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NATIONAL FIRE PROTECTION ASSOCIATION

Preliminary Hearings/Appeals

Standards Council Meeting - December 6, 2017

Tremont House

2300 Ship's Mechanic Row

Galveston, TX 77550

PREPARED BY:

Lani LeBouef, CSR

Galveston Island Reporting

2724 61st Street, Suite B

Galveston, TX 77551

1 MR. KERRY M. BELL: Good morning, everyone.
2 We're going to call this hearing to order. My name is
3 Kerry Bell and I'm the chair of this council. In a
4 moment here we're going to go around the room and have
5 everyone introduce themselves by stating their name and
6 affiliation. Before I do that, I want to point out that
7 we have an stenotypist here with us in the room, who
8 will be recording today's session; and for those of you
9 who will be speaking, I'm going to ask that you state
10 your name and affiliation before you make your remarks.
11 If you are also speaking, I'd ask that you give your
12 business card to the stenotypist or Linda Fuller here,
13 so that she can make sure she gets the spelling of your
14 name correct, which is always nice.

15 So the first hearing that we have this morning
16 is related to agenda item 17-12-25-d, which is an appeal
17 not to issue TIA 1340 or NFPA 1982, and as I understand,
18 the deal here will be for us to not issue this TIA. And
19 with that, I'd like to just go around and have everybody
20 introduce themselves and we'll start here to my right
21 with Dawn.

22 MS. DAWN BELLIS: Dawn Michelle Bellis, NFPA
23 staff.

24 MS. LINDA J. FULLER: Linda Fuller, NFPA
25 staff.

1 MR. GARY S. KEITH: Gary Keith, member of
2 council.

3 MR. KENNETH E. BUSH: Kenneth Bush, member of
4 council.

5 MR. MICHAEL J. JOHNSTON: Michael Johnston,
6 member of council.

7 MR. CHAD BEEBE: Chad Beebe member of council.

8 MR. DANIEL J. O'CONNOR: Dan O'Connor, member
9 of council.

10 MR. BILL PARSON: Bill Parson, chief engineer
11 for fire solutions at Scott Safety 3M.

12 MR. BRAD HARVEY: Brad Harvey with strategic
13 intelligence, Scott Safety 3M.

14 MR. JOHN MORRIS: John Morris, certification
15 engineer with Scott Safety, a part of 3M.

16 MS. PATRICIA A. GLEASON: Patricia Gleason,
17 member of council. For the record, I am recusing myself
18 on this agenda item and I will not participate as a
19 member of the standards council in the hearing
20 deliberations we're voting on this matter.

21 MR. JAMES R. QUITER: Jim Quiter, member of
22 council.

23 MR. JAMES E. GOLINVEAUX: James Golinveaux,
24 member of council.

25 MS. BONNIE E. MANLEY: Bonnie Manley, member

1 of council.

2 MR. JOHN A. RICKARD: John Rickard, member of
3 council.

4 MS. SUZANNE GALLAGHER: Suzanne Gallagher,
5 NFPA staff.

6 MS. SALLY EVERETT: Sally Everett, NFPA staff.

7 MR. CHRISTIAN DUBAY: Christian Dubay, NFPA
8 staff.

9 MR. KERRY M. BELL: Then, the back row here to
10 the right.

11 MR. JOEL GOERGEN: Joel Goergen, Cisco
12 Systems, also code making panel 3 and code making panel
13 12 member.

14 MR. GEORGE ZIMMERMAN: George Zimmerman, CME
15 Consulting.

16 MS. AMY B. CRONIN: Amy Cronin, Strategic Code
17 Solutions.

18 MR. LOUIS J. GUERRAZZI, E.I.T.: Louis
19 Guerrazzi, National Fire Sprinkler Association.

20 MR. KERRY M. BELL: Thank you for those
21 introductions. So on this appeal, I would like to ask
22 who's going to be speaking in support of the appeal?

23 MR. JOHN MORRIS: John Morris, Scott Safety,
24 part of 3M.

25 MR. KERRY M. BELL: Anybody else speaking in

1 support of the appeal?

2 MR. BILL PARSON: Bill Parson, chief engineer
3 with Scott Safety.

4 MR. BRAD HARVEY: And Brad Harvey, strategic
5 intelligence, Scott Safety 3M.

6 MR. KERRY M. BELL: So all three of you will
7 be speaking in support of the appeal. Anybody speaking
8 against the appeal? Seeing none. Okay.

