



Lennox International Inc.
2140 Lake Park Boulevard
Richardson, Texas 75080-2254

Mailing Address:
P.O. Box 799900
Dallas, Texas 75379-9900

Telephone: 972.497.5000
Facsimile: 972.497.6668
LennoxInternational.com

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Dave Winningham
Sr. Engineering Manager
Regulatory Affairs
Telephone: 803-738-4085

Department of Energy
Appliance and Equipment Standards Program
Building Technologies Office, Mailstop EE-5B
1000 Independence Ave SW
Washington, D.C. 20585

Submitted via: www.regulations.gov

Re: Lennox Comments on the DOE Request for Information “Energy Conservation Standards Program Design” (Docket EERE-2017-BT-STD-0059)

Lennox International Inc. (Lennox) hereby submits comments on the Request for Information, *Energy Conservation Standards Program Design* published by the U.S. Department of Energy (DOE) in the Federal Register on November 28, 2017 (82 Fed. Reg. 56,181) (hereafter referred to as the “RFI”).

Lennox is a leading provider, based in the United States, of climate control solutions for heating, air-conditioning and refrigeration equipment (HVACR) subject to DOE regulation. Lennox is a publicly-traded company and has thousands of employees. This industry is an important source of American jobs and provides equipment that is vital to the health and wellbeing of consumers and the preservation of food.

I. Summary of Comments.

DOE should not move forward with the “market based” regulatory measures raised in the RFI, and certainly not for the HVACR industry. The RFI’s summary states that DOE is evaluating “market-based approaches such as those used to set average efficiency standards.” (82 FR 56,181). Lennox is a strong supporter of allowing the market to work to promote efficiency in the HVACR industry. However, the way to accomplish this is to avoid ill-conceived DOE regulation. Lennox comments on this RFI include the following.

1. The market is already capable of working, particularly in the HVACR industry, without new, federally-imposed “market based” regulations.
2. Lennox does not consider any pilot program as discussed in the RFI to be appropriate, and certainly not in the HVACR industry.
3. DOE’s “market based” measures involve numerous complexities and a high-risk of adverse consequences, including regulatory uncertainty and litigation.
4. Market-based measures would impose high transition costs from the statutory program already in place. Lennox opposes new data collection and enforcement regulations that involve proprietary, non-public data.
5. No program should reduce existing minimum efficiency standards for equipment, including to avoid EPCA’s “anti-backsliding” provisions.

6. If DOE wants to promote proper functioning of the marketplace, DOE should avoid misguided additional regulation.

These points are further discussed below.

II. Discussion.

- 1. *The market is already capable of working, particularly in the HVACR industry, without new, federally-imposed “market based” regulations.***

The RFI cites to controversial corporate average fuel economy standards (“CAFE” standards) as a model for considering market-based regulations for energy conservation standards. (82 FR 56,182-85). Nothing suggests to Lennox that such a CAFE approach is currently warranted for federal energy conservation standards. The HVACR market is already capable of working without a CAFE standard whereby the government seeks to manipulate “market” dynamics.

- 2. *Lennox does not consider any pilot program as discussed in the RFI to be appropriate, and certainly not in the HVACR industry.***

DOE asks for suggestions for a pilot product category. (See e.g., 82 FR 56,181 and 56,185). Lennox is not aware of any appropriate pilot category. In particular, DOE should avoid burdening manufacturers and other stakeholders at this juncture with a misguided effort to develop a pilot category in the HVACR industry.

Additionally, trying to supplant current EPCA mandates with “market based” measures such as a CAFE-style approach raises significant questions of statutory authority, which the RFI glosses over. Because of the significant costs, confusion and complexities associated with the credit trading and other approaches raised in the RFI, DOE should not move forward with those measures or devoting what would likely be significant resources to vet even a pilot project. The time and resources of DOE, consumer and efficiency advocates, and manufacturers are better spent elsewhere, including allowing the current market to work and manufacturers the ability to devote resources to innovation and designing improved, efficient, affordable products.

- 3. *DOE’s “market based” measures involve numerous complexities and a high-risk of adverse consequences, including regulatory uncertainty and litigation.***

Lennox supports DOE’s goal of reducing compliance costs, enhancing consumer choice and maintaining or increasing energy savings. However, the RFI’s “market based” mechanisms are not the best way to accomplish these goals given the EPCA statutory program already in place.

- a. *The RFI provides no specific, compelling information that its “market based” measures are appropriate for federal energy conservation standards. Numerous factors suggest RFI measures are inappropriate.***

DOE provides *no details or specifics*, as applied to efficiency standards, explaining how federally-imposed credit trading, averaging or “feebates” accomplish the stated goals. DOE

provides no engineering, data or other fact-based assessment applied to the equipment at issue. The RFI provides a lengthy background discussion on market-based programs (Section I.B, pp. 82 FR 56,183-84) but provides no quantified evidence of a reduction in regulatory burdens, nor any stated benefits beyond hypothetical possibilities, regarding energy conservation standards. And DOE provides no details on relevant statutory authority given the EPCA mandates already in place.

