

From: Mattingly, Joseph[SMTP:JMATTINGLY@AHRINET.ORG]
Sent: Friday, March 26, 2010 2:30:33 PM
To: MAExemptPetition
Subject: Dkt. No. EERE-BT-PET-0024: Comments of AHRI
Auto forwarded by a Rule

Dear Sir or Madam:

Please see attached comments of the Air-Conditioning, Heating and Refrigeration Institute (AHRI) regarding the Commonwealth of Massachusetts Petition for Waiver of Federal Preemption, Docket No. EERE-BT-PET-0024. AHRI appreciates the opportunity we have been afforded to comment on the petition.

Joe Mattingly
AHRI General Counsel



March 26, 2010

Ms. Brenda Edwards
U.S. Department of Energy
Building Technologies Program
Mailstop EE-2J, Room 1J-018
1000 Independence Avenue, SW
Washington, DC 20585-0121

Re: Massachusetts Petition for Exemption from Preemption,
Dkt. No. EERE-BT-PET-0024: Comments of the
Air-Conditioning, Heating and Refrigeration Institute

Dear Ms. Edwards:

The Air-Conditioning, Heating and Refrigeration Institute (AHRI) is a national trade association whose membership includes the manufacturers of virtually all residential warm-air furnaces now being sold in the United States. AHRI appreciates having the opportunity to comment on the petition of the Commonwealth of Massachusetts for a waiver of federal preemption for its 90% AFUE minimum efficiency standard for residential gas-fired furnaces.

The petition (at page 3) refers to 225 C.M.R. 9.03(10) as “the Commonwealth’s furnace efficiency regulation for which the DOE waiver is sought.” This regulation prescribes minimum efficiency requirements not only for gas and propane furnaces, but also for oil furnaces, and gas and oil boilers. In addition, the regulation prescribes requirements for residential furnace air handlers. In its petition, Massachusetts has provided no support at all for a waiver of federal preemption for any requirements for oil furnaces, gas or oil boilers or furnace air handlers. The Department of Energy (DOE) therefore should consider only that part of 225 CMR 9.03(10) which prescribes a 90% AFUE minimum efficiency standard for residential gas-fired warm-air furnaces.

DOE Should Adopt the Consensus Standards Agreement and Deny the Waiver Petition as Untimely

AHRI urges DOE to decline to grant the Massachusetts petition in the current circumstances where new regional gas furnace standards are soon to be prescribed by DOE, or legislated by Congress. The Massachusetts petition is based on the obsolete assumption that the federal minimum standard for residential gas furnaces will remain at 78-80% AFUE for the nation as a whole, including Massachusetts, into the indefinite future. However, DOE has recalled its 80% AFUE gas furnace standard and, vested with new legal authority, the agency is now considering

adoption of regional gas furnace standards with a court-imposed deadline of May 2011 for publication of new standards. DOE should resist being forced to take public positions on legal issues that could later bind the agency in other situations when the Massachusetts petition will soon be moot.

Earlier this year, AHRI, environmental advocacy groups and states submitted to DOE a consensus agreement on amended federal minimum efficiency standards and effective dates for residential furnaces, central air conditioners and heat pumps for adoption as a direct final rule. The consensus agreement has also been incorporated in pending Congressional energy legislation. DOE adoption of the consensus agreement, or its enactment by Congress, will give Massachusetts the 90% AFUE furnace standard it seeks with an earlier effective date (May 1, 2013) than if Massachusetts obtained a waiver, which cannot take effect until three years after DOE publishes a final rule granting the waiver. AHRI urges DOE to publish the standards and effective dates contained in the consensus agreement as a direct final rule before its October 6, 2010 deadline for responding to the Massachusetts waiver petition. Even if DOE cannot act that quickly, its May 2011 deadline for publishing a final rule is not far behind. DOE should deny the Massachusetts petition without prejudice and without ruling on its merits pending publication of the final rule. If Massachusetts is not satisfied with the final rule it can resubmit its waiver petition.