9 The process that we're going to use here is to
10 start out with allowing you to -- a total of ten minutes
11 to make any opening remarks that you may have and you'll
12 have a total of ten minutes, you can set it up any way
13 you want to. Then, we're going to open it up for
14 questions from the council members, and then we'll close
15 out the hearing by allowing a total of five minutes for
16 any closing remarks that you have. Any questions at
17 this point? Pretty straightforward.

18 MR. BRAD HARVEY: Yeah.

19 MR. KERRY M. BELL: With that, I just want to
20 remind everybody before you speak, state your name and
21 affiliation and I'll turn it over to you.

22 MR. JOHN MORRIS: I'm John Morris with Scott
23 Safety, part of 3M. We're appealing the issuance of the
24 TIA -- and you'll have to bear with me, I'm new to this.
25 I don't think we've ever appealed anything to standards

1 council before. Basically, our biggest issue is that
2 TIA never identified any hazards that was being created
3 by accessories to the fire service. There was -- in the
4 TIA there's no examples, no firemen came forward saying,
5 hey, this is causing issue, providing harm.

6 Quite to the contrary, it -- the prevention of
7 some of these accessories, these accessories are
8 providing safety to the firemen and it's killing
9 innovation. For example, we manufacture a handheld
10 thermal imager. Under the language of the TIA, we've
11 been look at integrating a motion detector and an alarm
12 or flashing light system to where if a fireman sets it
13 down and they can't find it, the lights and the alarm
14 will go off to where they can locate it. Under the
15 language of the TIA, this would be prohibited because
16 the same device would have to undergo NFPA 1982 testing
17 as a pass device, which it could not be certified as
18 because of the configuration.

19 There's numerous other products and as
20 technology grows, there's more and more things
21 integrated into SCBA; communication devices. For
22 example, if we were to come out with a SCBA that had
23 two-way portable voice communications, that would not be
24 allowed when 1802 comes out specifying the standard for
25 handheld portable radios. Sorry, I feel like I'm

1 babbling now. If one of my coworkers would like to
2 elaborate any additional comments.

3 MR. BRAD HARVEY: Sure. So the crux of the
4 TIA is that there's an issue that needs to be addressed;
5 and the method being suggested is, basically, start
6 tieing standards together, and we think that creates an
7 issue. Well, so for one, we don't actually think
8 there's a problem. Maybe it's a pat on the back to the
9 folks in this room but we actually think the NFPA has
10 thought this conflict through and planned for it by
11 creating performance standards and selection standards.

12 So you're setting a performance standard, a
13 product has to be able to do certain things but there's
14 a selection standard. When the chief goes to outfit
15 with, you know, an SCBA or for PPE, that selection
16 standard says you need to consider these various
17 performance aspects; that delineation is really critical
18 to what we're talking about here because it allows the
19 fire service to set a minimum expectation for the
20 product without necessarily making a judgment on the
21 interactions of those products.

22 Today, if a fire chief or an AHJ -- whatever
23 the case may be -- if the AHJ makes the decision to not
24 use a certified product out of one category, that
25 decision doesn't impact his decision on another product;

1 and when we start tieing these things together, that's
2 not necessarily the case anymore. So a decision -- if
3 he looks at two thermal imagers on the market, one
4 that's certified and one that's not and he chooses the
5 one that's not, he's aware that what he's choosing is a
6 noncompliant thermal imager; but when the standards
7 become tied together and dependent on each other, he may
8 not be aware of the impact of that decision to other
9 certified products, and we think that takes away what
10 the NFPA has worked so hard to create in the field. How
11 do you tell when a product is compliant? You know, the
12 label says this product is compliant. If I can void
13 that by doing something later, if I can -- if no claim
14 is made to a product, those labels are going to become
15 not as directive or descriptive as they are today.

16 So we understand the concern that's been
17 raised by the firefighters and the committees. We
18 actually think it's a worthy topic because we think this
19 is going to start to permeate other products, not
20 necessarily in the fire service but under the span of
21 control of the NFPA. So you look to alarm systems and
22 security systems, all these products are starting to
23 work together, they're starting to share characteristics
24 and behaviors, they're starting to create new
25 capabilities; and the dependency of one standard -- when

1 somebody wrote a standard about an enunciator, that
2 person may not be an expert in all of these other
3 systems but yet all these other systems are going to
4 start working together -- and so, you know, we have
5 some -- some concern over the implications of those
6 things.

