

**From:** Andrew Persily <andrew.persily@nist.gov>  
**Subject:** Re: ExCom Input Requested -- Regional Energy Standards  
**Date:** October 2, 2007 10:36:10 AM EDT  
**To:** "Littleton, Jeff" <JLittleton@ashrae.org>, "Andy Persily" <apersily@nist.gov>, "Bill Harrison" <waharrison@trane.com>, "Gordon Holness" <gholness@comcast.net>, "Lynn Bellenger" <lbellenger@pathfinderengineers.com>, "Maureen Grasso" <mgrasso@uga.edu>, <kent.peterson@p2seng.com>, "Vincent Tse" <tse.vincent@pbworld.com>  
**Cc:** "Cofer, Gloria" <gcofer@ashrae.org>

Based on my reading of the bill and the comments submitted to date, I'd suggest we don't speak to the issue of regional standards in the letter for the following reasons:

- the bill only allows the Secretary to establish regional standards, it does not require
- raising this issue could distract the reader from our primary concern, i.e. requiring DOE to develop a building energy standard if ASHRAE doesn't make the 2010 target
- potential hassles with some of our own "constituents"

I don't view the last one as a great reason, given the sensibility of regional requirements as they relate to real energy use, but I simply don't think we need to make that argument here.

For what its worth,  
Andy

At 2:52 PM -0400 9/28/07, Littleton, Jeff wrote:

The ASHRAE Advocacy Committee has had a significant debate about what position ASHRAE should take concerning regional energy standards proposed in pending energy legislation. Because of the issue's importance and specifically the potential impact on Standard 90.1, Kent would like ExCom to determine ASHRAE's position. After reading the brief summary below, please respond with your comments.

H.R. 3221 is the New Direction for Energy Independence, National Security, and Consumer Protection Act. You can view it online at [http://thomas.loc.gov/home/gpoxmlc110/h3221\\_jh.xml](http://thomas.loc.gov/home/gpoxmlc110/h3221_jh.xml)

Some provisions of the bill call for DOE to set its own energy standard if 90.1 misses the 30% 2010 stringency target. There is universal, non-controversial agreement that ASHRAE will take a position against this provision. We do not want DOE writing standards.

The real controversy relates to regional standards. Both Houses of Congress have passed different forms of the bill with different requirements regarding regional standards. The bill will soon go to conference committee where the differences will be aligned. The House version would empower DOE to set 3 standards for the nation for *commercial and residential* heating and cooling products. Further, the House version would allow states to adopt all 3 regions in a single state. The Senate version would empower DOE to also set 3 standards for the nation, but for *residential* heating and cooling products only.

The options for ASHRAE are to (1) ignore the regional standards issue and take no position at all, (2) advocate in support of regional standards or (3) advocate against regional standards.

The manufacturing community is strongly opposed to regional standards, which they say would wreak havoc on manufacturing and distribution processes. They claim enforcement will be impossible and that market forces will cause low-cost, low-efficiency equipment to bleed into regions that require high-cost, high-efficiency equipment.

There are those that also claim that regional standards would significantly reduce the value and impact of 90.1. While 90.1 might serve as a minimum standard, other more stringent standards could replace it in some regions of the country. Countering that argument is the call for regionalized equipment requirements directly in standard 90.1. The 90.1 standard already includes regional variances for the building envelope based on 8 climate zones. Equipment efficiencies could be handled in the standard using a three-tiered climate based equipment specifications table. In effect there are already regionalized energy requirements (local jurisdictions). Each state has the option to adopt the energy code (or 90.1) outright. They can also use 90.1 as a base document and modify the requirements so they are specific only to their region as long as they remain at least as stringent as 90.1.

Speaking in favor of regional standards is the high-efficiency gas-fired boiler in Florida makes no sense argument. Equipment designed for specific climate zones can be properly sized, guidance documents can be more focused, etc. In short, it provides for a more elegant engineering solution to a building's performance overall energy performance. Below are comments solicited from non-manufacturers and members and the 90.1 Committee. (Interesting question -- Is ASHRAE's primary allegiance to the building as a whole or to the HVAC systems in the building?)

Advocacy's position is confused. We left the meeting with the understanding that we should not take a position because there was no consensus. After the meeting, a lengthy email debate erupted again with the manufacturing community again calling for ASHRAE to advocate against regional standards.

