NFPA STANDARDS COUNCIL MEETING

ONE BATTERYMARCH PARK

QUINCY, MASSACHUSETTS

TUESDAY, AUGUST 9, 2011

12:57 P.M.

INDEX

P R O C E E D I N G S

THE CHAIRPERSON: Good afternoon everyone. Welcome to the afternoon edition of the NFPA Standards Council meeting. We are on Agenda Item 11-8-15 A2 which deals with NFPA 2112. We are going to have everyone in the room introduce themselves in a moment for the record. We want everyone to note that we are doing a transcript of these proceedings, so it's very important that when you speak you preface your remarks by your name and your affiliation so we insure that the record accurately reflects the remarks that are made.

I'm going to go around the table and ask members of the Council to introduce themselves, and then I'll ask everyone else around the room. My name is Jim Pauley, Chairman of the Standards Council.

MS. CRONIN: Amy Cronin, NFPA staff and Standards Council secretary.

MS. FULLER: Linda Fuller, NFPA staff.

MR. HARRINGTON: J. C. Harrington, member of Council.

MR. MILKE: Jim Milke, member of Council.

MR. LEBER: Fred Leber, member of Council.

MR. DEMERS: David Demers, member of the Standards Council.

MR. JARDIN: Joseph Jardin, member of Council.

MR. McDANIEL: Danny McDaniel, member of Council.

MR. SNYDER: Michael Snyder, member of Council.

MR OWEN: Richard Owen, member of the Council.

MR. CLARY: S. M. Clary, member of Council.

MR. BELL: Kerry Bell, member of Council, and for the record, I will be recusing myself on this Agenda Item and will not be participating in the hearing, in deliberations or voting on this item.

MS. BRODOFF: Maureen Brodoff, NFPA staff and legal counsel for the Standards Council.

MR. FINNEGAN: Daniel Finnegan, Siemens Industry, guest.

MR. DUBAY: Christian Dubay, NFPA staff.

MR. TOLMAN: Robert Tolman, NFPA.

MR. GOLINVEAUX: James Golinveaux, Tyco.

MR. COLONNA: Guy Colonna, NFPA staff.

MS. STANEK: Sandra Stanek, NFPA staff.

MR. HART: John Hart, NFPA staff.

MS. GOLINVEAUX: Tracy Golinveaux, NFPA staff.

MR. KLAUS: Matt Klaus, NFPA staff.

MR. DUFFY: Chad Duffy, NFPA staff.

MS. STULL: Grace Stull, International Personal Protection.

MR. STULL: Jeff Stull, International Personal Protection.

MR. CORRADO: Steve Corrado, Underwriters Lab.

MS. GLEASON: Pat Gleason, Safety Equipment Institute.

MR. SCHULTE: Rich Schulte, Schulte & Associates.

MR. HUGGINS: Roland Huggins, member of Council.

THE CHAIRPERSON: If anybody else has come in please.

MR. DUVAL: Derek Duval, NFPA.

MS. BEACH: Denise Beach, NFPA.

THE CHAIRPERSON: Did I get everybody?

MR. SCHAEFER: August Schaefer, Underwriters Laboratories.

THE CHAIRPERSON: Okay, for this particular Agenda Item, I just want to get a reading on, Mr. Schaefer, you're speaking on this particular item. Who is speaking on behalf of the appellants in this case? Mr. Stull, is it?

MR. STULL: Yes.

THE CHAIRPERSON: And?

MS. GLEASON: And Pat Gleason.

THE CHAIRPERSON: And Pat Gleason, okay. And Mr. Schaefer, you're speaking as a respondent on the appeals --

MR. SCHAEFER: Yes.

THE CHAIRPERSON: -- in opposition to the appeals? Anyone else speaking in opposition to the appeals? Okay, the way we will do the hearing is I'm going to give the appellants about 10 minutes to do their opening remarks that they want to make. You can utilize that ten minutes to sort of summarize your appeal, provide any other information to the Council. I'll ask the respondent, I'll give them 10 minutes as well to do that, then I'll go to

the Standards Council for any questions from members of the Standards Council.

When we wrap up with those, I'll give each side about five minutes for any closing remarks that they may have, and that's how we'll close out the hearing. Mr. Stull is the appellant. I'm going to turn the floor over to you first, and again, if you and Ms. Gleason both, if you'll kind of use that ten minutes together on the appeals side, feel free to do that however you like. So if you'd like to come to the table also, that's fine.

MR. STULL: Thank you. I want to speak against an appeal of the floor motion that was approved at the recent annual meeting. Grace and I are from International Personal Protection. We're a company that provides research expertise in the area of personal protective equipment and have done so for the last 20 years.

I want to describe before we get into the matter what this issue is all about. It's about a subject called component recognition. Essentially in our project, a project to do with personal protective equipment, there are requirements for the third-party certification of products. Many of those products contain parts, pieces,

things that are not full products that get evaluated and tested.

Component recognition is a system or practice which allows for the testing of those components or parts or pieces to the applicable portions of the standard. Now, Underwriters Laboratory devised a process called component recognition. It's a listing process that they use, but it's not product certification, but it has a tremendous impact on the certification process.

And the reason it has an impact is many of the products, mainly garments in our industry, have lots of parts and pieces that get tested, and those parts and pieces can be separately evaluated, and then that information can be used by a multitude of different manufacturers that make the same product; hence, shortcutting the cost and the requirement that each product manufacturer certify and to undertake all the tests on their own.

So this process is one that we believe serves the industry well. The problem that's developed is that it's not a formalized process; it's part of certification. This, our standards for NFPA products not only at 2112 but on the project for fire and emergency

services protective clothing and equipment have extensive sections on product certification.

This is example 1971. This standard has five pages of certification requirements. It's not just that the certification organization has to meet some ISO standard or some other requirement. We have written extensively within the committee's criteria to provide the basis for how products are certified, but we haven't addressed component recognition.

So why is this important for us to do this now? Every time I was -- myself has been a member of these committees on product standards for the last 25 plus years, 30 years almost. Every time we had some understanding of what we thought was going on in the certification process we would learn different at a meeting, and this is back at the time when Rich Duffy was chairman of the Technical Correlating Committee as well as the Technical Committees responsible for the products, we would have to go and write requirements to provide the criteria and expectation of what we expect to receive.

And such is the case now for component recognition. What we've established are criteria which essentially allows for the interrelationship between

organizations, fully qualified organizations that test and validate that components or parts or pieces of products meet the standard and that that information can in turn be used by other certification organizations.

Well, you might say well, that's already doable. Well, the fact is that that's not already doable because certain certification organizations have chosen not to accept data and information from other certification organizations fully qualified meeting all of the requirements.

So I want to direct your attention to a document that I provided which is 11-8-15-8-2 which provides an outline on the component recognition process. Now, what I want to describe to you is how this ensued through the ROP, the ROC and NITMAN in a relatively short period of time.

Essentially, the committee went through a very deliberate process to come up with language that reflected not only what was happening but what the committee intended to happen. And this is with almost near unanimous acceptance by the committee members, and that was to put together criteria that sets how component recognition occurs and how that information is exchanged.

In the ROP process, the proposal was put forth by Pat Gleason and that proposal was adapted, and, in fact, there was a question even then from the staff liaison that went to legal, got a determination and said is this something we can do, and the answer came back yes, we can do this. The action was to require that one certification organization be able to accept the information from another certification organization but not just in a strict sense like that.

Where we ended up with this is in our report on comments. Proposals were made that it should be a shall permit in a permissive sense. We said no, we don't want that because still the certification organization could say no, we don't like you, we're not going to accept your data.

So we took the additional step of putting in -- and this is something I want to underline that's part of the information provided on the documents that are provided for you as part of the agenda package -- is that the receiving organization has the ability to dictate exactly what else that providing certification organization has to meet. So not only does the relationship have to meet all the base requirements in the standard but the

certification organization which is accepting the information can impose its requirements as well.

And here's why this is important to me: At the annual meeting statements were made that said we have no control, or they said that, well, we're going to be forced to accept information that we have, we don't know whether it's acceptable or not or we won't have access to information. These kinds of statements were made as part of the annual meeting and they're blatantly false because we have empowered, the committee has empowered the certification organization to demand to have any organization from which it accepts data to meet its own requirements. We just want this to happen. We just don't want this to be a casual reason for discarding one organization's information.

So why is this important? It's important because this industry is extensively based on component testing. It affects the prices of products dramatically, and, but at the same time the committees have endeavored to put in the most stringent criteria for qualifying certification organizations for how the testing is done, for how long that information is disclosed. All that is part of our criteria. And, in fact, once NITMAN was, of

course, held and voted on at the annual meeting, this, of course, was probably through a ballot to the Technical Committee, the Technical Committee did not agree, the ballot with the action on the floor of the annual meeting.

I just want to bring up two points before I'll turn it over to Pat Gleason. I think personally that the NITMAN process might be partly flawed. The reason I think it's flawed is I've been a member of NFPA for many, many years. I've been involved in writing pages and pages and pages of text, but the issue I saw in this NITMAN process was of a concern to me, and that is someone can make a motion but they don't have to provide a justification. So as an income, as someone trying to respond to that have no idea where that person is coming from until they actually voice their actions or their basis for the statement at the annual meeting which gives me no opportunity to prepare. I think that the NFPA should require that NITMAN not only have the motion being made but the substantiation or basis for why that motion is being made in the first place.

The second thing I want to bring up as a concern that I'm going to be discussing with NFPA staff is, even though it creates some awkwardness in this particular

situation, is the appointment of chairs, chairpersons. Right now it's kind of a behind-the-scenes thing, and I don't think that's what NFPA intends. The chairman is appointed by the outgoing chairman and with the assistance of staff.

I have had three occasions in the last year -- I'm sorry, excuse me. They're recommended to the Standards Council and the Standards Council makes the decision. I've had three occasions in the last year which I had no knowledge about a new chairperson being --

THE CHAIRPERSON: Mr. Stull, I just want to let you know there's about a minute left and others want to speak also. I should have done this at the beginning but could you state your name and who you represent for the record. I should have had you do that at the beginning of your remarks.

MR. STULL: Sure, Jeffrey Stull, International Personal Protection.

THE CHAIRPERSON: Thank you.

MS. GLEASON: I am Pat Gleason with the Safety Equipment Institute, and we're the organization that submitted the original proposal for the component recognition process. With the stringent certification

requirements captured in 2112, several companies approached SEI with their frustration of not being able to have other certification organizations accept their material as a component in an end garment certification. The material supplier had gone through the entire certification process including full testing for that particular component material as well as going through a quality audit process at their manufacturing plant, all of which were in compliance with NFPA standard as well as fall under the ISO Guide 65 accredited certification process.

With the language that's been approved by the NFPA 2112 TC on two separate occasions, it sets forth specific requirements on how a component recognition program should work, basically, the prescriptive requirements that Jeff mentioned already in place in the standard that apply to component certification recognition. The identical rules that apply to certification organization also apply to the organization providing the component recognition. Accreditation to ISO Guide 65, the laboratory must comply with ISO 17025, and the component manufacturer must be audited and the material must be tested annually.

So the language proposed for 2112 was

based on a full review of the TC with input from a diverse membership. The language in question gives the certification organization, in my opinion, complete control over the end product certification. The specifics in the ROC and the ROP state that the organization shall meet requirements of Section 4.2, which is that chapter within the standards specific to certification requirements. It's extensive and it's prescriptive, and we thought with the new language the end product manufacturer would submit to a certification organization a request to utilize the material that has been, has completed an entire certification process in accordance with these requirements.

The certification organization shall then accept the component recognition if the organization meets all the requirements stated in the standard, provides the required evidence of conformity and meets the requirements of the end product certifier.

In my opinion, there's no forcing any certification organization to accept component recognition. SEI has been faced with numerous situations in our history where we were unable to accept a material or component because of either incomplete data, a lack of 17025

accreditation by the testing laboratory or some other reason. The language that we have in the 2112 standard allows for that.

However, if all requirements for component recognition are met, it makes absolute sense to have that data shared between end product manufacturers because it does help bring the cost of certification down and ultimately the price of these products to the fire service.

