From: "Bushby, Steven T." < steven.bushby@nist.gov >

**Subject: FOIA Request** 

Date: April 29, 2014 1:38:03 PM EDT

To: "Dohne, A Kirk" < kirk.dohne@nist.gov >

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## Steven T. Bushby

Leader, Mechanical Systems and Controls Group Engineering Laboratory National Institute of Standards and Technology Gaithersburg, MD 20899-8631 USA

tel: (301) 975 5873 fax: (301) 975-8973

e-mail: steven.bushby@nist.gov

From: Bushby, Steven T.

Sent: Thursday, October 01, 2009 4:04 PM

**To:** 'Ferguson, Steve' **Subject:** RE: ASHRAE

Thanks Steve. That is good enough for now.

Steve

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## Steven T. Bushby

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e-mail: steven.bushby@nist.gov

From: Ferguson, Steve [mailto:SFerguson@ashrae.org]

Sent: Thursday, October 01, 2009 8:49 AM

**To:** Bushby, Steven T. **Cc:** Reiniche, Stephanie **Subject:** RE: ASHRAE

Steve

Pretty much everything Larry is saying is correct.

Standard 90.1 or its equivalent is mandated by EPAct and EISA. DOE has made a statement that the IECC complies with EPAct and EISA, this is primarily because 90.1 is allowed as an alternative

compliance path to the IECC in Section 5 (commercial energy chapter of the IECC). It is my understanding that the rest of the IECC is not as comprehensive or as stringent as many of the criteria of 90.1.

However, no official analysis has been done on the IECC to determine if it is as stringent as 90.1 or not, DOE has simply made a statement that if you comply with the IECC, then you comply with Federal Regs.

Did that answer your question?

Steve

PS, I've got 90.1 here until Saturday, so my availability will be spotty.

Steve Ferguson, Assistant Manager of Standards – Codes American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

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2138 eMail: SFerguson@ashrae.org Web: www.ASHRAE.org

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From: Bushby, Steven T. [mailto:steven.bushby@nist.gov]

Sent: Wednesday, September 30, 2009 5:42 PM

To: Ferguson, Steve Cc: Reiniche, Stephanie Subject: FW: ASHRAE

Steve,

Take a look at this e-mail trail involving Larry Spielvogel. Shyam Sunder is the Director of the NIST Building and Fire Research Laboratory. I would like to know what the true story is about adoption of 90.1 in codes so I can reliably inform my boss. Please help me straighten me out if you can.

Thanks, Steve

## Steven T. Bushby

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e-mail: steven.bushby@nist.gov

From: Shyam-Sunder, Sivaraj

**Sent:** Wednesday, September 30, 2009 1:49 PM **To:** Fanney, A. Hunter; Bushby, Steven T. **Cc:** Grosshandler, William; Crum, Edith Gail Mrs.

Subject: FW: ASHRAE

FYI. I have sent the note to Jerry and Dru asking for clarification from their perspective. Shyam

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Dr. S. Shyam Sunder

Director

**Building and Fire Research Laboratory** 

National Institute of Standards and Technology

Gaithersburg, MD 20899-8600

Tel.: 301-975-5900; Fax: 301-975-4032

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From: Shyam-Sunder, Sivaraj

Sent: Wednesday, September 30, 2009 1:47 PM

To: 'Larry Spielvogel'

Cc: Crum, Edith Gail Mrs.; Crum, Edith Gail Mrs.

Subject: RE: ASHRAE

Dear Mr. Spielvogel,

Thank you very much for bringing this issue to my attention. I was not aware of the federal law and regulations that you cite. I will make appropriate changes to the slide in my future presentations, citing the differences and the law.

Shyam

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Dr. S. Shyam Sunder

Director

**Building and Fire Research Laboratory** 

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From: Larry Spielvogel [mailto:spielvogel@comcast.net]

Sent: Tuesday, September 29, 2009 8:25 PM

To: Shyam-Sunder, Sivaraj Cc: Crum, Edith Gail Mrs. Subject: Re: ASHRAE

Dear Dr. Sunder:

The Federal Law and Federal Regulations specifically require states to comply with ASHRAE Standard 90.1 or its successor, and no other. That DOE "accepts" IECC as being equivalent to ASHRAE 90.1 does not mean anything, except that DOE does not comply with the Law and their own regulations. I state again, IECC is not equivalent to or as stringent as ASHRAE 90.1 across the board. Just because DOE "accepts" state certifications that adoption of IECC is equivalent to or more stringent than ASHRAE 90.1 does not mean they comply with the Law and Regulations.

If indeed, DOE believes that IECC is at least as stringent as ASHRAE 90.1, why then does DOE require compliance solely with ASHRAE 90.1 for all Federal Agency buildings by formal Federal Regulations, and never even mentions or considers IECC?

Is DOE speaking out of both sides of their mouth?

Larry Spielvogel, PE L. G. Spielvogel, Inc. 21506 Valley Forge Circle King of Prussia, PA 19406-1137

Phone: 610-783-6350; Cell: 215-620-1234

Fax: 610-783-6349; Email: spielvogel@comcast.net

----- Original Message -----**From:** Shyam-Sunder, Sivaraj **To:** 'Larry Spielvogel'

Cc: Crum, Edith Gail Mrs.

Sent: Tuesday, September 29, 2009 9:51 AM

Subject: RE: ASHRAE

Dear Mr. Spielvogel,

Thank you very much for your note. The source of the slide I used is DOE's Building Energy Codes Program (<a href="http://www.energycodes.gov/implement/state\_codes/index.stm">http://www.energycodes.gov/implement/state\_codes/index.stm</a>). As I read the notes provided on the slide, I interpret them to mean that a state has adopted a code that is equivalent to or better than either ASHRAE 90.1 or IECC. I do not interpret the notes to imply that ASHRAE 90.1 and IECC are equivalent. It is good to know that ASHRAE 90.1 is more comprehensive and stringent than IECC and that only one state has adopted ASHRAE 90.1 exclusively. I will forward your note to DOE since it appears the slide may be causing some confusion.

Best regards,

Shyam

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Dr. S. Shyam Sunder Director Building and Fire Research Laboratory National Institute of Standards and Technology Gaithersburg, MD 20899-8600

Tel.: 301-975-5900; Fax: 301-975-4032

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From: Larry Spielvogel [mailto:spielvogel@comcast.net]

Sent: Monday, September 28, 2009 8:18 PM

To: Shyam-Sunder, Sivaraj

Subject: ASHRAE

Dear Dr. Sunder:

I just saw the slides you used at the FFC/IFMA program in September. I think I can speak with some authority on energy codes and standards as a 19-year member and past Chairman of the ASHRAE Standard 90.1 committee.

Your slide 30 on commercial energy codes is not correct. Most states adopt the IECC. The IECC is not equivalent to ASHRAE 90.1. A reading of both will quickly show why. For example, of the 150 mechanical provisions in 90.1, only 43 of them are required equally in IECC. Most of the rest are either not required in IECC or are not as stringent. ASHRAE 90.1 is just one option in IECC that is rarely used. There is only one state that requires compliance with 90.1 exclusively.

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