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FACTS DON'T MATTER: THE ICC ETHICS POLICIES

By Richard Schulte

"*. . .real, honest, ethical leadership matters*"

Jeff Immelt, Chairman and Chief Executive, General Electric Company

"*. . .real, honest, ethical leadership matters*"

Jeff Immelt, General Electric Company

Perhaps I'm wrong about this, but I don't think so. It's my opinion that most members of the International Code Council (ICC) would agree with the statement above by the Chairman of the General Electric Company. Assuming that my opinion is correct, it would seem likely that most ICC members would disagree with the Executive Board's recent decision that the ICC ethics policy, CP-#37, does not apply to testimony at the ICC code development hearings. I know what your thinking: when did the ICC's Executive Board make that ruling?

Before we begin a discussion of the Executive Board's decision limiting the scope of the ICC ethics policy, let's take a moment and review excerpts from the Council's ethic policies:

> "*This policy is intended to guide the conduct of all members, member representatives, and participants in the activities of the ICC and is further intended to foster an environment that promotes ethical conduct and transparency in all matters related to the organization.*"
>
> "**2.0. Integrity.** *A commitment to integrity in all circumstances benefits each individual as well as the ICC. ICC Members, member representatives, and participants in the activities of the ICC should:*
>
> **2.1.** *Respect the truth and avoid misrepresentation.*
>
> **2.2.** *Pursue fairness and objectivity in all activities.*

3.0. Professional Excellence. *ICC promotes professional excellence and encourages open and honest communication among all members. ICC Members, member representatives, and participants in the activities of the ICC should:*

3.1. *Set an example for high standards of professionalism.*

3.2. *Disclose any proprietary interests.*"

> "*This policy is intended to . . . foster an environment that promotes ethical conduct and transparency in all matters related to the organization.*"

On January 20, 2010, an ethics complaint was filed with the ICC regarding William Koffel's testimony on code change proposal F144-09/10 at the ICC code development hearings held in Baltimore in late October 2009. Code change F144-09/10 addresses the roof vent requirements for one-story industrial and storage buildings, but first a little background on the issue would be appropriate.

> "**Integrity.** *A commitment to integrity in all circumstances . . . Respect the truth and avoid misrepresentation.*"

In 1997/1998, the National Fire Protection Research Foundation (NFPRF) funded research on the interaction between sprinklers, roof vents and draft curtains. This research found that the operation of standard spray sprinklers has an adverse effect on the operation (opening) of roof vents-that is the operation of standard spray sprinklers prevents the opening of individually-activated roof vents when the temperature rating of the vent activating mechanism (fusible link) is the same temperature rating as the sprinklers.

Based upon the NFPRF-funded research, a code change proposal to delete the requirements for roof vents in sprinklered buildings was submitted to the ICC in 1999.

In response to the findings of the NFPRF-funded research, the AAMA Smoke Vent Task Group commissioned a paper written by Dr. Craig Beyler and Leonard Y. Cooper which reviewed the various tests which had been conducted on roof vents and the findings of these tests. This paper was published in February 1999 and was titled "*Interaction of Sprinklers With Smoke and Heat Vents*". (**Source:** Ian David McAuslin, et al v. Grinnell Corporation, et al, Dr. Craig Beyler deposition, June 23, 1999, Page 1345, Line 24)

In addition to the Beyler/Cooper paper, the AAMA Smoke Vent Task Group (SVTG) also announced a new research study to investigate the interaction of sprinklers, roof vents and draft curtains in a memorandum dated September 10, 1999. (See page 10 for the text of the SVTG's memorandum.) After the code change proposal to delete the requirements for roof vents in sprinklered buildings was defeated at the code development hearings held in St. Louis in October 1999, the SVTG's new research study on sprinklers/vents seems to have been forgotten. The research was never conducted.

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In what appears to be a response to repeated attempts to remove the requirements for roof vents in sprinklered buildings after the 2000 edition of the International Building Code and International Fire Code were published, the AAMA Smoke Vent Task Group once again announced another research study on the interaction of sprinklers and vents in the summer of 2006. The announcement indicated that fire modeling would be used in this study, rather than actual fire testing, and that Dr. Craig Beyler/Hughes Associates, Inc. would perform the modeling study.

In early January 2007, Rick Thornberry, also a consultant to the Smoke Vent Task Group, announced a new research study into the concept of the "ganged" operation of roof vents at a meeting of the ICC Code Technology Committee Balanced Fire Protection Study Group held at the headquarters of the Orange County Fire Authority. . .this study was also never conducted.