In SEI's case, we stand behind our legally registered mark, we have liability insurance and we require all manufacturers, as part of our program, to maintain liability insurance as well. It's required by ISO Guide 65, and ANSI, our accreditor, requires that SEI take full responsibility, as any other ISO Guide 65 accredited organization, must take full responsibility for our certifications. We don't have any intention of compromising our integrity, and we don't expect any other organization to do so either.

THE CHAIRPERSON: You have about a minute to try to wrap up please.

MS. GLEASON: It will take 30 seconds.

THE CHAIRPERSON: Okay.

MS. GLEASON: The approved language is strong and has built-in safeguards to maintain the best possible products are brought to market by only reputable certification organizations.

THE CHAIRPERSON: All right, thank you. Mr. Schaefer, do you want to take your time please for opening remarks?

MR. SCHAEFER: Council members, good afternoon. My name is August Schaefer, and I'm the senior vice president and public safety officer with Underwriters Laboratories, and we appreciate the opportunity to speak with you today about what we consider a very important matter and present our position.

The language being proposed for NFPA 2012 is problematic for many reasons, the first of which being that it's simply not appropriate or necessary for inclusion in a product standard. A certification organization may accept data or recognition from another certification organization if they choose to do so. But that choice should strictly be up to the end product certification organization to administer the program in a manner that maintains the integrity of the certification and is not mandated by an end product standard.

This language would, by way of a product standard, require the certification organization to assume the legal liability for the work done by someone else with whom they have little or no association nor knowledge nor control of their practices. We are not aware of any other product standard that would, in effect, force commercial trade conditions upon certification organizations. Such a requirement in a standard raises serious legal issues with respect to how and with whom a company conducts its business.

This leads me to our second point. We believe the proposed language is in violation of the ANSI Essential Requirements. The ANSI Essential Requirements: Due process requirements for American National Standards, Section 3.2 Normative American National Standards Policies, Commercial Terms and Conditions reads as follows: In connection with standards that relate to the determination of whether products or services conform to one or more standards, the process or criteria for determining conformity can be standardized as long as a description of the process or criteria is limited to technical and engineering concerns and does not include what would otherwise be a commercial term. We believe the proposed

requirements to NFPA 2012, in effect, mandates commercial criteria for the determination of conformity.

Again, this language, by requiring a program to essentially replace the organization's own certification of components, could be interpreted as forcing a commercial relationship between competitors. In essence, NFPA would be forcing certification organizations to have a business relationship with their competitors. This language would intentionally interfere with how a certification organization performs its service as well as with whom it chooses to do business to provide its service or chooses not to do business with.

A third point relates to a concern that the surveillance or follow-up activities to the initial product qualification could become compromised. With the proposed language, a certification organization would be required to accept both the initial testing and the ongoing surveillance or the follow-up of a component certified or recognized by another certification organization.

With this proposed language, the ability of the end product certification organization to establish a contractual agreement with the component manufacturer is compromised. In other words, UL, when it certifies a

recognized component, enters into a contract with that component manufacturer directly. We believe this may result in a breakdown of the surveillance and traceability of the recognized component. Consequently, the end product certification organization may be exposed to liability for end product failures associated with the component that's been utilized in the end product that they certify.

For example, if there's a deficiency discovered with a component certified by another certification organization, the end product certifier might not be notified since there would not be necessarily a relationship between the competing certification bodies to provide such notification, and therefore, the end product certifier may not be able to take appropriate action to inform the users and the public of a potential safety issue. The unintended consequence of these proposed requirements could create gaps in follow-up surveillance between the components and the end products where they are utilized.

Another important point to consider is the quality and intensity of the certification process used by the various certification organizations. All certification organizations are not equal. While two

certification organizations may meet the same minimum accreditation criteria, the nature and extent of the service they provide can be vastly different, much like any type of service offered to the marketplace.

For example, the number of inspections conducted per year as well as the content and the nature of the inspections at the factories where components are made can vary significantly. Certification organizations can also vary in their experience and expertise with various product types and competency of their personnel. All of these things are important considerations when making the certification decision for an end product.

This proposed mandatory language may lead to a lack of confidence in the end product certification. The responsibility to certify a product lies solely with the end product certification organization. As part of that decision, the certification organization must be confident in the components that are utilized in the end product and that they're acceptable in every way. That's the reason UL originated the recognized component program. If there's no level of oversight over the component certification, there cannot be full confidence in the end product's compliance by the certification organization.

Unfortunately, users of these products could be adversely affected by these inappropriate criteria. Should this proposed language be implemented, end users of the product, who have come to rely on the certification mark on the product itself in making their purchasing decisions, could be adversely affected.

End users assume that the certification mark on the end product means that that organization, this mark appears for the entire certification of the product. In turn, as I indicated earlier, the certification organization must have the confidence in the components and end products that they meet the appropriate requirements. Claiming a product meets the requirements in a standard speaks nothing to the quality and integrity of the work that goes into the certification decision.

Furthermore, the industry standards that govern product certification and testing organizations only require that they have certain processes and systems in place. These are accreditation criteria. Accreditation to these standards affords no guarantee that sound engineering judgments and correct certification decisions are made or ultimately that a product meets the requirements.

End users have the right to know that the

components of the products were subjected to the comprehensive testing and surveillance by the organization whose certification mark appears on a product. They also should have the right to choose products that are certified in their entirety by the companies that they have come to trust.

The proposed language may lead to increased liability for the end product certification organization by taking control of the full certification process out of the end product certifier's hands. There are several potential consequences that can result from this. If the certified product fails to meet the user's expectations, particularly where an injury or a loss of life is involved, legal claims may be asserted against both the manufacturer and the organization whose certification mark appears on the end product.

To manage this potential liability, the certifying organization must be able to defend itself by showing that the conformity assessment process was followed and technically sound engineering judgments and certification decisions were made. If the certification organization is not in control of the conformity assessment process, however, the certifying organization may be

subjected to unmanageable, uninsurable, and ultimately unacceptable legal risk.

By accepting the components tested by another organization, the end product certifier assumes all responsibility and legal risks for that component, and as such should have the ability to set the terms and conditions of component acceptance and who it chooses to do business with. It could also be argued that by NFPA placing such a requirement in their codes and standards that NFPA may be assuming the liabilities which accompany such a requirement.

In closing, I'd also like to point out that contrary to what you may have been led to believe there is a healthy competition between certification organizations. I believe the arguments presented to you today make it very clear that it's not appropriate to include a requirement in an end product certification, for an end product certification organization to accept a component certified by another organization in NFPA 2012 or in any other published NFPA standard.

This requirement does not comply with ANSI Essential Requirements. It would inappropriately require a commercial relationship to be established between

competitors, and many of you work for companies where you have competitors and very rarely do you see any type of requirement that forces you to work with a competitor, accept information from a competitor, accept anything from a competitor; it's just not appropriate in an end product standard.

It may expose end product certification organizations to increase liability; and finally, it may compromise the safety of the products made available to the marketplace. So thank you for your time to present our position and I look forward to the committee's review.

THE CHAIRPERSON: Thank you. At this point I'm going to open it up to questions from members of the Standards Council. Mr. Harrington.

MR. HARRINGTON: J. C. Harrington, member of Council. I have a question for Mr. Stull. I just would like you to comment on, we just heard a discussion from the gentleman of UL as far as his view that certification organizations are very different and a level of effort from one to another may be different, and I would just like to listen to your take or opinion on that.

MR. STULL: I don't agree with that statement. The reason is we have, as I pointed out in my

presentation, my delivery, extensive requirements for, that are specified. In fact, when we first embraced third-party certification as part of product standards, and this is a huge leap and I can say that because I've been involved with ASTM and ISO and all the other processes for European standards, we have by far the most rigorous requirements for certification for any type of product at least in our industry that I know of.

There are some, there can be some differences; for example, the standards may dictate the number of surveillance audits, and UL has a practice of their own to have four audits, and this isn't necessarily something that the end user or rather the manufacturer of product components do. This is what UL has as part of their practice or program.

I don't agree. I think that we're seeing quite good consistencies, there's a lot of interaction of the certification organizations on the committees, and these are very well-established organizations that are part of this business.

THE CHAIRPERSON: Ms. Brodoff.

MS. BRODOFF: Mr. Stull, could you just state for the record who you represent in any phases of this

process?

MR. STULL: Yes, I certainly will.

MS. BRODOFF: Because you mentioned that you, well, your disclosure of representation as being a matter of affiliation with National Personal Protection at this hearing, but I'd be curious to know whether that's your only affiliation or whether you have any --

MR. STULL: Yes, it is. Before, myself and my wife, Grace Stull, as part of National Personal Protection, had presented this issue and took part at the annual meeting on behalf of a company known as TenCate. TenCate is a company that is a major supplier of fabrics, so our participation at that annual meeting was on their behalf.

MS. BRODOFF: Are you saying now you're not representing anyone?

MR. STULL: We are not representing TenCate, that's right.

MS. BRODOFF: You have no interest other than your own personal point of view?

MR. STULL: That's right.

MS. BRODOFF: I think that should have been disclosed to the rest of the Council because I think you

clearly had a client interest on this matter and that's something Council needs to know even if you're not being retained to come here for that specific purpose.

MR. STULL: All right.

MS. BRODOFF: What interest do you serve on the committee?

MR. STULL: Special expert.

MS. BRODOFF: So you're not a manufacturing representative?

MR. STULL: No, I'm not.

MS. BRODOFF: Did you vote on this matter?

MR. STULL: On this matter?

MS. BRODOFF: Yes, on the proposal that you're proposing now.

MR. STULL: I believe I did, yes.

MS. BRODOFF: And did you disclose any other interests that you were serving at that time?

MR. STULL: I disclosed them at the annual meeting.

MS. BRODOFF: Were you representing Mr. TenCate or the TenCate organization at the time you were serving on the committee?

MR. STULL: When the issue first came up,

yes, I would have been, yes.

MS. BRODOFF: Are you aware that you should have disclosed it at that time?

MR. STULL: Yes, I am.

MS. BRODOFF: And not voted on the issue?

MR. STULL: Yes.

MS. BRODOFF: I have some other questions, but on a different subject.

THE CHAIRPERSON: Are there additional questions from members of the Council? Mr. Jardin.

MR. JARDIN: Joe Jardin, member of Council to Mr. Stull. You held up a copy of the 1971 standard when you were discussing the issue of the component certification. Were you saying that right now in that standard, the 1971 standard, that it incorporates what you're proposing for 2112? I just want to clarify that.

MR. STULL: No, it's under consideration by the Technical Correlating Committee which is a group that oversees that particular project interest, but they have not made any specific decision as to whether they're going to go forward. They formed a task group for that matter.

MR. JARDIN: Thank you.

THE CHAIRPERSON: Additional questions? Jim

Pauley, chairman of the Council. I guess, the question that I have, the argument that I seem to hear from both sides is an issue that we have a product standard that has specific certification requirements in it, and we seem to be, what seems to be blending into this is a conformity assessment related sort of issue on how you actually show compliance with the standard.

Are there any other examples of, you know, standards that you can tell me that have included this sort of explicit conformity assessment requirements into the standard to where, and particularly I'm talking about any kind of accredited standard that would go through, and if that's true, what kind of requirements are we talking about.

MR. STULL: I can mention two instances. NFPA 1981 right now has a requirement for self-contained breathing apparatus. As part of their criteria, they have a requirement for the acceptance of the government certification of brush fighters; in this case self-contained breathing apparatus. So the certification organization has to accept that certification as part of the prerequisite to be certified to NFPA 1981.

In a prior edition of NFPA 1977, which is

a standard on wild land firefighting protective clothing and equipment, there is a requirement that shelters, these are the devices that are deployed by firefighters as a last ditch effort, meet federal requirements for a specific federal specification. In fact, Underwriters Laboratory was one of the organizations that would accept the government information for that, government test information as part of their certification without any auditing or surveillance program on their behalf.

THE CHAIRPERSON: Mr. Schaefer, any comments from your end?

MR. SCHAEFER: I can't speak specifically to that standard, I'm just not familiar with it, but I can tell you to the question of conformity assessment criteria being included in standards. When I started at UL, and this is 37 years ago now, UL was going through the process of removing all the conformity assessment criteria from its standards. We used to publish what we called our follow-up inspection programs in the standard itself, and that included information about what would happen during visits to the factories, what testing would be done in a factory, what samples would be selected for testing back at UL, everything that we included in our entire product

certification program.