While major emission trading programs have worked in the past, they have been in different contexts. For instance, the acid-rain trading program for electric power plants was created with explicit statutory authority and regulated large electric power plants run by a relatively small number of entities that have comparatively sophisticated compliance programs.

DOE cites the renewable fuels standard as a model program. However, this program has been subject to multiple lawsuits and has ongoing issues regarding its implementation—and this program was authorized by statute with explicit Congressional guideposts. By contrast, the RFI details no federal authority for an energy efficiency trading program—a discussion noticeably absent. As noted above, the CAFE program has also been controversial, and even it too had explicit statutory authority for credit trading. And the CAFE program targeted only a limited number of vehicle manufacturers, which are generally large entities with sophisticated compliance programs.

Demonstrating the unwieldy complexity of applying emissions trading to federal energy conservation standards, these standards regulate over 60 product types “each of which have a number of product classes” involving “a large number of manufacturers controlling hundreds of brands across a wide range of sectors and industries.” (82 FR 56,184). For just one product category alone, the RFI notes refrigerator-freezer products are subdivided into 42 different product classes. (82 FR 56,182, footnote 12). This extreme range of product types and market participants is a disadvantage to trying to foist emission trading over federal energy conservation standards.

The RFI notes the EPCA manufacturer definition “applies not only to original equipment manufacturers, but also retailers, distributors, installers, or importers, some of which rebrand products manufactured by other distributors” and for a trading program “these regulated entities would have to ... track compliance” with a trading program. (82 FR 56,184). The possibilities for chaos for credit trading involving such an extremely heterogenous group of regulated entities—who do not have experience trading these credits—is significant.

The RFI also raises concerns regarding its market-based measures and inconsistent “distributional asymmetries” where “some firms might face higher costs than under the current program.” (82 FR 56,185). DOE further raises concerns credit trading markets “would not be perfectly competitive.” (82 FR 56,185). In short, a trading program and other RFI market-based measures could create “winners and losers” among regulated entities. Creating such DOE market intervention is not an appropriate use of resources, and even trying to postulate, comment on, and seek to vet such a litigation-prone regulatory foray seems a misguided use of government and stakeholder resources at this juncture.

Concerns expressed throughout these comments regarding efficiency “trading” similarly apply to “averaging” programs, which can function like just another form of trading. While limiting averaging to a narrow class of products and a single manufacturer (i.e., allowing intra-company averaging only) may eliminate some of the problems and complexity with broader trading programs, such narrow averaging likely also reduces program benefits since fewer opportunities would exist for averaging against increments of lower-cost energy efficiency improvements, calling into question the benefits of making such a switch from an already-working EPCA program given all the residual issues with averaging (including issues such as statutory authority, regulatory uncertainty, data collection, transition costs, adverse consumer impacts, and enforcement).

The RFI acknowledges a CAFE-style regulatory approach (which involves both credit trading and averaging) “incorporates many different complexities.” (56,183). DOE lacks a “standardized definition of credits” and raises the amorphous specter of a “normalization of energy savings” across fuel sources and product types. (82 FR 56,184-85). Does DOE plan to rate equipment based on total emissions using gas and electric consumption as well as potential refrigerant emissions? If so, emissions of what pollutants? If emissions are being regulated, would authority for this program better vest with EPA? Is a watt saved via large scale commercial equipment equivalent to a watt saved by a household room air conditioner, and would this justify no future energy savings gains for household equipment (denying efficiency improvements to low income consumers) if it is cheaper to save energy through commercial equipment? Lennox fails to understand how “many different complexities” reduces regulatory burden, one of the RFI’s key goals.

Market-based mechanisms such as credit trading and averaging also raise numerous enforcement issues. If a manufacturer uses averaging or trading for compliance, DOE cannot simply take a unit from inventory and test it to see if the equipment meets the applicable federal standard (as DOE can do when testing against a federal minimum efficiency standard); rather, DOE would have to review a manufacturer’s entire compliance regime to see if the manufacturer had properly obtained the right amount of “credits” to offset any equipment testing below a certain required level (e.g., below an average standard).

The Northwest Power and Conservation Council submitted comments to this docket indicating measures such as a “fleet average efficiency” or trading program “may not be practical, will undoubtedly be difficult to design and implement ... and ultimately may be no more efficient and effective (or even as efficient and effective) as the current approach in securing cost-effective savings.” (Docket ID No. EERE-2017-BT-STD-0059-0017, p. 3). Lennox agrees. Furthermore, DOE’s seeking to impose the RFI’s “market based” measures involves a high risk of litigation, creating regulatory uncertainty that can substantially increase manufacturer costs and ultimately consumer costs. Under no circumstances should DOE come out with a proposed rule following this RFI. DOE has simply not articulated any reasonable grounds on which to move forward.

b. HVACR equipment introduces even more complexity, regarding the RFI's "market based" measures, than household appliances and other equipment.