In early January 2007, Rick Thornberry, also a consultant to the Smoke Vent Task Group, announced another new research study into the concept of the "ganged" operation of roof vents at a meeting of the ICC Code Technology Committee Balanced Fire Protection Study Group held at the headquarters of the Orange County Fire Authority. Thornberry stated that the research would be conducted at an aircraft hanger scheduled for demolition at the Marine Corps base in Orange County and that the fire tests would be supervised by Dr. Craig Beyler. Like the SVTG research study announced on September 10, 1999, this study was also never conducted.

On February 18, 2008, Hughes Associates released its fire modeling study of the interaction between sprinklers and roof vents. This study introduced the concept of the "ganged" operation of roof vents and was intended to support a code change proposal, F197-07/08, which would permit the "ganged" operation of roof vents. Coincidentally, the study was released after the code development hearings in Palm Springs had already begun which only permitted a few days for interested parties to review the report prior to code change proposal F197 being heard. Given this, the committee's recommendation on this code change proposal was "disapproved".

In mid October 2006, the ICC Code Technology Committee voted to form a Study Group on roof vents as part of the CTC's study of the "balanced fire protection" issue at its meeting held in Kansas City. Given that the Roof Vent Study Group work had bogged down, the CTC approved a debate on the use of roof vents in sprinklered buildings at its June 2007 meeting held in Cincinnati. The debate was held at the CTC's meeting in Baltimore in May 2008 and, given that there was insufficient time available for a discussion of the debate presentations, the debate presentations were repeated at the CTC's mid November 2008 meeting in Chicago.

At each of his presentations, the question was raised whether or not the fire model used in the research was "validated" for the purposes used in the study. Each time, Dr. Beyler responded affirmatively to this question.

Dr. Craig Beyler made both debate presentations for the Smoke Vent Task Group and most of his 30 minute presentations was taken up presenting Hughes Associates' research on the concept of the "ganged" operation of roof vents. At each of his presentations, the question was raised whether or not the fire model used in the research was "validated" for the purposes used in the study. Each time, Dr. Beyler responded affirmatively to this question.

Minutes of a AAMA Smoke Vent Task Group teleconference held on March 24, 2009 indicated that Dr. Beyler refused to "stand behind" his fire modeling work and, given this, that the SVTG considered the research study to be "*worthless*".

After the Beyler presentations, the issue of the "validation" of the fire model was researched and the research on "validation" of the fire model confirmed that Dr. Beyler/ Hughes Associates had used the model beyond its capabilities. Minutes of a AAMA Smoke Vent Task Group teleconference held on March 24, 2009 indicated that Dr. Beyler refused to "stand behind" his fire modeling work and, given this, the SVTG considered the research study to be "*worthless*".

This brief background brings us to the code development hearings held in Baltimore in late October 2009 and William Koffel's testimony on code change proposal F144-09/10. The following is an excerpt from Koffel's testimony on this code change proposal:

"*. . .I sit on NFPA 13 discharge criteria committee which is responsible for Chapter 12. I'm not representing that committee. But I think this committee needs to know that NFPA 13 now allows vents and draft curtains in buildings protected throughout with a sprinkler system. . .That's in Chapter 12 of the 2010 edition of NFPA 13. So the 13 committee recognizes that this is a viable technology in sprinklered buildings.*"

> *". . .So the 13 committee recognizes that this is a viable technology in sprinklered buildings."* William Koffel
>
> "**Substantiation:** *The intent of the* [NFPA 13] *standard is that roof vents and draft curtains should not be used in conjunction with storage protection."* 13-325 Log #CP43 AUT-SSD

The record on the proposal to include specific provisions which address the installation of roof vents in buildings protected by a sprinkler system differs markedly from Koffel's characterization that "*the NFPA 13 committee recognizes that this is a viable technology in sprinklered buildings*". The substantiation for the proposal reads as follows:

Substantiation: *The intent of the standard is that roof vents and draft curtains should not be used in conjunction with storage protection. Previous language was unenforceable.*

Further, comments on the proposal included the following recommendation for the text of the commentary in Annex A of NFPA 13:

"**A.12.1.1** *The design parameters in NFPA 13 were developed based upon the absence of roof vents or draft curtains. (See Annex C.6) Fire tests for sprinklers specifically listed for storage applications are tested without vents or draft curtains. References to control mode sprinklers in other building standards pertain to standard spray sprinklers that were not specifically tested by the laboratories for storage applications. . . With the advent of K-11.2 and larger sprinklers for storage applications and now Specific Application Control Mode sprinklers (being revised to CMSA), we need to realize that ESFRs are not the only storage sprinklers and that the use of smoke vents and draft curtains can be detrimental to all sprinklers that are specifically tested for storage applications. . .*"

Given the substantiation statement and the proposed text to be included in Annex A above, it would be difficult to conclude that "*the NFPA 13 committee recognizes that this is a viable technology in sprinklered buildings*".