We removed that criteria because it was our understanding, and we agreed, that to become ANSI national standards the standards should not include the product certification criteria in the standard itself. So all that material was removed from our standards many years ago, and whether it was required by ANSI or not, it was the right thing to do because it's, in our opinion it's just not appropriate to include what the certification organization should do to maintain the integrity of its mark, and what certification organizations decide to do to maintain the integrity of their mark can vary. It's not appropriate to include that in the standard itself.

THE CHAIRPERSON: Ms. Gleason, do you have a comment on that point?

MR. GLEASON: I do, and what we have found is in standards dealing with personal protective equipment particularly is a bit unique in that there are numerous standards that have been published not only by NFPA, and virtually all of the standards that fall under the personal protective equipment project all include conformity assessment requirements and very, very specific, as we mentioned earlier, but also the International Safety

Equipment Association who also publishes personal protective equipment standards has included conformity assessment requirements, as well as ASTM.

Again, these are all unique to the industry of safety and protective equipment that's worn primarily occupationally in order to protect workers against, you know, potential hazards in the workplace, and in virtually all of their standards there are conformity assessment requirements, and in European standards, well, in Europe there's the personal protective equipment directive which specifies which type of products should undergo either full testing or quality audits. It's prescriptive for that particular industry.

In the U.S. we don't have anything like that, and I feel as though originally when these requirements were incorporated into the standards it was because the industry wasn't looking for uniformity in the type of products that they were going to wear as they were going out fighting fires and putting their life on the line, and so these standards are unique.

And, you know, it's not an electrical type product that may, you know, just fade out if the standard, you know, if it fails, and we are looking at

somebody who could lose their life if their SCBA wasn't working. So again, that's why there's prescriptive requirements in the NFPA standards for conformity assessment because they don't exist elsewhere.

THE CHAIRPERSON: Additional questions from members of the Council? Ms. Brodoff.

MS. BRODOFF: Maureen Brodoff. As I understand it, and I think, Gus, you spoke to this, this requirement would essentially require your competitor to accept your component testing under certain circumstances. How is that something that is standard, that the standards should be regulating?

MR. SCHAEFER: I don't know how that would be regulated.

MS. BRODOFF: Actually, I wasn't -- I kind of know your answer. Ms Gleason, it seems to me that this requirement as long as in some unspecified way a component recognition organization meets the requirements of a certification program, that they, that the certification organization has to accept the testing by that component recognition group in spite of the fact that it's a direct competitor, and I'm just not aware of any standard that would require that kind of commercial interaction among

competitors, whether it would be appropriate, but, so I wanted you to comment on that since it just seems like an unusual request.

MS. GLEASON: The standard does allow for a process of essentially review of --

MS. BRODOFF: What is the process, is there accreditation of certification organizations under this 4.2?

MS. GLEASON: Yes, a certification organization has to be accredited to ISO Guide 65. If you looked at ISO Guide 65, basically it's a template for how a certification organization shall operate. It's extensive. We have to have procedures in place for conflict of interest. I mean there's just many, many, we've got to have legal, you know, we have to have bylaws, Articles of Incorporation. All these things are reviewed as a business by the accrediting organization. We have to have procedures for how we contract with each manufacturer who we offer certification to. We have to have processes in place for how we accept samples, how a quality audit is conducted. There are, it's very prescriptive.

So we undergo audits on an annual basis where ANSI comes in to our facility, reviews all of our

product, our procedures for product certification. They additionally go out and they observe us when we are on quality audits at manufacturing facilities where a component would be manufactured or a full end product would be manufactured.

Additionally, they look at the standard, the NFPA standard which we certify to and bring close the whole process when they come back in to conduct an audit. They want to see how we're meeting all those requirements that are specified in that particular NFPA standard.

So for us to then look at a report that comes from another certification organization, the first thing we want to see is are they ISO Guide 65 accredited. If they are, then we check that off. There's a procedure that we have internally within our organization for acceptance of data from outside --

MS. BRODOFF: You didn't do that voluntarily under the current circumstances; you're asking to compel UL to accept your testament and as a direct competitor --

MS. GLEASON: It's our certification; not just our testing.

MS. BRODOFF: I assume that you're competitors for certification testing?

MS. GLEASON: We're friendly competitors, yes.

MS. BRODOFF: So you're seeking a provision in a standard that would compel that commercial relationship between competitors, and I just want you to comment on that specific issue of why should a standard be regulated in those kind of commercial relationships?

MS. GLEASON: Well, when we've gone to the extent that we have within these standards for trying to have a level operating system for every certification organization and a manufacturer comes to us and they have a material that they've gone through a certification process with us and an extensive certification process as you can see in the NFPA standard, again, the process involves us being accredited and us conducting testing, us conducting audits, and that material can be used by numerous manufacturers. Why should that manufacturer have to then go to another organization and go through the exact same process?

MS. BRODOFF: Let me come at it a slightly different way. If UL chooses not to rely on its competitors for component testing, do its own testing as a result, charge more or do more testing that's required

because that in their business judgment is how they want to conduct their business, a manufacturer is not compelled to go to them, they can go directly to you for certification and testing and yield whatever benefits, economic or quality, that they can choose to get from you, isn't that true?

MS. GLEASON: Yes, absolutely.

MS. BRODOFF: So there's no reason why anyone has to go to UL if they find that their commercial approach to this is insufficient.

MS. GLEASON: The only issue would be that if they have other manufacturers of end products that they want to supply their material to then basically they have to pay for our certification process as well as the whole process that UL would offer, and that's why we've developed our own criteria for acceptance of test results from another certification organization.

THE CHAIRPERSON: Do you have anything else?

MS. BRODOFF: No.

THE CHAIRPERSON: Jim Pauley, chair of the Council. I just want to follow on that line of questioning because you mentioned ISO Guide 65, and I'm going to ask this question perhaps to both of you. Ms. Gleason, I'll

ask you first. Is there anything in your internal procedures that you would say is above and beyond Guide 65?

MS. GLEASON: Well, Guide 65 is, like I said before, it's a template for how a certification organization should operate, and there are different types of certification. Meaning there may be a certification where it's literally one test and then no more testing. The NFPA standard drives organizations to repeat testing every year for the product as well as a quality audit.

So Guide 65 is a template for a certification organization to have policies, procedures and all the legal requirements needed for that business to operate and to be financially, you know, operable. Where we go beyond would be, for instance, for our certification program, and I know UL has something similar too, we require full annual testing of all products and all components every year.

We additionally require a minimum of two full quality assurance audits similar to an ISO 9,000 audit. We don't require an auditor to go in and review an inspection checklist. It's a full audit from incoming, receiving, all the way through the product being manufactured to be shipped out, so --

THE CHAIRPERSON: Let me interrupt at this point. So those things that you just named that are pretty specific, are all of those elements that you require, are those required in Guide 65 to do it that way?

MS. GLEASON: In Guide 65 what you have to do is when you issue your certificate to the product manufacturer you have to state what process you've used within Guide 65. If it's a one-on test or it's a, you know, Type 5, which is what we are and I know UL is because we conduct the quality audits and the full annual testing, so all of that is disclosed when we issue --

THE CHAIRPERSON: Well, I was kind of getting into your specifics where you said you require twice a year, you know, and you require full testing of all those components, but I'm gathering out of the discussion that I could take another certifier with a different set of procedures that doesn't require full testing and only may do one audit a year and still be Guide 65 compliant provided they've written the procedures?

MS. GLEASON: Right, but they wouldn't be in compliance with the NFPA standard.

THE CHAIRPERSON: So your premise is that everything necessary is really outlined explicitly in the

standard --

MS. GLEASON: Correct.

THE CHAIRPERSON: -- to be able to do the conformity assessment. I'll just take that same sort of set of questions, Mr. Schaefer, and ask the same from your perspective. Are you above and beyond Guide 65 or does that sort of relate?

MR. SCHAEFER: We look at any accreditation program that we have ourselves accredited to, whether it's ANSI or whether it's OSHA, NRTL, whatever, those requirements as a basic threshold. What we really focus on is what do we need to do in any product category where we certify to maintain the integrity of the UL mark, and 99 percent of the time and maybe 100 percent that goes well beyond the threshold requirements in an accreditation program, and that can vary, everything from the frequency of our follow-up inspections to the type of samples that we select when we go to the factory.

It can even vary and some of you might be aware of this. We invest millions of dollars each year to prevent the counterfeiting of the UL mark, just to make certain that the end product that has UL mark can be trusted, and the same holds true for a recognized

component.

We look at a recognized component as a certified product. We set up the same exact type of inspection documentation, we manage our frequency of inspection the same way, we select samples and so on. So any accreditation criteria we look at as a baseline, and we go well beyond that baseline because it all comes down to the integrity of the mark.

If I can just actually quote a statement. These are the FAQs that appear on the OSHA website about the NRTL program, and there's a statement here that I think is relevant if I may. One issue that often surfaces is whether a NRTL must accept the product testing certifications or approvals of another NRTL. And this is the type of subject we're speaking about. OSHA has no authority to require such an acceptance. A NRTL may accept the work output of another NRTL; however, this is solely a business decision of each NRTL.

THE CHAIRPERSON: Jim Pauley, chair of the Council. I'm going to sort of try to wrap up my piece of this and what I was trying to understand. So, in essence, this issue gets down to if your requirements were twice a year to go do an audit but, Mr. Schaefer, your requirements

were four times a year based on your minimum threshold point that you were making about that's what you believe, this would essentially say you would accept the other components even if it was only done twice a year, whatever it was those procedures were, that's what you would accept?

And I'm not trying to get into two versus four; I only used that as an example because it was brought up, but I'm trying to simply understand what the range of variation can be and still be in compliance with the Guide, so I understand, Mr. Stull, you have a comment, but I'm looking back at Ms. Gleason and Mr. Schaefer since they kind of engaged in a conversation to make sure of sort of what that range was, and maybe, you know, I don't know enough specifically about any of this to get down into the details, so I was trying to look for a more general way to try to understand it from my perspective.

MS. GLEASON: Yea, I mean I think both organizations go beyond Guide 65. First of all, if you want to call the NFPA standard, it's almost a scheme for a lot of the certification requirements, and so that standard, the requirements in the standard drive what we equally have to meet. And to me it equalizes those requirements in our industry. I think it's relatively

prescriptive in terms of what each certification organization has to do either for an end product or, again, in the place of a component.

And just as Gus mentioned, we have the same exact requirements in our program as well. We treat a component exactly like an end product in terms of the surveillance program that we have for that also. And I think any certification organization with integrity wants to insure the integrity of its mark and we police our mark equally as aggressive.

THE CHAIRPERSON: Mr. Schaefer.

MR. SCHAEFER: Just, and with all due respect, very seriously, but even the use of the term "equalizers" and you're talking about a competitive environment, I think this gets into territory that's business relationships and business-related, so there's some, I think, risk when you hear terms like that in this type of discussion.

And, again, there is so much that goes into a product certification well beyond the inspection of the product or frequency of inspection; it's the training of our staff, it's the steps we take if we find a noncompliant product and escalating our oversight and all

types of things that it's just, in our opinion it's not appropriate for this type of requirement to be placed in a standard.

THE CHAIRPERSON: Mr. Stull, do you want to comment on that briefly?

MR. STULL: I have to. I think there's been a missing of the point here. The fact is that what we specify in the committee language for the change in NFPA 2112 is that UL, or whoever it might be, can impose its own criteria on the organization providing the data to any extent that it wants. That's what the requirement says. Please read it. Meeting the applicable requirements of the product certification organization accepting the recognized components. Its own program. It can dictate its entirety of its program if it so chooses.

All we're trying to avoid is it just can't say we don't like you so we're not going to take your data. If it wants to say we have to do four audits, we have to have our auditors crosschange it or whatever, they can do that. In fact, it could say no on that basis alone, that it's not identical or absolutely equivocal to being the same. That's what the standard says. It's not saying accept something of a lesser value.