The Waiver Petition Otherwise Fails on Its Merits to Justify a Waiver of Federal Preemption

If DOE is unable to defer action on the Massachusetts petition and must consider the petition on the basis of an assumed 80% AFUE continuing national minimum standard for residential gas furnaces, AHRI urges DOE to deny the petition for failure to satisfy the waiver justification criteria set forth in the Energy Policy and Conservation Act (EPCA). An additional reason for denying the petition is that granting the petition would likely result in a proliferation of state standards for this product category which would defeat a key purpose of EPCA, *i.e.* to reduce burdens on interstate commerce

To merit a waiver of federal preemption a state must show that it has “unusual and compelling State or local energy or water interests,” defined by EPCA as interests which:

- (1) “are substantially different in nature or magnitude than those prevailing in the United States generally;” and
- (2) “are such that the costs, benefits, burdens, and reliability of energy or water resulting from the State regulation make such regulation preferable or necessary when measured against the costs, benefits, burdens, and reliability of alternative approaches to energy or water savings or production, including reliance on reasonably predictable market-induced improvements in efficiency of all products subject to the State regulation.”

42 U.S.C. § 6297(d)(1)(C)(i) and (ii). The Massachusetts petition contends that local state conditions satisfy this definition because (1) the state has much colder winters than the national average, (2) the state has some of the highest energy prices in the country, (3) residential heating

loads and natural gas-fired electric generation loads compete for supplies of natural gas, (4) the state has one of the highest rental rates in the country, and (5) reducing the consumption of natural gas meets the requirements of other state laws, specifically the Global Warming Solutions Act and the Green Communities Act. See Petition at 3-5.

DOE should be skeptical of waiver claims based on climate. Massachusetts does have colder winters than the national average, but they can hardly be considered unusual and certainly not extreme. Fifteen other states in the continental U.S. (nearly one-third of the states) have more historical, population-weighted heating degree days (HDDs) than does Massachusetts. In establishing uniform national furnace efficiency standards through passage of the National Appliance Energy Conservation Act of 1987 (NAECA), amending EPCA, Congress was well aware of climatic variations within the United States. Massachusetts' climate relative to national averages has not changed significantly, if at all, since 1987.

Massachusetts may indeed have higher gas prices than the national average because of its location relative to natural gas production sites, but the petition does not establish any projected shortage of natural gas that more stringent furnace efficiency standards would help to alleviate. The fact that electricity generation competes with residential heating for natural gas supplies should not be treated as separate justification for a waiver because such competition presumably is reflected in the price of natural gas. Moreover, competition between electricity generation and residential heating for natural gas supplies does not make Massachusetts unusual as this is a common situation in many other states (for example, New York, Pennsylvania, New Jersey, Connecticut, Virginia, and Georgia).

The argument that more stringent furnace efficiency standards would serve the goals of other state environmental legislation should not be allowed to subvert the will of the U.S. Congress and trump EPCA federal preemption. The petition does not establish that global warming is a bigger threat to Massachusetts than to the country as a whole.

Even if Massachusetts were deemed to have local energy interests that are "substantially different in nature or magnitude than those prevailing in the United States generally," the petition fails to satisfy the second element of the EPCA test for "unusual and compelling State or local energy or water interests," *i.e.* the regulation is necessary or preferable when compared with non-regulatory alternatives. The petition fails to establish that alternatives to regulation are not working in Massachusetts. Indeed, the petition concedes an upward trend in the market penetration of high efficiency residential gas furnaces approaching 70% over the last decade. See Optimal Energy Inc. Report accompanying the Petition at p.15, Figure 13. AHRI's latest data compilations show that in 2009 over 74% of residential gas furnaces shipped to Massachusetts were high efficiency, condensing furnaces. The petition uses the high market penetration of high efficiency furnaces to preempt any industry argument that furnace manufacturers would be unduly burdened by a 90% AFUE minimum efficiency standard in Massachusetts. However, this same information establishes that Massachusetts has failed to meet its own burden of proving that market forces are not working and need to be supplemented by regulation.

The petition claims the market penetration of high efficiency gas furnaces has stalled and will never reach the 95% penetration level the State desires. In New England, according to 2005 RECS data, only 44% of residential dwellings are heated by natural gas, and in 62% of those dwellings it is a gas boiler, not a warm-air furnace, that is doing the heating. There is no reason to believe that these statistics are less applicable to Massachusetts than to other New England states. One could fairly conclude then that a 90% AFUE gas furnace minimum standard would only impact less than 20% of residential dwellings in Massachusetts, and it would take many years for that impact to be fully realized as gas furnaces are replaced in existing homes. The amount of natural gas saved by an additional 25% (95% minus 70%) of new gas furnaces installed each year going from an 80% AFUE to a 90% AFUE should not be deemed sufficient for the granting of a waiver of federal preemption.