Was William Koffel's testimony misleading? Did William Koffel intentionally attempt to mislead the code changes committee with his testimony? It is my opinion that there is absolutely no doubt that Koffel's testimony was misleading and, given the fact that Koffel is a member of both the NFPA 13 committee, and the NFPA 13 subcommittee which reviewed the roof vent provisions now included in NFPA 13, it would be difficult not to conclude that he was aware of the substantiation for the roof vent provisions. Hence, it seems more than reasonable to conclude that Koffel intentionally intended to mislead the code changes committee with his testimony on code change proposal F144-09/10.

Rather than respond to the ethics complaint against William Koffel, ICC's Executive Committee chose an unusual forum to respond to the complaint-a Staff Comment to Public Comment 1 on code change proposal F144-09/10. (This public comment requested that the ICC membership approve the code change "as submitted".)

The Staff Comment reads as follows:

The design parameters in NFPA 13 were developed based upon the absence of roof vents or draft curtains. (See Annex C.6) Fire tests for sprinklers specifically listed for storage applications are tested without vents or draft curtains. References to control mode sprinklers in other building standards pertain to standard spray sprinklers that were not specifically tested by the laboratories for storage applications. . . With the advent of K-11.2 and larger sprinklers for storage applications and now Specific Application Control Mode sprinklers (being revised to CMSA), we need to realize that ESFRs are not the only storage sprinklers and that the use of smoke vents and draft curtains can be detrimental to all sprinklers that are specifically tested for storage applications. . ."

"**Staff Analysis:** *In his reason statement, the proponent* [Richard Schulte, Schulte & Associates] *has noted that an ethics complaint (relating to Council Policy #37) has been filed with ICC concerning testimony offered on code change F144-09/10 at the Baltimore Code Development Hearings. The Executive Committee (EC) of the ICC Board has met and reviewed the complaint. The EC concluded that it is not the intent of CP #37 to govern the conduct of the hearings relating to the veracity or intent of technical statements made at the hearings. The EC's view is that the hearings themselves – which by their very nature afford the opportunity for a wide variety of assertions and opinions to be made and rebutted in an open forum – are the proper venue for resolution of substantive and technical issues relating to code content. As such, the EC has concluded that CP #37 does not apply. The resolution of those concerns needs to occur at the hearing itself. The open forum provided at the Final Action Hearings is the appropriate forum for debating the issues surrounding the basis for IFC's committee action in Baltimore, as well as for consideration of any new information contained in the public comments submitted in response to the committee's action."*

> "*The EC concluded that it is not the intent of CP #37 to govern the conduct of the hearings relating to the veracity or intent of technical statements made at the hearings. . . As such,* the EC has concluded that CP #37 does not apply."

There is some logic to the Executive Board's ruling on the ethics complaint. After all, the Executive Board does not want to be the arbiter on every statement made in testimony at code change hearings, however, in this case, Koffel utilized his position on the NFPA 13 committee, and his position on the NFPA 13 subcommittee where the roof vent provisions originated to vouch for the veracity of his statement regarding the use of roof vents in sprinklered buildings. The statement that "*the NFPA 13 committee recognizes that this is a viable technology in sprinklered buildings*" is really nothing more than a "**bold-faced lie**" in my opinion.

> . . .however, it this case, Koffel utilized his position on the NFPA 13 committee, and his position on the NFPA 13 subcommittee where the roof vent provisions originated, to vouch for the veracity of his statement regarding the use of roof vents in sprinklered buildings.

Should using your position on an NFPA technical committee to introduce false or misleading testimony into the code development proceedings be permitted under the ICC ethics policies? While it is true that the rules of engagement at the code development hearings permit rebuttal, the time allotted for rebuttal is only 60 seconds. Could anyone on the Executive Board have offered a rebuttal to Koffel's testimony in just 60 seconds without studying the record of NFPA 13 proposals? Apparently, no one from the Executive Board went to the microphone to rebut Koffel's testimony, hence, it's a safe assumption that the answer to this question is no. In other words, offering a rebuttal to Koffel's testimony was next to impossible without having "13-325 Log #CP43 AUT-SSD" at your fingertips.