And by the way, for the record, my representation of TenCate was just solely on the basis of the annual meeting proponents because they weren't able to. So this is an issue that our company feels strongly about because we've been involved in this issue of products for personal protective equipment of first responders for the last 30 years, and we put our efforts, and we want them to have the best protective clothing equipment possible, and we don't want games being played in the industry that increase the costs, particularly in the fiscal environment that are difficult for Fire Departments to meet now. Thank you.

THE CHAIRPERSON: Any additional questions from Council? Very good. Mr. Stull and Ms. Gleason, I'm going to give just 5 minutes between the two of you for any wrap-up or final remarks that you want to make, Mr. Schaefer, I'll do the same for you and then we'll bring the hearing to a close.

MS. GLEASON: Well, thank you for listening to us today, and at a minimum, I hope you have an appreciation for the project and the amount of work that's gone into development of the standards as well as the certification requirements, and, you know, I just want to

remind everyone that the requirements really were brought about by fire service representatives.

The union in particular wanted these standards because of the fact that there were quality problems in the industry, and so, I think we've come a long way, and I know there are arguments about including conformity assessment requirements in the standard, but in this case I think it's completely appropriate.

And, again, we stand behind our certification mark and other organizations do as well, and based on the language that's proposed, I believe we could determine that we would not want to use a certification organization's test data for a variety of reasons, and so I would compel you to allow that language to stay in as the committee voted.

THE CHAIRPERSON: Mr. Stull.

MR. STULL: Yes, I'd like to add, please read the language that the committee has proposed and was comfortable with. It is a language that does empower the certification organization. There's been a lot of rhetoric about control, lack of control, liability. I've been involved in over 250 product liability suits, and I can tell you that any issue of increased liability on the

product certification organization is for naught. It really is not going to be the case. With the way that most of these suits work is not going to be a circumstance of this level of scrutiny.

I'd also like to point out that unfortunately there was a remark made at the annual meeting by an individual representing the International Association of Firefighters. I talked to Mr. Rich Duffy. He sent a letter to Mrs. Cronin today that says that the International Association of Firefighters is in support of this for its members because it does not want its members to be overburdened by costs based on what it thinks are fair and equitable standards, and those standards have, again, not in any way taken away from the certification organization's ability to be high demanding and high specific and to maintain the standards in which their reputation is built.

THE CHAIRPERSON: Thank you. Mr. Schaefer.

MR. SCHAEFER: I'll basically reiterate what I said in my opening statement. UL views these requirements as commercial requirements and mandating how competitors must interact. Even the concept of being able to go to your competitor and dictate how they certify

components is inappropriate. You know, just as any of our competitors -- and they have the option to do this -- any of our competitors that might accept a UL recognized component, we would not expect them to be able to come into our organization and dictate how we certify components. Again, it's just not an appropriate way to behave in a competitive environment.

There is competition in this field. Manufacturers do have choices as far as who they go to to certify the component, who they go to to certify the end product, and if anything, putting requirements in a standard such as this could damage a competitive environment which ultimately works to everyone's benefit. I appreciate the time to speak today.

THE CHAIRPERSON: Thank you. With that I'm going to bring this hearing to a close. I want to thank all of you first for being here and taking the time to be here today and help share this information to the Council, and also for your participation in the NFPA codes and standards process. The decision of the Standards Council will be issued as a written decision by Ms. Cronin, the secretary of the Standards Council. No member of the Council nor member of NFPA staff is permitted to convey any

information regarding the council's decision. Only that written communication will be the notification of ultimately the council's decision.

So thank you again for your participation today, and with that I'm going to move directly into the next hearing item which is Agenda Item 11-8-8A. This is an issue on NFPA 204 and certified amending motion 204-1.

(Off the record.)

THE CHAIRPERSON: All right, I'm going to bring this hearing to order again. This is Agenda Item 11-8-8A. Just in looking around, is there anybody that has come into the room since we did the last hearing that has not introduced yourself for the record? Please.

MS. CURTIS: Martha Curtis, NFPA staff.

MR. BIELEN: Richard Bielen, NFPA staff.

MR. SPOTIS: Joe Spotis, NFPA.

THE CHAIRPERSON: And Mr. Schulte, I understand in this case you're the appellant. Is there anyone else speaking in favor of this appeal?

MR. SCHULTE: Not that I'm aware of.

THE CHAIRPERSON: Is anyone speaking in opposition to the appeal? Mr. Koffel. With that, also a couple of statements from members of Council,

Mr. Harrington.

MR. HARRINGTON: J. C. Harrington, member of the Council. For the record, I'm recusing myself on this Agenda Item. I will not participate as a member of the Standards Council in the hearing, deliberations or voting on this matter.

THE CHAIRPERSON: Thank you. Mr. Milke.

MR. MILKE: I'm Jim Milke, member of the Council. For the record, I'm recusing myself on this Agenda Item and will not participate as a member of the Standards Council in the hearing, deliberations or voting on this matter.

THE CHAIRPERSON: Thank you. I think, Mr. Schulte, you ran here a little earlier, but just to sort of reiterate, I'm going to give you about 10 minutes to make any opening remarks that you want to make regarding the appeal to the Council. Mr. Koffel, I'll give you on the other side any statements that you want to make; I'll give you ten minutes as well. I'll open it up to questions from the Council and give you each about 5 minutes to close out and that's how we will close the hearing. So Mr. Schulte, the floor is yours.

MR. SCHULTE: Thank you, Mr. Chairman. On

June 24th, I submitted a letter to the Standards Council and I think it pretty well described my objections to the publication of NFPA 204, and I've also submitted attachments that I think pretty well describe what I have in mind here. I'm going to go through that letter just very briefly. I don't expect to be talking for 10 minutes, but before I, before I do that I'd like to borrow a line from Groucho Marx, "Before I speak I've got something important to say."

And so what I'd like to do is take a look at Mr. Tucker's response to the appeal, and that's an e-mail dated July 7th to Amy Cronin, and basically in that e-mail Mr. Tucker defers to Mr. Davis, and Mr. Davis gives a synopsis for the position of the NFPA 204 committee. The reason I want to start with this is because of information in this commentary that's incorrect.

Mr. Davis says that the most important reason that NFPA 204 should be published because there's draft curtains requirements in the International Building Code and the International Fire Code for draft curtains, and Mr. Davis feels that that's the reason we need to publish this addition of NFPA 204.

I'd like to correct Mr. Davis's comment.

In the International Fire Code, the requirements for draft curtains had been deleted, and so basically this kind of nullifies or makes neutral Mr. Davis's comments. There are still requirements for draft curtains in the International Building Code. They only apply to storage buildings with no high piled storage exceeding 50,000 square feet in area. I believe that probably there are no buildings of that size that don't contain high piled storage.

The other buildings that, where the International Building Code requires draft curtains, would be industrial buildings, no storage, then also exceeding 50,000 square feet, and of course, there might be some buildings today, but given the recession, I think those are going to be pretty far and few between. So what I want to do first is to say what Mr. Davis has provided in the e-mail dated July 7th is incorrect.

Now, once we got that off the table, I'd like to go back to my letter dated June 24th. I've given four reasons why I think that NFPA 204 should not be published, the 2012 edition, and we should defer this for at least a year. The very first reason is a conflict between NFPA 13 and NFPA 204. I think the conflicts are very obvious. I'm going to go through those in just a

moment.

Sprinkler design criteria. NFPA 204 in the appendix -- appendix, excuse me -- annex F.3 contain sprinkler design criteria. I think that's the wrong standard. Sprinkler design criteria should be in NFPA 13 not in NFPA 204. I think that the NFPA 13 committee should be determining sprinkler design criteria not the NFPA 204 committee.

The third reason I've given here why I think that NFPA 204 shouldn't be published deals with firefighter safety. We've got two relatively new, I'm going to refer to them as standards, they're called NIOSH alerts on firefighter safety. Nowhere in NFPA 204, the proposed new NFPA 204 do we address the information provided in those two NIOSH alerts, and I think it's very critical to stay up to date that NFPA 204 address what's in the NIOSH alerts.

Lastly, the last reason that I'd like to present as far as not having the new edition of NFPA 204 published deals with an engineering analysis. The proposed edition of NFPA 204 requires that an engineering analysis be done to document that we can use sprinklers and roof vents together. There is no accepted engineering analysis

that can be used to provide that documentation. So, in effect, what we have here is NFPA 204 telling us we need to do an engineering analysis, and that engineering analysis can't be done.

Let me go back to Item No. 1 and then I'll move on here to some of the other items. The conflict between NFPA 13 and NFPA 204. In a document I titled The Critique of Annex F.3, I believe the Standards Council has that, on page 7 of that document, this is a statement from Annex F.3. NFPA 204 suggests that we use gang vents in sprinkler buildings. Typically the roof vent that you're familiar with is individually activated. A fusible link operates, the vent opens. With a gang venting, multiple vents open at the same time, and those vents might be operated from sprinkler system water flow, it might be operated from smoke detectors, or it might be activated by a manual switch; in other words, we're going to have multiple vents open at the same time.

Now, on page 8 of this document on Annex F.3, again, in Annex F.3, let me quote this. It says "The studies of smoke and heat venting used in conjunction with controlled mode sprinklers do not provide evidence that venting has a negative effect on control mode sprinkler

performance." That's exactly the opposite of what NFPA 13 is telling us. So it's completely opposite of what's in NFPA 13 right now. And so there's a conflict that needs to be resolved that hasn't been resolved.

We have roof vent provisions in NFPA 13 now, and the substantiation for those vent provisions in NFPA 13 say "The intent of the standard is that roof vents and draft curtains should not be used in conjunction with storage protection." I think that statement is pretty obvious as to what that means. So here we have NFPA 204 saying there's no problem, here we have NFPA 13 saying I think we've got a problem, and we do have a problem because we've got standards going in opposite directions.

On page 9 of the document I just referred to, again we have a statement in NFPA 204 that says "There's no detrimental effects to the opening of vents." Again, in complete opposite of NFPA 13. So those are the conflicts between NFPA 13 and NFPA 204.

To get back to the other items that I've noted here in my letter to the Standards Council, Item 2, sprinkler system design criteria, I think that's obvious what that's about. NIOSH standards firefighter safety, the NIOSH alerts, I've already discussed that. The engineering

analysis, the proposed, well, the present edition of NFPA 204, excuse me, the 2007 edition of NFPA 204 requires a performance based analysis. In the proposed NFPA 204, that wording has been changed to an engineering analysis. So they've changed some wording. The question is is it actually possible to do that engineering analysis?

The attachment list here that I've attached to the letter addresses this issue. It's titled Engineering Analysis Commentary. Mr. Dillon of Dillon Consulting Engineers submitted a comment back in December of 2009 on NFPA 204. Mr. Dillon's comment says "The document prematurely and improperly requires and relies upon unproven methods of calculation for the effectiveness of smoke and heat vents in the presence of automatic water-based sprinkler protection systems. It also relies on calculations of questionable accuracy to determine activation times for the vents and the sprinklers."

Mr. Dillon is correct. As part of the attachments --

THE CHAIRPERSON: Mr. Schulte, you have about 1 minute left.

MR. SCHULTE: Okay, thank you. As part of the attachments, I've submitted a report by Hughes

Associates, a lengthy report. The client for Hughes Associates says that the report by Hughes Associates is worthless. If Hughes Associates can't produce an engineering analysis that shows what's going to happen when we have sprinklers and vents in the same building, then I would suggest that probably can't be done and that Mr. Dillon is correct. I think I'm going to just leave it at that. Thank you.

THE CHAIRPERSON: Thank you. Mr. Koffel.

MR. KOFFEL: Thank you, William Koffel, Koffel Associates, and on this item we are representing the AAMA Smoke Vent Task Group, and the AAMA Smoke Vent Task Group consists of manufacturers of smoke vents, so obviously we have a vested interest in this item.

We would encourage the Council to support the consensus process and the outcome of the committee process. As you know, this document was returned to committee during the last cycle. We received several comments with regard to this issue. This was the issue, the reason the document was returned to cycle last time or returned to committee last time. We received comments from Mr. Schulte. We received comments from two other people who had spoken on this issue in the past, Carl Baldassarre

and Dan O'Connor.

Looking at the record, the committee looked at the two comments that proposed modifications to the document, worked with those, Mr. Baldassarre was present at the meeting, and I'm not trying to say that Mr. Baldassarre supported or did not support the final action of the committee, but he was present at the meeting, was able to work with us to develop what the committee eventually balloted as a consensus document for the proposed Chapter 11.