7 We understand the fire service's desire to
8 have, as an example, a pass device that alerts when the
9 firefighter is not moving anymore but what we're
10 concerned about is if we manufactured a radio, as an
11 example, a portable radio, and it was 1802 compliant and
12 for, you know, a few pennies more or a few dollars more
13 we could put a man down detector in that radio; that
14 decision -- if these standards are tide together, that
15 decision would be a huge decision for us because if
16 somebody could argue that that man down alarm is
17 performing a pass function and it doesn't meet 1982,
18 then I would lose my 1802 certification and that's a
19 risk that it takes away -- I mean, why would we want to
20 have firefighters to have five or six potential man down
21 or motionless detectors on there.

22 So like I said, I think -- we think the topic
23 is worthy and it's complicated but coming in through a
24 TIA is the wrong way to do it, there's not enough time
25 and opportunity to debate and to vet. Forgive my

1 ignorance of the NFPA process but this does seem like
2 something that maybe should start very high in the
3 organization. How are we going to deal with this,
4 because it permeates products far beyond the fire
5 service -- I say the fire service, I'm talking about
6 fire suppression service or fire departments, not
7 necessarily sprinkler -- but those products, also, are
8 going to have these types of interactions. For anybody
9 that's been involved with the mass notification systems
10 that are going on, it's a great example of a minimum
11 performance expectation with some extension of
12 capability and features that are real to saving lives.

13 So, you know, that being said, those are kind
14 of our concerns. You know, we'd make the offer we would
15 love to carry the conversation at some opportunity that
16 where we're not all time bound and you guys have a lot
17 of other things on the agenda but that's the crux of our
18 concern is those types of interactions.

19 MR. JOHN MORRIS: John Morris, Scott Safety.
20 And also, the TIA implies that manufactures are just
21 slapping accessories on, when, in fact, there's quite a
22 bit of care and thought process that goes in when we
23 developed accessories; and according to the NFPA
24 standards, there are testing requirements in the
25 individual standards for accessories, and the labels

1 clearly identify if it's an approved accessory or not,
2 so I think it's kind of a misconception that the users
3 don't understand what they're purchasing.

4 MR. KERRY M. BELL: Thank you. We'll open it
5 up for questions from council members.

6 MR. DANIEL J. O'CONNOR: Dan O'Connor, member
7 of council. Gentlemen, so I -- you guys are -- you
8 manufacture accessories that would attach to a pass
9 device, am I right?

10 MR. JOHN MORRIS: Well --

11 MR. DANIEL J. O'CONNOR: Here's my question.
12 I'd like to understand what you guys are manufacturing,
13 what you're doing; and then, I see that the submitter of
14 the TIA, Mr. Weinstein from Honeywell Safety Products, I
15 assume that somehow they are involved in product
16 manufacturing here, too. I'd just like to understand
17 what you guys do and what maybe Mr. Weinstein does, he
18 was the submitter of this. If you guys could provide
19 some clarification, that would be appreciated.

20 MR. BILL PARSON: I'll take that. So Bill
21 Parson with Scott Safety. So we produce a
22 self-contained breathing apparatus, as well as the man
23 down alarms, pass devices that are subject to --

24 THE COURT REPORTER: I can't hear you.

25 MR. BILL PARSON: I'm sorry. So we produce

1 self-containing breathing apparatus, as well as pass
2 devices that would be integrated to those self-contained
3 breathing apparatus that are governed by 1982. The
4 submitter of the pass devices, one of the products that
5 they produce is also SCBAs and pass devices.

6 MR. DANIEL J. O'CONNOR: Okay. Thank you.

7 MR. KERRY M. BELL: Any other questions,
8 council? Mr. Quiter?

9 MR. JAMES R. QUITER: First thing I need to
10 know, are any of you on the committee?

11 MR. JOHN MORRIS: I am. John Morris, Scott
12 Safety. I sit on the electronic safety equipment
13 committee.

14 MR. JAMES R. QUITER: Okay. So then, that
15 leads to my question: How did this come to be a TIA and
16 why was it not addressed during cycle, if it was an
17 emergency that's been there for decades? Do you know
18 the committee's reason for that?