Attached is a draft letter with a small section highlighted in yellow on regional standards. Should ASHRAE (1) ignore the regional standards issue and take no position at all, (2) advocate in support of regional standards or (3) advocate against regional standards? Please respond to this email with your comments. We should resolve this question quickly so that we can promote ASHRAE's position among lawmakers.

Thanks in advance for your guidance,  
Jeff

----- Forwarded Message

**From:** Mark Hydeman <mhydeman@taylor-engineering.com>  
**Date:** Wed, 26 Sep 2007 17:39:55 -0700  
**To:** "Ramspeck, Claire" <cramspeck@ashrae.org>, "Rosenstock, Steven" <SRosenstock@eei.org>, "McBride, Merle" <merle.mcbride@owenscorning.com>  
**Cc:** "Ferguson, Steve" <sferguson@ashrae.org>, Rita Harrold <rharrold@iesna.org>, "Kennedy, Steve D." <SDKENNED@southernco.com>, David Knebel <dknebel@aaon.com>, Steve Taylor <staylor@taylor-engineering.com>, Kent Peterson <kent.peterson@p2seng.com>  
**Conversation:** Regional Standards in Proposed Energy Bills  
**Subject:** RE: Regional Standards in Proposed Energy Bills

Claire and Kent:

You asked for my opinion so I have to believe that you really want it. John Proctor of Proctor Engineering developed a persuasive case for regional equipment standards in his PIER work. He and his colleagues developed and tested a 5 ton RTU that was designed for optimal performance in hot-dry climates. The results of their study can be found

on the website: <http://www.hdac-des-pier.com/results.html>. In a nutshell they showed 35% peak savings and over 20% in annual energy usage. It is hard to argue with the numbers.

Since the manufacturers stand united against regional standards Kent and ASHRAE are in a tough position to take a stand on this. However I am not similarly burdened and I see this as an issue that has large environmental consequences. The equipment manufactured for the humidity of SE is simply not optimized for operation in the dryer climates west of the Rockies. This inconvenient truth shields a huge opportunity for energy and demand savings. In my opinion regional standards should be considered if we are serious about achieving our energy efficiency goals.

- Mark  
Mark Hydeman, P.E., FASHRAE  
Principal Taylor Engineering, LLC  
1080 Marina Village Parkway, Suite 501, Alameda CA 94501  
(510) 263-1543 office, (510) 749-9136 fax, (415) 602-9982 mobile

[mhydeman@taylor-engineering.com](mailto:mhydeman@taylor-engineering.com)  
[www.taylor-engineering.com](http://www.taylor-engineering.com) <<http://www.taylor-engineering.com/>>

Jeff Littleton, Executive Vice President  
American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.  
Direct Line: 678-539-1100 Fax: 678-539-2100 eMail: [JLittleton@ashrae.org](mailto:JLittleton@ashrae.org) Web: [www.ASHRAE.org](http://www.ASHRAE.org)

Reaching New Heights with ASHRAE at its 2008 Winter Meeting,  
Jan. 19-23, New York City. Registration is now open  
at [www.ashrae.org/newyork](http://www.ashrae.org/newyork)

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**From:** Kennedy, Steve D. [<mailto:SDKENNED@southernco.com>]  
**Sent:** Tuesday, September 25, 2007 11:01 AM  
**To:** Ramspeck, Claire  
**Subject:** RE: Regional Standards

Claire,

As I understand it, the regional standards, as shown in the energy bill, refer to NAECA regulated equipment ( mostly residential) where ASHRAE already defers to DOE and just copies the current DOE standards into 90.1 and 90.2. Also, absent specific legislation to the contrary, DOE appliance efficiency standards include a "one-way ratchet" - for any given appliance, standards may be raised or kept the same but may NEVER be lowered.

The big issue is that you can justify a higher standard on a regional basis (i.e. 90% gas furnaces for climate zones 4 and above) that could not be justified on a national basis, including areas like Florida with minimal heating needs.

If you can get around the fact that there are a lot of our influential members have day jobs at the equipment makers, I don't see why ASHRAE as an organization should oppose it. Having regional appliance standards is no more harmful to the concept of national building code standards that requiring greater insulation levels in zone 8 than zone 3.

Steve

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Andy Persily  
NIST  
100 Bureau Drive, MS8633  
Gaithersburg, MD 20899  
[andyp@nist.gov](mailto:andyp@nist.gov)  
301 975-6418  
Fax 975-4409  
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