Is the document perfect? No. Would we like to know even more about sprinkler interaction with roof vents? Yes. Does the committee think that the document offers to the users of the document the best available information at this point in time? I think we do.

Some of the comments you've heard with regard to a conflict between NFPA 13 and NFPA 204, I know Mr. Schulte has been having discussions with NFPA staff about that conflict. I'm not sure that there is any consensus, opinion or view from staff at this point in time that there necessarily is a conflict between NFPA 13 and NFPA 204.

With regard to design criteria being in NFPA 204, yes, I think ultimately if we have definite design criteria for the sprinkler system, that belongs in NFPA 13. However, what 204 basically addresses is the criteria for the smoke vent if they're used in conjunction with the sprinkler system in a building, and I don't think NFPA 204 does establish design criteria for the sprinkler system, and, in fact, in the language adopted by the committee, we've actually referred to NFPA 13, and one of the reasons there is a reference to NFPA 13 in the committee action is to insure that the requirements in NFPA 13 are in fact met. So we recognize that we need to make sure that the designers use both documents.

With regard to the engineering analysis, the statement that the committee has put in the document is that there's no, and I don't have this exactly, but there's no universally accepted engineering analysis that could be put into an NFPA guide or standard at this point in time that could apply to all applications. I don't think the committee is saying that it can't be done. I believe the work that Mr. Schulte is referencing with regard to the work performed by Hughes Associates was part of a research effort to do modeling to try to develop some language that

could be incorporated into NFPA 204.

I also believe that the language that he is referring to, at least in my discussions with the client, does not necessarily represent the universal or consensus opinion but rather this was taken from minutes of a meeting in which there was concern that if the Hughes Associates' work was not able to move forward that maybe they didn't receive the value of that research project that they were hoping to receive from that effort, at least that's the way it has been portrayed to me in my discussions with the client.

So I would encourage the Council to support your committee and to release the document, recognize that the committee will continue to work on this area and hopefully be able to refine it as more information and research is available. Thank you.

THE CHAIRPERSON: Thank you. I'll open it up to questions from members of the Council. Mr. Clary.

MR. CLARY: Yes, Shane Clary, member of Council to Mr. Schulte. As part of the package that was sent to us, there's a very lengthy set of minutes from the AAMA 72nd Annual Conference in Coronado, California. What was the, I guess what point is being made within these

minutes?

MR. SCHULTE: I think I'm going to refer to page 128 of those minutes. That's the portion that addresses smoke and heat vents, and you'll see in those, and the teleconference discusses the Hughes Associates report that was just discussed or just mentioned here, and there you will see the Smoke Vent Task Group's statement that the Hughes Associates report is worthless. And so that was the sole purpose of submitting that.

There's about two or three pages in the whole 100 pages that's of interest. The reason I submitted the whole thing was because it was just a single document, a single PDF, and my technical capabilities as far as computers go, I don't know how to get that out of it, so it was easier for me to send you the whole thing, let you know the whole thing exists.

MR. CLARY: Okay, thank you.

THE CHAIRPERSON: Additional questions? Jim Pauley, chair of the Council. I guess, Mr. Schulte, I'm just curious, there's a number of the things you said and you've got a number of elements in your submittal to technical points that are in the document and that you've rebutted. Have you been interacting with the 204 committee

or submitting proposals and comments and making those points as well.

MR. SCHULTE: I've submitted either one or two comments. Just recently I submitted a comment, just recently within the last 18 months, a comment to completely delete Chapter 18, excuse me, Chapter 11 and in NFPA 204. Chapter 11 is the chapter that deals with sprinklers and roof vents. Just delete the whole thing and I provided a lengthy explanation why, and the explanation is basically it conflicts with NFPA 13.

THE CHAIRPERSON: Thank you. Ms Brodoff.

MS. BRODOFF: Maureen Brodoff. Maybe you already said this but I just want to clarify. Do you represent any client interest in this matter?

MR. SCHULTE: None.

THE CHAIRPERSON: Mr. Demers.

MR. DEMERS: Dave Demers, Council member. Mr. Schulte, what is your technical analysis, or what is your professional opinion regarding smoke vents and the use of them at all in sprinkler buildings and storage occupancy; is it your position that we shouldn't even have them?

MR. SCHULTE: That's correct, and it's been

that position since 1981.

MR. DEMERS: Based on your writings, that's what I assume.

MR. SCHULTE: That's correct.

MR. DEMERS: It's consistent.

MR. SCHULTE: Right.

MR. DEMERS: Thank you.

THE CHAIRPERSON: Mr. Bell.

MR. BELL: Yes, a question for Mr. Schulte. Your appeal is to return the entire report.

MR. SCHULTE: That's correct.

MR. BELL: Is there a possibility of carving out your key concerns and submitting that as a TIA at some point?

MR. SCHULTE: To tell you the truth, I'm not all that familiar with the NFPA process and how a TIA would interact within NFPA 204. I'm not up on that, and so I really can't answer your question.

THE CHAIRPERSON: Additional questions? Mr. Schulte, I'll give you five minutes to wrap up or add anything that you want, and Mr. Koffel, I'll do the same for you.

MR. SCHULTE: Thank you. I'm just going to

be very brief. Since I filed this appeal, I've requested far more interpretations of the NFPA 13 Committee on the roof vent provisions in NFPA 13. I submitted basically two formal interpretations. Each one is three questions. One deals with whether gang roof vents are permitted by the roof vent provisions in NFPA 13.

The other set is also three questions. Basically they're all three similar, and that formal interpretation request is whether we can use the design criteria in NFPA 13 with gang roof vent systems, and I believe the answer to both of those questions is obvious based upon the substantiation, the NFPA 13 roof vent provisions, but so far no answer. I was told that the NFPA 13 Committee is waiting on the Standards Council. It's the chicken and egg thing, so we'll see. Other than that, I don't think I have anything to add. Thank you.

THE CHAIRPERSON: Thank you. Mr. Koffel.

MR. KOFFEL: I don't think I have anything further to add. Thank you.

THE CHAIRPERSON: Thank you, gentlemen. Thank you both for being here today and for sharing information with the Council. We appreciate that, and thank you both for your participation in the NFPA codes and

standards process. The Council will make a decision on this and that decision will be issued in written communication by Ms. Cronin, the secretary of the Council. No member of staff or member of the Council is permitted to convey any information regarding that decision. That written communication will be the sole way that Council will communicate on this topic. So again, thank you for being here today.

With that, we will bring that hearing to a close, and this is probably an appropriate time, I have three hearings left, so this is an appropriate time to take a break. We are going to take about a 10-minute break for the Council, and then we'll start back in with the final three hearings, so we'll go off the record at this moment.

(Recess taken.)

THE CHAIRPERSON: We'll come back to order and we'll go back on the record. We have three hearings left this afternoon. The next item we're going to go into is 11-8-19D. We have sort of rotated the room again, and so since I went off the record, I am going to go around the room and have folks introduce themselves so we capture it on the record. My name is Jim Pauley, chairman of the Council.

MS. CRONIN: Amy Cronin, NFPA staff and Standards Council secretary.

MS. FULLER: Linda Fuller, NFPA staff.

MR. HARRINGTON: J. C. Harrington, member of Council.

MR. MILKE: Jim Milke, member of Council.

MR. LEBER: Fred Leber, member of Council.

MR. DEMERS: David Demers, member of the Council.

MR. JARDIN: Joseph Jardin, member of Council.

MR. HUGGINS: Roland Huggins, member of Council.

MR. McDANIEL: Danny McDaniel, member of Council.

MR. SNYDER: Michael Snyder, member of Council.

MR. OWEN: Richard Owen, member of the Council.

MR. CLARY: Shane Clary, Council member.

MR. BELL: Kerry Bell, member of Council, and I would like to note for the record that I'm a member of the technical committee on the residential sprinkler

systems. As a member of this committee, I participate in the consideration of voting on the issues that appear to be related to this appeal. I have reviewed the obligations under the guide for conduct and participants of the NFPA process to consider whether there was any reason for me to recuse myself from consideration of this appeal. I have concluded that I do not have any views that are or would appear to be fixed concerning the issues, and I am fully able to give open and fair consideration to this appeal. For the record, therefore, I have considered the matter and believe that I can fully, fairly and impartially fulfill my role as Council member on this appeal.

MS. BRODOFF: I'm Maureen Brodoff, NFPA staff and legal counsel to the Standards Council.

MR. FINNEGAN: Dan Finnegan, Siemens Industry, guest.

MS. HOUSEWRIGHT: Meghan Housewright, NFPA staff.

MS. COLLETTE: Kristin Collette, NFPA staff.

MR. COLONNA: Guy Colonna, NFPA staff.

MR. SPOKIS: Joe Spokis, NFPA.

MS. STANEK: Sandra Stanek, NFPA staff.

MR. HART: John Hart, NFPA staff.

MS. GOLINVEAUX: Tracy Golinveaux, NFPA staff.

MR. KLAUS: Matt Klaus, NFPA staff.

MR. DUFFY: Chad Duffy, NFPA staff.

MR. DUVAL: Derek Duval, NFPA staff.

MR. BIELEN: Richard Bielen, NFPA staff.

MR. KOFFEL: Bill Koffel, Koffel Associates.

MS. CARROLL: Elena Carroll, NFPA staff.

MS. GOYETTE: Joanne Goyette, NFPA staff.

MS. CURTIS: Martha Curtis, NFPA staff.

MR. GOLINVEAUX: And James Golinveaux with Tyco Fire Suppression & Building Products.

THE CHAIRPERSON: Thank you. The particular Agenda Item that we have, again, 11-8-19D, this has to do with NFPA 13D and an appeal to issue TIA 1028R. Mr. Golinveaux, you're speaking in favor of the appeal. Is anyone else speaking in favor of the appeal? Is anyone speaking in opposition to the appeal?

Mr. Golinveaux, I'm going to give you ten minutes to introduce this to the Council, make your opening remarks, there will be questions from the Council and any wrap-up comments, and then we'll close out the hearing.

MR. GOLINVEAUX: To start off with full

disclosure, this proposal was made, supported by a Research Foundation report. I am a member of the Board of Trustees for the Research Foundation just to put that on the record, and I'm also the proud father of a member of staff, Miss Tracy Golinveaux, just to put that on the record as well. That's what I'm most nervous about is speaking in front of her.

To simplify this appeal, the Research Foundation undertook a program to help mitigate the cost of the installation of residential sprinklers. Residential sprinklers are currently listed by Underwriters Laboratory or Factory Mutual. Most of the design or the listing limitations are for smooth, flat, horizontal ceilings, and we use a two-sprinkler design for these single-family homes for NFPA 13D.

When we come to the slope ceiling configurations or alternate configurations that have beams, we default to special listings or other guidance by 13D. This other guidance increases the cost of the installation of residential sprinklers by larger pipe sizes, higher flows, more sprinklers in the design area and larger meters. All of these combined increase the cost of the installation of residential sprinklers in single-family

homes.

So the proposal that I made was to the next cycle of 13D, but in the meantime, we submitted this as a tentative interim amendment to the 2010 edition of NFPA 13D, that of which I'm here today to speak to you on behalf.

So the proposal is TIA 1028R for 13D. The reason for the appeal is the failing ballot of the Technical Committee on emergency nature. To summarize the vote, the Technical Correlating Committee passed the motion on correlation and emergency nature, but the Technical Committee passed 100 percent on the technical merit but failed by a round-off of .25 votes or one vote of the emergency nature. So I was one vote short of receiving both a pass on technical and emergency nature, so the reason for the appeal.

The appeal that I am basing this on today is in accordance with NFPA regulation Section 5.3E and a reference to 5.3F; specifically, that the method is not in current use or unavailable to the public. To summarize the intent of this TIA is to provide long-awaited guidance to the HJ and installing contractors on how to handle slope ceiling conditions relative to the number of design

sprinklers in one and two-family homes and manufactured homes. The current 2010 13D standard recognizes the existence of sloped ceilings, yet remains silent as to the design standard.