The petition estimates that a 90% minimum AFUE requirement for gas furnaces will provide an annual energy savings of 1 billion cubic feet of natural gas. We maintain that this savings is grossly overestimated and, if a more realistic value is used, the savings is insignificant relative to the total annual natural gas consumption in Massachusetts. According to the 2005 RECS data, the average heated floor space of a household using natural gas for heating in New England is 1620 square feet. Lacking any more precise data, this value can be reasonably assumed to reflect the situation in Massachusetts. Using the procedure for estimating annual consumption of gas for heating that is specified for use in conjunction with the DOE's efficiency test procedure for residential furnaces and boilers, we estimate that the average Massachusetts household will use 79 million Btus of natural gas for heating annually¹. This estimate assumes that the furnace has an AFUE of 80%. With a furnace at 90% AFUE, the estimated annual natural gas consumption for heating reduces to 70 million Btus for this same average Massachusetts household, a savings of 9 million Btus or 8700 cubic feet of gas.

In the last 3 years (2007, 2008, 2009) the average annual residential gas furnace shipments into Massachusetts were 21,623 units. On average, 5885 of those were furnaces with AFUEs of 80% or so. The remainder were units with AFUEs of 90% or higher. The real benefit of a 90% AFUE gas furnace minimum in Massachusetts would be only to raise the efficiency of about 5885 units per year.

Based on our estimate, the annual gas savings from a 90% minimum AFUE requirement calculates to be 51.2 million cubic feet. This is .045% (less than 1/20 of 1%) of the total annual residential gas consumption in Massachusetts and a mere .014% (about 1/70 of 1%) of the total gas consumption in Massachusetts².

Clearly, a 90% AFUE gas furnace minimum standard will have a negligible impact on overall energy consumption in Massachusetts. What the petition boils down to is an effort to force Massachusetts landlords of rental properties heated by gas warm-air furnaces to purchase higher efficiency furnaces in order to lower renters' utility bills. AHRI is aware of the "split incentives" of landlords and tenants regarding equipment costs and energy savings. While the state may

¹ Based on the following assumptions: Heating Load Hours – 2500; Design Heating Requirement – 35,000Btu/h; Furnace Input – 75,000 Btu/h; Rated Design Heating Requirement – 40,000 Btu/h; Average Annual Gas Consumption (Ef) – 75 million Btu

² Based on 2008 EIA data for the state of Massachusetts

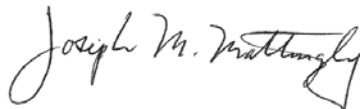
wish to reduce utility costs for renters, this narrow problem area is not adequate grounds for granting Massachusetts a broad waiver of federal preemption.

If DOE were to grant Massachusetts' waiver petition, other northern states with relatively high natural gas prices would view DOE's action as an invitation to submit their own waiver petitions, leading to the proliferation of state standards that EPCA was intended to avoid. Indeed, the Optimal Energy Inc. report accompanying the petition predicts that granting Massachusetts a waiver will result in a New England regional standard. See Optimal Energy Inc. Report at p. 26. Efficiency standard levels could vary among states seeking waivers, but even with identical efficiency levels manufacturers would be unduly burdened. That is because each state granted a waiver would be free to set up its own compliance certification and standards enforcement scheme, resulting in an administrative and marketing nightmare for manufacturers contrary to the purpose of EPCA, as amended by NAECA.

Conclusion

In summary, DOE should avoid being forced to take legal positions on federal preemption issues in the current circumstances where Massachusetts will soon get the minimum standard it wants through a DOE final rule or Congressional legislation. If DOE determines that it must address the Massachusetts petition on its merits, DOE should deny the petition for its failure to establish that Massachusetts has "unusual and compelling State or local energy or water interests" per the EPCA definition. An additional reason for denying the petition is that granting the petition would likely contribute significantly to a proliferation of state appliance efficiency requirements that would unduly burden gas furnace manufacturers.

Respectfully submitted,



Joseph M. Mattingly
Secretary and General Counsel