> The statement that "*the NFPA 13 committee recognizes that this is a viable technology in sprinklered buildings*" is really nothing more than a "bold-faced lie" in my opinion.

In my opinion, it seems quite apparent from the record that the Smoke Vent Task Group and its consultants, Beyler, Koffel and Thornberry, have been involved in an orchestrated ruse to confuse the issue of whether or not smoke/heat vents "work" in sprinklered buildings. Koffel's testimony at the hearings in Baltimore is just the latest act in the seemingly never-ending stream of misleading statements from this trade association.

> In other words, offering a rebuttal to Koffel's testimony was next to impossible without having "13-325 Log #CP43 AUT-SSD" at your fingertips.

Does *"real, honest, ethical leadership matter*"? In regards to the development of provisions intended to be included in the International Building Code and the International Fire Code, I believe it does. I also believe it's pretty apparent that both William Koffel and the ICC Executive Board have failed in their duty to provide that sort of leadership. Once again, of course, this is just my opinion, but I think that most ICC members would agree with me.

> It's time for the ICC Executive Board to step up and provide "*real, honest, ethical* leadership".

It's time for the ICC Executive Board to step up and provide "*real, honest, ethical leadership*". Given that Koffel is a former president of the Society of Fire Protection Engineers and a member on a number of NFPA technical committees, the same can be said about Koffel.

Editor's Note: It should be recalled that this is not the first time that William Koffel has been involved in providing misleading/false information in the building code development process. Koffel was the primary source of the statistic that sprinkler systems fail in 1 in 6 fires large enough to activate sprinklers, the so-called "Koffel statistic". The "Koffel statistic" was determined using data from a report generated by the National Fire Protection Association without any recognition by Koffel that the data was not reliable. It is difficult to understand how a recognized expert in the field of fire protection, and a long-time member of the NFPA 13 committee, would be unaware that the NFPA data used in his determination of the sprinkler system failure rate was unreliable.

Koffel was the primary source of the statistic that sprinkler systems fail in 1 in 6 fires large enough to activate sprinklers, the so-called "Koffel statistic". The "Koffel statistic" was determined using data from a report generated by the National Fire Protection Association without any recognition by Koffel that the data was not reliable.

* * * * *

The following is the text of the AAMA Smoke Vent Task Group memorandum dated September 10, 1999 referenced on page 3. The research mentioned in this memorandum was never conducted.

AAMA SMOKE VENT TASK GROUP
3100 S. Susan Street
Santa Ana, CA 97204
Phone: 800/609-9995
Fax: 714/545-0472

September 10, 1999

Re: American Architectural Manufacturers Association-
Smoke Vent Research Project

The AAMA Research Foundation and the AAMA Smoke Vent Task Group are pleased to announce the commencement of the AAMA Smoke Vent Task Group's research project. This project will study the interaction of smoke vents, draft curtains and sprinklers, and to develop scientifically based engineering design criteria for the installation of draft curtains and vents. An Action Plan summary is attached for your review.

Highlights of the 3-5 year study, focusing on life safety and property protection issues are:

- Design method and development of Validation Tests
    - Large eddy simulation (LES) Computer Model
    - Link actuated vent computer model with sprinklers (LA vent)
- Full-scale testing
- Finalization of results
    - Compare LES & LA Vents with test data
    - Finalize report and LA vents
- Validate LA Vent(s)
- Complete software development and users guide for LA Vents
- Smoke vent and draft curtain design criteria (from modeling and full-scale tests)

- Vent/sprinkler synergism performance study (from modeling and full-scale tests)
    - Alternative activation methodologies
    - Draft curtain design alternative
    - Make-up air design criteria
- Formalize engineering design criteria for installation of smoke vents and draft curtains

The project will be coordinated by Dr. Craig Beyler, of Hughes & Associates, Inc., and will utilize Hughes' team of researcher professionals. Others who will have committed to participate in the project are NIST and the University of Maryland Fire Protection Engineering Department.

I would encourage anyone interested in participating in the study to contact the AAMA Smoke Vent Task Group Chairman, Paul Simony, directly at (800) 609-9995, extension 268. Shortly we will be organizing a Technical Advisory Committee (TAC) to participate in developing the parameters for the full-scale tests. We are also searching for an appropriate building in the range of 50,000 sq. ft. or more to conduct the full-scale tests. Suggestions on a suitable location would be greatly appreciated.

If you would like additional information, please contact me at the above number.

Paul Simony
Chairman-AAMA Smoke Vent Task Group