Section 8.1.2 requires two sprinklers to be designed but restricts that to flat, smooth, horizontal ceilings. With an annex note, stating that some residential sprinklers have been listed under smooth sloped, and where ceilings have configurations outside scope of current listings, special sprinkler design features such as larger flows and/or three or more sprinklers in the design area, this mandates higher cost for the installed by lack of guidance in the standard for how to handle these slope ceiling conditions or these beam slope ceiling conditions.

The great research of the Fire Protection Research Foundation titled Analysis and Performance of Residential Sprinkler Systems with Sloped and Sloped and Beam Ceilings was unfortunately unavailable during the revision cycle of the 2010 NFPA 13D. This report, which is the basis of the technical proposal that received 100 percent support of the Technical Committee, shows that the current sprinkler listings and/or the increased number

of design sprinklers and flow requirements is not and was not necessary.

The fundamental conclusion of the foundation report for not requiring additional flow or number of sprinklers, increase of number of sprinklers is the effect of higher pressures available to the first sprinkler operation, providing a higher level of control and a thorough review of the room tenability. Unfortunately, in the 2010 cycle of 13D, the annex section, which recommends the higher flows and greater number of sprinklers, was revised to add cautionary language on recent attempts to reduce the two sprinkler demand to a single sprinkler.

The data for looking into a single sprinkler demand was based on field performance of one sprinkler successes, yet the annex statement quote the impact of hydraulic increase in the number of single sprinkler activations cannot be determined. And this causes confusion to the HJ to accept the Fire Protection Research Foundation's report as an equivalent method because we have guidance in the appendix saying hydraulic increase cannot be determined to the effect of that, but the whole foundation of the report is that the hydraulic

increase of a two-sprinkler demand does have an effect and does provide the minimum level of life safety.

So I have some conflict in the appendix guidance to the equivalent method of what most of the people who say this is not an emergency nature, it makes it difficult for the authority to accept the Fire Protection Research Foundation report. But the committee, as stated with the language that was submitted, there's a hundred percent technical support for this.

The statement in the 2010 13 standard does not support the research done by the foundation. The hydraulic increase of the first sprinkler does have an impact, a positive impact on the performance of residential sprinklers, provide life safety in 13D occupancies. The committee statement is correct for the single sprinkler argument because there's confusion in accepting the report's conclusions.

Also, note that sloped beamed ceilings are currently outside the scope of all current listings and not included in the design standard of NFPA 13D. So it completely defaults to the authority having jurisdiction to decide how to protect those buildings, and beam-sloped ceilings are becoming more common in the average home,

especially new construction.

NFPA has an initiative to promote the adoption of the installation of residential sprinklers in single-family homes to reduce the overall deaths by fire. The 2012 International Residential Code requiring these sprinklers will reference the 2010 edition of NFPA 13D. We need this revision now.

The work of the foundation provides design guidance and eliminated increased cost due to higher water demands. The proposed technical change that received a hundred percent technical support corrects the confusion caused by the 2010 annex. Additionally, the proposed change provides design guidance currently not available in the standard. Arguments that equivalent methods should be used are not justifiable in a standard that's supposed to be simple and easy to understand and use. This is the simplest design standard out there, NFPA 13D. These systems are supposed to cost between $1.00 and $1.61 a square foot. To require equivalent method as a submittal for protection requires more work than what the standard is supposed to bring to the table.

My proposal lost ballot on emergency nature on the Technical Committee by only one vote but did

pass the Technical Correlating Committee on emergency nature. I believe the arguments that I provided justify the emergency nature prescribed in the regulation, Section 503E and F. I ask the Council to support my appeal and issue TIA 1028R. Thank you very much.

THE CHAIRPERSON: Thank you. I'll open it up to questions from members of the Council. Mr. Clary.

MR. CLARY: Shane Clary, member of Council. Did you submit this TIA on behalf of the foundation or on behalf of Tyco Fire Protection Products?

MR. GOLINVEAUX: I submitted it on behalf of Tyco Fire Protection Products. I had called Kathleen Armand and asked if it was appropriate to submit the same language that I submitted to the ROP process as a TIA, and she gave me her nod of approval that I could at least submit it to the TIA, but I did call her in advance before I submitted, but I did submit it on behalf of Tyco Fire Protection Products just because that's who I work for.

THE CHAIRPERSON: Okay, thank you. Mr. Huggins.

MR. HUGGINS: Roland Huggins, Council member. I noticed in your letter here on your appeal you identified some E and F and your reasoning for emergency nature, but

was it not in the initial ballot, the justification was just predicated upon cost?

MR. GOLINVEAUX: It was probably heavily on cost as to the reason. I didn't realize that as many people felt as strong of the emergency nature as they did, so I had to reevaluate when I saw that I had lost emergency nature as to the proposal and the effect.

MR. HUGGINS: So more to the point, the initial ballot did not identify these other two items.

MR. GOLINVEAUX: No, it did not. It was more on the cost initiative and saving cost to reduce the install cost, yes.

THE CHAIRPERSON: Mr. Demers.

MR. DEMERS: Mr. Chairman, Dave Demers, member of the Council. Two questions. How many negative votes were there, and a follow-up to that, I would have liked to have seen what those negative comments were. I don't need it now, but if you could kind of give more of a summary, I think you already have explained it a little bit, but why they voted negatively.

MR. GOLINVEAUX: I believe the ballot count was 27 voting, 7, yes, 7 disagreed. So I needed 20.25 votes for a positive vote and I received 20. The general

sense was they just, if I read through them, that I did not satisfy the intent of emergency nature. If I had to summarize the 7 comments that came in, they just didn't feel that I proved emergency nature with my proposal.

THE CHAIRPERSON: Mr. Demers.

MR. DEMERS: A follow-up, so they didn't make any explicit statements disagreeing that it was not of, that it was not of an emergency nature -- I don't want to put a double negative in there -- but they weren't contesting that it wasn't emergency; they just didn't have enough information to confirm that?

MR. GOLINVEAUX: I'll give them more credit than that because there were a couple of comments that said as long as we have the equivalent method in the standard that any new technology can be applied through the equivalent method.

As I read through those comments, that helped me justify my proposal to you where I looked at the appendix and why the authority having jurisdiction that would accept that equivalent method may not accept the foundation report the way the committee does.

So, but generally, I didn't provide it, but the best comments I saw from members in their negative

ballots was that the equivalent method was out there and this could be used, just to support their argument. And I believe Michael Friedman submitted a letter to Council as well and kind of followed the same format that the equivalent method was available to people out there. I just think that this is just the wrong standard to have to apply that report.

MR. DEMERS: Thank you.

THE CHAIRPERSON: Mr. Huggins.

MR. HUGGINS: Roland Huggins, Council member. Speaking of Mark Ready, he commented on his paperwork that he felt this would create a conflict between D, R and 13. Would you have any opinion on that?

MR. GOLINVEAUX: Absolutely. It does not create a conflict between 13D, 13R or 13. 13R and 13 require a four-head sprinkler calc. 13D requires a two-head calc, a two sprinkler calc, and this report is on the issue of the two sprinklers and the listing that slope ceilings doesn't require additional flows for the two sprinkler demand. So that's why I focused on 13D. That's where the greatest impact is.

MR. HUGGINS: A follow-up.

THE CHAIRPERSON: Mr. Huggins.

MR. HUGGINS: Roland Huggins, Council member. And speaking of potential conflicts, although we can infer from the numbers supporting it on the technical merit, do you perceive any potential for a conflict to, it not be approved in 2013, if it was put in 2010; I mean is there any push-back from any sector that might create a difference?

MR. GOLINVEAUX: I'm not aware of any, and my staff leader is here. I have not heard of any push-back for the 2013 edition. It's foundation work. It's good work. That was a biased comment.

THE CHAIRPERSON: Ms. Brodoff.

MS. BRODOFF: Maureen Brodoff. I don't have in front of me or it's not yet in the record, but you submitted a proposal to the next edition 13D?

MR. GOLINVEAUX: Yes, that's in the ROP process currently.

MS. BRODOFF: So has there been an ROP meeting yet?

MR. GOLINVEAUX: Yes.

MS. BRODOFF: And what was the result?

MR. GOLINVEAUX: It's moved to ROC, so the language that was proposed has been balloted and approved

and is moved to ROC.

MS. BRODOFF: Is it the exact same language?

MR. GOLINVEAUX: Yes, it is. That's the R version. The first version I submitted I made an error and we revised it to be what was submitted in the 2013 ROP.

THE CHAIRPERSON: Ms. Cronin.

MS. CRONIN: Amy Cronin. I think I heard somebody at the end of the table ask do you anticipate a change at the ROC at all?

MR. GOLINVEAUX: I do not and I haven't seen any opposition to the proposal, and I was looking for Matt to clarify because I have not seen the ROC comments yet, but I don't foresee any changes, especially to the intent of using the flat ceiling design listings for slope ceiling applications.

THE CHAIRPERSON: Jim Pauley, chair of the Council. Just to put it on the record, do you know what the vote was at the ROP meeting, was it unanimous as well as the Technical Committee?

MR. GOLINVEAUX: I don't know. I apologize.

THE CHAIRPERSON: No, that's fine, that's fine. Any other questions from members of the Council? With that, Mr. Golinveaux, any closing comments?

MR. GOLINVEAUX: No. I enjoy the process and I support the foundation; I support the work. And in this one I just believe it's the right thing to do.

THE CHAIRPERSON: Great, thank you. Thank you for your time in being here today and presenting the information to Council and also thank you for your participation in the process. We do appreciate it.

The decision of the Council will be issued by written decision by Ms. Cronin, the secretary of the Council. No member of staff nor member of the Standards Council is permitted to convey any of that information outside of that written decision that will be issued.

So with that, I'll bring this hearing to a close. And we have two hearings left both with the same appellant and so I'm just going to go off the record for a couple of minutes while we switch appellants. I'm not going to take a full break at this point, but we can go off the record and then I'll come back on.

(Off the record.)

THE CHAIRPERSON: We will go back on the record, and I'm just going to ask that anybody that was not in the room for the previous hearing if you would just

introduce yourself, your name and your affiliation for the record please.

MR. FRANCIS: Sam Francis, American Wood Council.

MR. MATTOS: Art Mattos, XL GAPS, chair of the 664 Committee.

MR. URAL: I'm Erden Ural, LPFTI.

THE CHAIRPERSON: Anybody else? Okay. This particular hearing is agenda items 11-8-10A and 11-8-10B. This deals with NFPA 664 in two different certified mini motions, certified mini motions 664-2 and 664-3. We combined these into one hearing because both of these deal with a terminology issue, albeit separate terminology in the two CAMS but terminology overall.

I'm going to operate the hearing that, Mr. Ural, you're the appellant, so I'm going to give you 10 minutes to essentially cover both of those items for the Council. We certainly have all of the written documentation that Council has looked at and reviewed that. So anything that you want to add to that record, or if there is anything you want to highlight to the Council in that 10 minutes will be available to you.

Gentlemen, since you're speaking on

behalf of the committee and in opposition to the appeal, I'm going to give you 10 minutes between the two of you for any opening remarks that you want to make in response to that. I'll then open it up for questions from members of the Standards Council. When we're finished with that, I'll give each of you five minutes to essentially close that back out and that's how we'll close the hearing.

So, Mr. Ural, you have the floor first.

MR. URAL: Good afternoon. First of all, as a background, I have studied combustion in undergraduate school, I got a Ph.D., in aerospace engineering. My first job was at Factory Mutual. I worked there for 16 years as a research scientist on dust and gas explosion, and after that I ran the explosion test site at Kidde Fenwal in Holliston, Massachusetts, and I did a lot of dust testing, so that's my involvement with dust, and right now I'm an independent consultant. I still work with dust and gas explosions.

I serve -- you guys have appointed me to essentially all the dust committees, and I serve on the, I am an active member on all the dust committees, and I try to identify the differences and unify it.

There is alarming difference in this NFPA

664 and the combustible dust definition, and I felt it's really important for NFPA because it also incurs tort liability for NFPA in my view and in the view of the attorneys that I have spoken with. So that's why among all my appeals the CAM 664-2 is the most serious and potentially most dire consequences for NFPA.

So I am a member of the 664 Committee and I brought it to the attention of the NFPA 664 Committee, and at the ROP the committee understood the issues and have accepted a definition similar to other NFPA standards, and that you see in the page 1866 of your folder. There's a table that shows the ROP text versus ROC text. So what I'm trying to do here is to return the document to the version that's in the ROP text.