The problems noted above are compounded for HVACR products. HVACR products have highly varying engineering and market characteristics across particularly numerous product types, including highly customizable products. HVACR products are used by millions of consumers, including in homes and both small and large businesses. Accordingly, HVACR equipment involves more complex distribution and installation issues than typical household appliances and other DOE-regulated equipment. For just one single product category, residential split-system air conditioners, trying to devise a compliance regime for regional standards—which were explicitly statutorily authorized—involved significant complexity and years of controversy among large manufacturers and small business distributors alike. (See e.g., 81 FR 45,388, detailing the lengthy consideration of this compliance regime and the “wide range of views” thereto.)

Additionally, the exact energy efficiency for much HVACR equipment is not established until installation, including for residential split-system air conditioners (that involve separate indoor and outdoor equipment) and various commercial applications. A single split-system air conditioner outdoor unit can have hundreds of various indoor coil and furnace combinations, each with varying system efficiency levels, from the OEM manufacturer. Further, “mix and match” equipment installations can involve different brands and manufacturers, such as various condensing unit manufacturers and independent coil manufacturers. This level of variety is needed by the market to meet customer needs, but because there are millions of rated combinations for residential split systems alone, and the efficiency of these are not determined until configured for the particular consumer application, applying the RFI’s measures would be extremely difficult to administer and a significant increase in burden on manufacturers.

Also, a significant time-lag can exist between an HVACR product’s OEM manufacture and subsequent installation, and establishing the relevant compliance date is an additional complication to applying a “CAFE”/trading framework to HVACR products. Because HVACR equipment is often more expensive than other DOE-regulated products, a substantial retrofit market exists that can increase the prevalence of “mix and match” equipment by different manufacturers and the time lag between the date of component manufacture and the date of system installation.

Imposing credit trading across extremely heterogenous and highly complex HVACR markets creates concerns regarding regulatory transparency, credit trading fraud, the ability of a trading market to actually function, and a host of other issues. HVACR product classes have been carefully assessed through prior regulatory development under the current EPCA process, and the current statutorily-informed process should not be cast aside for the RFI’s measures.

It should also be noted that comments to this docket promoting the benefits of trading programs may be from academics, Washington-focused “think tanks,” or entities otherwise not responsible for designing, producing and selling reliable, efficient equipment that consumers will actually purchase. Comments advocating for trading programs have presupposed that some “market failure” exists in what are in fact highly-competitive equipment markets (e.g., HVACR markets) that have been functioning for decades. Furthermore, Lennox and other HVACR equipment

manufacturers are highly attuned to consumer preferences because customers are obviously essential to the health of their businesses, jobs they provide, and this industry's important impact on the United States economy in general (including via the essential services HVACR equipment provides). Lennox offers a broad range of HVACR products to what is an already-competitive market, including the most efficient equipment that consumers are willing to purchase. A subset of HVACR customers have been willing to purchase equipment that is more efficient than federal minimum energy standards. And Lennox has actively participated in Energy Star, a voluntary federal program, to help promote higher-efficiency equipment. However, purchasers of premium HVACR equipment are a limited subset of the market. DOE should not be persuaded by comments or pursue the RFI's "market based" approaches that are only explorations of only hypothetical benefits such as via credit trading, particularly when such approaches lack support from key manufacturer stakeholders. Even pilot programs may drain resources and cause significant harm versus DOE pursuing tailored improvements to the existing, already functioning, statutorily-mandated energy conservation standards program.

4. Market-based measures would impose high transition costs from the statutory program already in place. Lennox opposes new data collection and enforcement regulations that involve proprietary, non-public data.

The RFI glosses over the high costs of transitioning away from the existing regulatory program. These costs include developing new implementation, monitoring and reporting systems by both DOE and manufacturers alike for trading measures. Trading measures would also involve higher manufacturer testing costs for additional products (assuming that sufficient lab testing capacity is even available) if lower-efficiency products are developed. Moreover, there could be costs to train distributors and dealers across multiple product categories. All these costs could adversely impact consumers.

Furthermore, any trading program would hinge on collecting proprietary data (including production and sales data correlated to efficiency levels, and other market information) that would stifle innovation. Lennox opposes new data collection and enforcement regulations that involve proprietary, non-public data.

Transitioning to a new regulatory program would also require re-designs for new products and disrupt production schedules. This disruption would be compounded by the litigation risk for a new program, undermining regulatory predictability and efficiently providing products to consumers.

