this rulemaking. DOE has initially identified seven domestic small businesses that manufacture residential central air conditioners and heat pumps. The small businesses identified are:

- Aerosys, Inc.

[3] Available at: http://www.sba.gov/content/small-business-size-standards

- Bard Manufacturing Company
- First Co.
- Heat Controller, Inc.
- National Refrigeration and Air Conditioning Products, Inc.
- Style Crest Enterprises, Inc.
- Unico, Inc.

Issue H.1 DOE requests comment on what small business manufacturers of residential central air conditioners and heat pumps have not been identified in the above list that it should consider in its analysis.

I. Submission of Comments

DOE invites all interested parties to submit in writing by **[INSERT DATE 30 DAYS FOLLOWING PUBLICATION IN FEDERAL REGISTER]**, comments and information on matters addressed in this notice and on other matters relevant to DOE's consideration of new or amended energy conservations standards for residential central air conditioners and heat pumps. After the close of the comment period, DOE will begin collecting data, conducting the analyses, and reviewing the public comments, as needed. These actions will be taken to aid in the development of a NOPR for residential central air conditioner and heat pump products if DOE decides to amend the standards for such products.

DOE considers public participation to be a very important part of the process for developing test procedures and energy conservation standards. DOE actively encourages the participation and interaction of the public during the comment period in each stage of the

rulemaking process. Interactions with and between members of the public provide a balanced discussion of the issues and assist DOE in the rulemaking process. Anyone who wishes to be added to the DOE mailing list to receive future notices and information about this rulemaking should contact Ms. Brenda Edwards at (202) 586–2945, or via e-mail at Brenda.Edwards@ee.doe.gov.

Issued in Washington, DC, on October 30, 2014.

Kathleen B. Hogan
Deputy Assistant Secretary for Energy Efficiency
Energy Efficiency and Renewable Energy