During the ROC some changes were made to it and the committee has included both the old definition and the new definition and then they came up with some contradictory definitions. Why is this definition important? It is very important because it tells the people if your dust does not fit this definition that means the standard doesn't apply. That means you don't have a dust explosion hazard, but in reality it does.

And one standard says if you use NFPA 664

it would call, you would do a test and then decide whether the dust is explosible or not. If you use 664, you would look at the particle size, and what is the most dangerous part of that is it doesn't say if your particles are larger than this your dust is explosive. It says if 50 percent of your mass is larger than this magic particle size your dust is not explosible. It's silent on the remaining 50 percent that's smaller.

And Factory Mutual has run some tests and determined that this is not true on a general basis, and more recently we have, we are preparing our paper for publication in the AIChE Loss Prevention Symposium and we have run some tests, and I shared a one-page report, I shared that with the committee as well as with you. This is a one-page summary of the test results that shows that, if you look at the table in here, if your particles are smaller than 75 microns, you get 8-bar pressurized. 1 bar is 14.5 psi, so 8 bar is about 100, 120 psi pressurized.

If you have half of it smaller than 500 microns, half of it larger than 500 microns, the standard says it's not explosible, but the test results show you that it's 7.5 bar, so it's like 110 psi, so that's obviously wrong. Then if it's larger than 500 microns and

smaller than 853 microns still 5 bars, it's still 5 bars so that's 75 psi.

So is there -- I presented a paper at the 2009 Dust Symposium that part of it dealt with this issue. Is there a right particle size for a threshold, and the answer is yes, but that depends on the dust, what type of dust it is, and more importantly, what is the morphology of the particle; in other words, what's the shape of the particle.

So here in that paper, you have it in NFPA records, May 2009 Dust Explosion Symposium for certain aluminum particles, spherical aluminum particles, it came out about 100 microns. That's the magic particle size. If it's more than 100, then it's not explosible.

For coal dust, that's nearly spherical, may be cubicle. It came out 250 microns for a particular coal dust, and for the wood dust, we have shown for that particular type of wood, tree bark, it came out more than 800 microns. So it's also in the answers to my appeal.

There were some comments made saying that, you know, we try to get everything tested. That's not what we are trying to do. We are saying for your operation, if you're producing certain dust, just test one

dust, characterize the particle size and decide what is the appropriate particle size for your application and for your dust, for your particle morphology. You don't have to do it for all the dust. You just pick one size and then test it. The test is $250. So that way you would do it right and you wouldn't stick NFPA's neck out for liability.

And the last part I wanted to mention is, you know, we argue here about what's the right particle size. What OSHA does -- and I confirmed this with the OSHA test, the manager of the OSHA test lab in Salt Lake City -- what they do is they take the sample from the operation, dust collector or whatever the operation they have, and they test it as received in the 20-liter chamber, and they look at the pressurized and decide whether the dust is explosible or not. They do not look at what particle size is the magic particle size. Thank you.

THE CHAIRPERSON: Thank you very much. Mr. Mattos, do you want to speak on behalf of the committee? And as I said, if you and Mr. Francis can kind of split that time in your comments, that would be great.

MR. MATTOS: Okay. I've already submitted most of this in writing, so I'm just going to kind of summarize. The committee has historically used a

420-micron threshold for this, and at the ROP it was taken out, and there was no size criteria at all. At the ROC the committee recognized that doing that basically required that everything had to be tested.

Seeing the errors in their ways, they decided to put the size criteria back in. At that time there was some discussion and it was decided to use 500 instead of 420 based on some FM test that had been done. Erden brings up some good points and it's new material. We did not have this during the discussions that we had. Had we had it, maybe it would have gone a different direction. Maybe the number would have been 1,000 microns instead of 500 microns, but we didn't have that so they went with 500.

That's the gist of it really. Going back to the ROP wording will require the users to have everything tested. That's the only way to define it is by having it tested. We wanted to make the document user friendly as it had been in the past, so we included the size criteria then; we took it out and saw that was not the way to go and put it back in. So it's really nothing new here other than we increased the size from 420 to 500.

THE CHAIRPERSON: Thank you. Mr. Francis, again, if you would just preface your remarks with your

name and affiliation.

MR. FRANCIS: Sam Francis, American Wood Council, member of 664 Committee. The member companies of American Wood Council are more than a little concerned about this because one of the unintended consequences, of course, is retest or testing everything, and wood is a highly variable product. Unlike spherical pieces of aluminum, wood dust is oddly shaped and so on, and so any change in the production line is going to result in necessity to test again. I personally don't know anybody who will do these tests for $250, but then that's not part of my job, and it's going to be, the unintended consequence is a significant increase in cost to the industry.

Having said that, during the ROP stage the question was posed what is the problem that we're trying to solve other than to make the definition in this dust standard look like the definition in other dust standards. And while there are reasons to do that, there are equally, I feel, valid reasons to not do that because of the differences and variability in the materials that we're regulating here. So no, no problem has been defined that we're trying to address.

At the time we had the hearing, the

studies that are alluded to weren't available, and had they been, I'm not sure that, I don't share the chair's optimism that some other value would have come forth. By the way, the value 420 that exists in the 664 standard today was based on some work done at FM, some research that they did, so it wasn't simply created from nothing.

And the risk assessment and management of risk is what this is all about. In at least one of the submittals to this Council for this appeal, another engineer in this field has said he has not seen, and this was testimony I might add at the annual meeting, that no, no incident has occurred in a facility that complied with the then existing standard. Moreover, in a newspaper interview following the Domino Sugar, which is not wood dust, but in the Domino Sugar incident, the then head of OSHA said had they merely complied with the existing standard this wouldn't be an event.

So the member companies say we don't see the problem that's being addressed. The proposed solution to whatever problem is being addressed is expensive, and the industry is concerned that the cost doesn't bring an attendant benefit with it that's justifying the cost. So that the committee's decision to stay with a number, a

finite particle size for which the definition addresses is a position that we would like to support.

THE CHAIRPERSON: Thank you. I'm going to open it up to questions from members of the Council. Mr. Clary.

MR. CLARY: Shane Clary, member of the Council, to Mr. Mattos. What criteria did you use to go from the 420 micron to the 500-micron particle size; what was the basis of that determination during your ROC.

MR. MATTOS: My recollection is that it was some testing that Factory Mutual had done that was discussed during the meeting, but I can't --

MR. URAL: Would you let me answer that?

MR. MATTOS: Sure, go ahead.

MR. URAL: I think Factory Mutual, it was more like what the other committees were saying. The standard says even in the ROP text it says dust is explosible regardless of particle size and shape, but in the annex and all the standards says, well, usually for most dust it's 500 microns. So I think it was more to go with that, am I correct?

MR. MATTOS: Yea, I would go with that, yes.

THE CHAIRPERSON: Okay, thank you. Jim

Pauley, chair of the Council. Mr. Ural, were you in attendance at the ROC meeting?

MR. URAL: I was by phone.

THE CHAIRPERSON: By phone. And were the points that you made to the Council today regarding the issues that you've raised, did you raise those with the Technical Committee as well?

MR. URAL: The phone connection was not as good as it could be, but I essentially raised it, actually, I was the one who submitted the proposal to get that discussion going, I was the one who submitted the comment to get the discussion going, and in fact, the committee acted on my comment, not only they rejected my comment, but they went back.

The only thing that's new here is this one sheet of paper that shows beyond any reasonable doubt that ROP, ROC's definition is deadly. That's the only new thing. That paper was in existence but maybe we didn't discuss that in the meeting, but I know Mr. Mattos asked the FM --

THE CHAIRPERSON: Would you just for the record instead of just saying that paper, could you just describe that paper on the record.

MR. URAL: This is a Project Progress Summary, Effect of Particle Size on Wood Dust Explosibility, and it says draft initial results from an ongoing research project disclosed to NFPA management and NFPA 664 Committee members for the purpose of evaluating the 2011 NITMAN on NFPA 664. And this was sent to the Standards Council Secretary's Office on Thursday, and I believe it was sent out to you guys, I mean to the Standards Council on Friday.

THE CHAIRPERSON: Jim Pauley, chair of the Council again. I just want to sort of follow through on this line. So you submitted proposals to the committee which were acted on and you submitted comments to the committee which were acted on, you've taken it to the floor, and I'm presuming when it came to the floor some of this additional information you're talking about was rebuilding that record on the floor of which the membership didn't overturn. So I'm trying to understand from the council's perspective and from a process perspective, you know, what's the compelling evidence that the Council should overturn the entire standards-making process in this case in the actions of the technical experts?

MR. URAL: Well, the association meeting, it

wasn't the experts of dust present in the association meeting. There were only a few people, and you know like I do that the lobbying part rules in the association meeting. And the committee meeting, you know, you have that the composition of the committee. You know, there are some old-timers that like to propagate the old ways; there are some new people that come up with new ways of handling it.

And lastly, you know, we discussed the same thing last year. Whether the, how much NFPA should rely on on data or science when making these decisions. So I mean I come to you to identify a problem for you to act on. You know, whether you act on it or not, I don't have any control on it, but my best judgment and the best information I have shows you that it's a dangerous condition, and I mean you may decide to wait for the body counts. That's what, you know, the argument against it seems to be.

The other argument against it seems to be the cost, which is really not an issue. I mean there are laboratories that do this test at $250, and we don't say that you have to test every single sample from every single process. If you like the size criteria, just pick one size and then test it and see if that's an appropriate criteria

for you, so you're talking about spending $250. Doing also the SIM analysis, you know, SIM analysis also costs money. It costs time and money. If you send it to a laboratory, they charge you more than $250.

THE CHAIRPERSON: Ms. Brodoff.

MS. BRODOFF: Maureen Brodoff. Mr. Ural, the document you were referring to is a one-page Project Progress Summary Sheet --

MR. URAL: Yes.

MS. BRODOFF: -- that's how it's identified. When would a full report be available for experts to review and evaluate, or will it be made available?

MR. URAL: The people who wrote this document are known as the experts in this field, and this was just a preliminary test because we also want to do some large scale tests as well, so this is an ongoing project. We are waiting for the sample to come in, but it will be published, we are aiming to publish the full paper at the Loss Prevention Symposium which will be early next year.

MS. BRODOFF: So the full results you're not going to go make available until next year?

MR. URAL: You can have the full results --

MS. BRODOFF: I just want the answer to the

question.

MR. URAL: I'm trying to answer; I'm trying to answer. This was based on one particular wood dust sample that shows that the material is incorrect. So you can have the full results from this test series to, you can have the full results from this test series immediately. I mean the machine that does the test spits out reports. It's not in the form of an ISO report, but it's a report that would be read and understood with all the experts. Am I answering your question?

MS. BRODOFF: Well, I guess I --

MR. URAL: If I may say one more sentence. You know, buying a bark from the pet store and then grinding it is not an easy process, and when you do the large scale test, you need pounds and pounds of that sample, so that's why we couldn't do that in a cost effective way. So we have ordered some samples with the large particle size. We are going to run the tests with that sample as well.

THE CHAIRPERSON: Ms. Brodoff.

MS. BRODOFF: Thank you. I guess what I'm asking is that this describes some results without giving any details as to how the testing was done or various other

things that I would expect --

MR. URAL: Oh --

MS. BRODOFF: If I may.

MR. URAL: Go ahead please.

MS. BRODOFF: I would expect you would expect to see in a full report of results, and what I am wondering is since the Technical Committee would be in a far better position to evaluate this material than the Standards Council which is not in a position to evaluate it even based on this one sheet, whether you would be willing to make that information available if in fact you feel it demonstrates the danger that you are alleging.

I don't think the Technical Committee has to accept your conclusions without seeing the full information about the testing, and this was information that was not available to them at that time. So I'm wondering whether you might consider bringing this information back to the committee as an interim amendment, for example, if the Council doesn't agree with you in terms of what its power is.