Additionally, as noted by comments to the Government of Canada to this docket, a trading program would misalign with regulations in Canada. (See Docket ID No. EERE-2017-BT-STD-0059-0018). Canada is an important export market for the HVACR industry. A patchwork of regulations by jurisdiction increases product design costs and ultimately consumer costs. Rather than increasing regulatorily-driven costs, DOE should promote regulatory harmonization with an important trading partner like Canada.

Worse still, if federal trading programs open the door to greater state regulation of energy efficiency (such as by California, New York or other states that have sued DOE regarding energy efficiency regulation in the past), this could create an extremely costly patchwork of state regulations, dramatically increasing costs to consumers and potentially leading manufacturers to exit markets entirely.

5. No program should reduce existing minimum efficiency standards for equipment, including to avoid EPCA's "anti-backsliding" provisions.

A new credit trading or averaging regulatory program for federal energy efficiency standards would have to contend with the "anti-backsliding" provisions of EPCA. Under those provisions, EPCA prohibits a new standard that either "increases the maximum allowable energy use, ... or decreases the minimum required energy efficiency, of a covered product." (42 U.S.C. 6295(o)(1) and 6313(a)(6)(B)). Moreover, manufacturers have invested significant sums designing and manufacturing products to currently-existing federal minimum standards. In addition to violating statutory mandates and undermining manufacturer investments, allowing newly-available, low-efficiency products would confuse consumers and disrupt consumer expectations for product performance and quality on which they have come to rely. Moreover, gutting efficiency standards could increase imports of low-cost, low-quality, foreign-manufactured products to the detriment of United States jobs.

In short, no new standard should result in a reduction of minimum efficiency standards; even the least-efficient future equipment should meet current federal standards (including those standards already promulgated and set to take effect in the future, for which manufacturers have already begun designing products and developing production schedules). In other words, current federal standards should set a "floor" below which future standards should not fall.

Furthermore, DOE should avoid pilot programs where a subset of manufacturers in a sector can "opt in" that would create an unlevel playing field. The energy conservation standards program has been susceptible to manufacturers seeking to exploit loopholes or import non-compliant equipment, problems that could be exacerbated by a trading or pilot program.

6. If DOE wants to promote proper functioning of the marketplace, DOE should avoid misguided additional regulation.

DOE should make tailored improvement to the existing EPCA energy conservation standards process, rather than seek to foist in an ill-conceived set of "market based" new regulations. Lennox recently outlined such tailored improvements in March 5, 2018 comments on DOE's "Process Rule" RFI (see Document Id. No. EERE-2017-BT-STD-0062-0062). Steps that DOE should take include:

- DOE should better assess standards under DOE's Process Rule and make compliance with the Process Rule mandatory.
- DOE should fully assess cumulative regulatory burden.

- Clear, transparent and technically sound analysis should apply to DOE's traditional rulemaking process.
- Key stakeholders, including manufacturers of products regulated by DOE, should be involved early and meaningfully in the rulemaking process, which is best accomplished through a working group process such as via the Appliance Standards and Rulemaking Federal Advisory Committee (ASRAC).

DOE is already required to consider non-regulatory alternatives to federal standards in energy conservation standard rulemakings, including in the EPCA economic justification analysis. Furthermore, under DOE's Process Rule, DOE is to "consider fully the likely effects of non-regulatory initiatives on product energy use" and the "incremental impacts" of revising mandatory efficiency standards. (Process Rule, Section 12(a)). These non-regulatory alternatives are often undertaken via manufacturers, utilities and states and involve various market incentive programs that do not try to otherwise micromanage market dynamics. Lennox supports these programs. However, DOE seems to have bootstrapped this consideration of market-based incentive and other voluntary and non-federal programs into a misguided attempt to replace current EPCA regulations. Instead, EPCA standards should not be continually and unnecessarily tightened if voluntary and other market-based measures can work. See Lennox Process Rule RFI comments, *supra*, pp. 15-16.

III. Summary.

DOE should not move forward with considering foisting the RFI's "market based" measures to supplant statutorily-mandated federal energy conservation provisions that are already in place and working. Rather, DOE should make targeted improvements to the current program, such as noted in Lennox's "Process Rule" RFI comments cited in the section immediately above, so that DOE would only increase the stringency of EPCA standards when there is a clear and transparent economic justification, and DOE would fully evaluate measures such as utility company market incentives as alternatives to additional DOE federal efficiency standards increases for appliances and equipment. If DOE desires a "market based" approach, it should let manufacturers compete on price, quality, durability, and product features as much as possible under the existing program. DOE should not through the RFI's measures impose additional market intervention and costs, or invite litigation and regulatory uncertainty, that would harm manufacturers and consumers alike. A switch in program design as raised in the RFI is not appropriate at this juncture, particularly for HVACR equipment.

Sincerely,



Dave Winningham,
Sr. Engineering Manager, Regulatory Affairs