MR. URAL: Yea, I will certainly do that, but let me, because most people in the Standards Council is not familiar with this particular test method. There is an

ASTM test method, a procedure, ASTM E1226. That specifies the equipment, that specifies how you ignite it, and that specifies how you create the dust cloud and what you look at to decide whether the material is explosible or not. So that one you can have right away. I can give it to you today, or the committee --

MS. BRODOFF: I don't think -- sorry to interrupt but I just wanted to emphasize. My question was directed to how we could get this information to the Technical Committee.

MR. URAL: Beyond this there isn't much information in the full textual report, but then we can provide the information from the, from the, you know, what the equipment produces and -- what was I going to say...

THE CHAIRPERSON: Ms. Brodoff, did that answer your question?

MS. BRODOFF: Yes.

THE CHAIRPERSON: Mr. Huggins.

MR. HUGGINS: No, it was taken care of. Thank you.

THE CHAIRPERSON: Okay. Other questions from members of the Council? I'm going to give Mr. Ural a quick 5 minutes, if you will, for any closing remarks that you

have that you haven't covered on anything. Gentlemen, I'll do the same, Mr. Mattos and Mr. Francis, the same for any closing remarks you may have. So Mr. Ural, you have the floor.

MR. URAL: Thank you for listening to me. I know it's late in the afternoon. Although this is new, the committee has access to the Factory Mutual report. In fact, Mr. Mattos asked if the committee has a representative from Factory Mutual, and Mr. Mattos asked that Factory Mutual representative to go look at the FM database, and I don't know if that was ever brought back to the committee, but the fact remains FM Global did publish a paper before I did, and they got a K of 80 bar meters per second for wood dust with a mass medium particle size greater than 500 microns.

So that's a full paper documented. It's in the, it was an NFPA, presented in the NFPA meeting, so I don't know, I don't think you should wait to act on it to, you know, the final results of this study. This is a different study.

But if you do it, I mean I'll cooperate as best as I can to make things happen because I know this is in a very dangerous situation. I know it puts NFPA into

unnecessary liability. I know it shifts the burden of liability because companies, they look at the explosibility issue. They do a process hazard analysis and then they assume the risk at their own peril. What certain companies are trying to do is they don't want to assume the risk, instead they want the NFPA to assume the risk, and I object to that. Thank you.

THE CHAIRPERSON: Thank you. Mr. Mattos.

MR. MATTOS: The discussion seems to have evolved into this particle size issue and that's not what's before you today. The question is do we have any size criteria at all, and the appeal is seeking to remove that requirement completely so there will be no size criteria mentioned at all. The committee feels that there should be a size criteria and would certainly entertain any additional evidence to address that. The best information we had available to us at the time, we went with the 500. There is also a moisture content factor to that definition that would also need to be discussed, but I just don't want to get hung up on the size criteria because that's not what you're being asked to evaluate today. Were we addressing both of the appeals at the same time?

THE CHAIRPERSON: Yes, for both and, or

comment 664-5 and dash 6.

MR. MATTOS: There's no been no discussion at all on the second one.

THE CHAIRPERSON: I believe Mr. Ural really said he focused on 664-5 is the most critical element of that. From our perspective, they both dealt with the terminology issue in relation to that, so that's why we tied them together.

MR. MATTOS: Okay, I'm done.

THE CHAIRPERSON: And we also have written materials on both of those --

MR. URAL: I mean both of them are important, but I figure this is the most serious one. And will I be able to comment after?

THE CHAIRPERSON: No, we're at closing comments at this point. You've had your closing comments. I'm going to ask Mr. Francis with the last couple of minutes that are left out of those closing comments if there's anything he would like to say.

MR. FRANCIS: Well, at risk of minimizing what Art just said about losing focus and looking at particle size, let me just say that 420 came from research done by FM. We didn't just pull that out of the air, no

pun intended. So when the committee put that in a long time ago, there were reasons for it. There's, the question is the definition of explosible. You've heard all the rest of it, but this is a question of risk analysis and cost benefit by redefining the whole process based on something other than a simple particulate measure.

MR. URAL: May I make one more comment?

THE CHAIRPERSON: No. I've been very, very clear about how we're going to operate the hearing.

MR. URAL: You have.

THE CHAIRPERSON: And that's exactly how we followed the process. So with that I'm going to bring this hearing to a close, and that will close the elements on NFPA 664. I want to thank you gentlemen for your participation in today's hearings.

The information you provided to the Standards Council is very valuable in helping us evaluate and make our decisions, and this particular item will be decided by the Standards Council and the decision will be issued by a written decision by Ms. Cronin, the secretary of the Standards Council. No member of the Council nor member of NFPA staff is permitted to convey any of that information on the decision. That written communication

will stand as the communication from the Council on this issue. So that will close this particular hearing.

I want to go ahead and move directly into Agenda Item 11-8-12A which is on NFPA 704. It has to do with certifying amending motion 704-2. Mr. Ural, you are the appellant on this particular item as well. Is there anyone else speaking in favor of this appeal? Is there anyone speaking in opposition to this appeal?

MR. URAL: I want to speak in favor of the appeal.

THE CHAIRPERSON: Right.

MR. URAL: Do you mean anybody else?

THE CHAIRPERSON: Correct, I was asking if there's anybody besides yourself. So what we'll do since no one is speaking in opposition, Mr. Ural, I'm going to give you ten minutes to describe again the issue to the Council and highlight anything. Again, we have the written material that has been submitted. I'll then take any questions from members of the Standards Council. After that any brief closing remarks you may have and then we'll bring that hearing to a close, so please begin.

MR. URAL: Good afternoon again. Right now we are talking about, if anybody doesn't know, the

placards. The same information is also provided in the material safety data sheets and also labels on shipping the product. So NFPA 704 provides a simple regularly recognized and easily understood system of marking that provides the general idea of the hazards of a material and the severity of these hazards as they relate to emergency response.

This is the part. I'm reading from the standard. "The objectives of the system are as follows: One, provide an opportunity, appropriate signal or alert to the on-the-spot information to safeguard the lives of both public and private emergency response personnel; two, to assist in planning for effective fire and emergency control operations including cleanup; and three, to assist all designated personnel, engineers and plant and safety personnel in evaluating the hazards.

This system provides basic information to firefighting, emergency and other personnel enabling them to easily decide whether to evacuate the area or to commence emergency control procedures. This system also provides those personnel with information to assist in selecting firefighting tactics and emergency procedures.

So when you look at this, they put the

hazard into different categories. Zero is minimal hazard, one is slight hazard, two is moderate hazard, three is serious hazard, and four is severe hazard.

I came to the NFPA library and did some research on how the document has evolved. In the eighties and earlier they rated the combustible dust four, then in the nineties they rated it to three, and in the 2000s they rated it to two. So as the hazard awareness is increasing and we are experiencing all these problems, NFPA is reducing the hazard rating of the materials.

And the table that I am challenging, I have been challenging -- by the way, I am not a member of this committee, but I have identified the problem. I put in, I'm on the waiting list to be a member of that committee, and I put in a proposal, the committee was not very responsive, then I put a comment, the committee was not responsive. But part of the system that works is we had, after I filed a NITMAN, the committee was more willing to hear me out and we had a meeting, and some of the members they agree with me, not all the members they agree with me, and hopefully, they will be, if this body doesn't agree with my appeal, they will try to change the cycle from 5 years to 3 years. So some of the members agree with

the problem.

In the table in question for the flammability, we have clear criteria. It says Category 4, severe hazard is for flammable gases, volatile liquids or pyrophoric materials, Category 3 is material that would ignite at ambient temperature, and 2 is ignite when moderately heated. So I think most of the people here they know this for the flammable liquids, but the dust is the same thing, whether you can ignite it. Like the wood dust you can ignite it with a match as a layer, but the other dust like a phenolic resin you couldn't ignite it with a match at room temperature as a layer, but if you disperse it into a cloud, a dust cloud, you could ignite it at room temperature. So that's why I think it should be a three, ignites at ambient temperature.

And so that's pretty much the gist of it. There was a little bit, I want a little bit to talk about the committee. This is a really small committee, I believe it's less than ten people, and then the committee has three subspecialties. One is the people who are familiar with the flammability aspects, other flammability with the health aspects, and the third one is the people familiar with the reactivity aspects. So when you have such a small

committee, that makes it vulnerable to lobbying by our special interests.

And finally, you can look at the -- I just looked at the Internet last night. You can get these material safety data sheets; you can see NFPA diamond. This is one for, this is for phenolic resin. About seven people were killed in the explosion in Kentucky, seven people were killed, and I don't know, 40 people were injured. I have investigated that loss, and you can see they're rating it a hazard rating of one, slight hazard.

Most of you guys know this sugar dust explosion in Georgia. Again, in the Material Safety Data Sheet, you'll see the NFPA diamond. So that's why it is important to get it correctly and do it right and make it consistent. So with that, I'll stop and get your questions. Now I'm learning the process.

THE CHAIRPERSON: I'll open it up to questions from members of the Council. Mr. Harrington.

MR. HARRINGTON: J. C. Harrington, member of Council. I was looking at the information that we were submitted and with your ROC comment that was submitted, I know you made a comment that this is a very small committee. I guess it indicates there are 13 voting

members on the committee.

MR. URAL: I think --

MR. HARRINGTON: Well, if I could continue.

MR. URAL: I'm sorry.

MR. HARRINGTON: Thank you. 13 voting members on the committee. Apparently there were a few nonreturned ballots but at ROC this was voted down ten to zero, so that 10 people voted it ten to zero. I know you've made a comment that you subsequently had discussions, informal discussions, with the committee members since it went to vote, but of those informal discussions you had, you said there was some sentiment supporting what you had. Of the 13 members or so on the committee, is it your sense that there was a majority committee support in favor of your sentiment, or was it still somewhat in the vast minority like this vote was?

MR. URAL: Denise can tell, give you a better indication. One of the members had recognized the issues that I was putting in and then he called for a committee teleconference, and I participated in that, and I forgot how many people participated. It wasn't that many people. And in that group, maybe because they see value in what I said, most people agreed with me except one. He said, you

know, he wouldn't agree with me. So, but at least at that time I was listened to and I really appreciated that and it inspired some hope in me.

THE CHAIRPERSON: Jim Pauley, chair of the Council. I just to that very point I want to clarify. Is the teleconference you talked about after the ROP and ROC were completed?

MR. URAL: And after, I believe it was even after the association meeting.

THE CHAIRPERSON: Okay, thank you. Mr. Harrington, was that all?

MR. HARRINGTON: Yes, I'm all set, thank you.

THE CHAIRPERSON: Mr. Milke.

MR. MILKE: Jim Milke, a member of Council. A question on the small modest size of this committee that you talk about. I don't know the make-up of that committee I have to say, but there are dust committees here who certainly appreciate dust explosion hazards and the like. Does that expertise sit on this committee in some fashion; is there some crossover to that?

MR. URAL: Because I'm not a member of that committee I really don't know, but I remember Mrs. Denise Beach telling me it was less than ten people on the

committee right now. And there is certainly a dust explosion expert, Larry Briton is on that committee, so I value his opinion, and in fact, he is the one who called the committee conference for me. Was I able to answer your question?

MR. MILKE: Yes, thank you.

THE CHAIRPERSON: Other questions? Okay, seeing none, Mr. Ural, any closing comments?

MR. URAL: Well, I appreciate this opportunity, and hopefully, I won't have to see you next year.

THE CHAIRPERSON: Great, thank you. With that, we will bring this hearing to a close. And, again, I just want to remind everyone and, Mr. Ural, thank you for being here for both those hearings. We appreciate your participation in the process.

MR. URAL: My pleasure.

THE CHAIRPERSON: This item will be issued by a written decision of the Council. That will come from Ms. Cronin, the secretary of the Standards Council, and, again, I want to reiterate no member of the staff nor member of the Standards Council is permitted to convey any of that information from the Council decision. That written

decision will speak for the Council.

With that, I'm going to bring this hearing and our, unless I have another page of paper I'm missing, our entire day of hearings to a close, so we can go off the record please.

(Whereupon the proceedings adjourned at 3:41 p.m.)

CERTIFICATE

I hereby certify that the foregoing 113 pages contain a full, true and accurate transcript of all my stenographic notes to the best of my ability taken in the above-captioned matter held at the offices of NFPA on August 9, 2011, commencing at 12:57 p.m.

_____

KATHLEEN M. BENOIT

Notary Public

My commission expires

May 25, 2012