19 MR. JOHN MORRIS: That's a great question.
20 And no, I don't know the answer to that. This came up
21 at a correlating committee meeting and it was my
22 understanding and if you look at the notes from the
23 correlating committee meeting, it states that it was to
24 be brought back to the technical meeting and discussed
25 and determined how to move forward; however, it's my

1 understanding that Mr. Weinstein chose to rock the TIA
2 and submit it and --

3 MR. BRAD HARVEY: Can I add some context?

4 MR. JAMES R. QUITER: Yeah.

5 MR. BRAD HARVEY: Brad Harvey with Scott
6 Safety. So kind of the genesis of the concern started
7 in the Department of Homeland Security. Under the
8 assistance to firefighter's grant, equipment that is
9 requested under the grant has to be compliant to an NFPA
10 standard, if an NFPA standard exists. We launched a
11 product called Scott Sight, which is a hands free
12 in-mask thermal imaging system. That thermal imager
13 can't be tested to 1801; just the way the testing
14 procedures are established, that standard was written
15 around the concept of a handheld camera and so we simply
16 can't get 1801 test -- or I'm sorry, Scott Sight tested
17 to 1801; yet, we had fire departments that were
18 submitting grant requests for SCBAs, which, clearly, are
19 1981 and 82, and they wanted Scott Sight. And so this
20 created a question inside of the DHS and FEMA about what
21 do we do about this accessory product and the fact that
22 there is a thermal imaging standard. That question was
23 brought to the correlating committee at a normal
24 meeting. It didn't generate an answer within the course
25 of that debate and so they referred it down to the

1 technical committee to address and come back with a
2 recommended solution. How that request resulted in a
3 TIA, I don't know but that's kind of the chain of the
4 events that set off the question that we're dealing
5 with.

6 MR. JAMES R. QUITER: Thank you.

7 MR. KERRY M. BELL: Any additional questions,
8 council members?

9 MR. CHAD BEEBE: Chad Beebe, member of
10 council. I'm curious, Mr. Morris, if you have any idea
11 on why there's so, I guess, such substantial support for
12 this TIA at 25 to 50 I think is the voting record; do
13 you have any thoughts on why the committee was in such
14 support of this?

15 MR. JOHN MORRIS: I'm not sure. It appears to
16 be -- I'm not sure how to answer that.

17 MR. BILL PARSON: I'd like to add to that, if
18 I could. Bill Parson with Scott Safety. I think as
19 a -- within the committee there was some discussion
20 around -- around the specifics of this; and frankly,
21 what somewhat was alluded by my colleague earlier,
22 around the fact that this was initially generated around
23 integrated thermal imagers drove a lot of the discussion
24 within the ESC that governs both of the standards around
25 the thermal imager as well as the pass device. I think

1 the pass device standard 1982 is seen as -- and I think
2 this has been verbalized in the -- some of the committee
3 meetings and teleconferences that we've had -- that that
4 standard didn't have any teeth was, I think, the word
5 that was used; and 1982 and more directly 1981, that
6 governs the SCBA, was seen to have more teeth and that's
7 where the action was. I would point out that, I think,
8 at the correlating committee level and then as well as
9 this TIA was also introduced into the 1981 committee
10 where it didn't see -- it didn't see similar support, in
11 fact, it didn't meet the threshold to pass.

12 MR. CHAD BEEBE: Thank you.

13 MR. KERRY M. BELL: I had a question here.
14 Looking at the comments from some of the individuals
15 supporting the TIA, they entered here that some of the
16 manufacturers may be identifying a device or an element
17 of a passing unit as an accessory that would circumvent
18 requirements of the standard; what's your perspective on
19 that?

20 MR. BRAD HARVEY: So Brad Harvey with Scott
21 Safety. So nothing could be further from the truth than
22 that. In fact, what we're doing in our certifications
23 is following exactly what the NFPA laid out; and that
24 is, if I'm a firefighter wearing an SCBA, my concern is
25 the performance of that SCBA and nothing should

1 jeopardize that. So if you want to sell an accessory to
2 the SCBA, the SCBA has to be tested with that accessory
3 installed to make sure that that accessory does not
4 negatively impact the performance of the SCBA, which is
5 a completely rational thing to do and gives, I think,
6 the firefighters extraordinary confidence that that SCBA
7 is going to perform its function. So we're faced with a
8 situation of we manufacture a thermal imaging camera
9 that, in this case, the hands free in-mask is something
10 that's been pursued for ever since thermal imagers have
11 existed, so it's very attractive to the fire service.
12 We can't test it as a thermal imager for various block
13 reasons. We still have a duty to do the accessory
14 testing to make sure that the attachment doesn't impact
15 the SCBA; and that's the claim that we make, this is
16 certified as an accessory to SCBA pass 1981, 1982. We
17 make no claims about the 1801 status of the camera and
18 if asked, our answer is very clear, no, it is not 1801,
19 it is not intended to replace handheld cameras.
20 Handheld cameras are always going to generate the best
21 picture quality and have the most features. This
22 in-mask is a situational awareness tool, it's a thing to
23 keep you oriented, to navigate a structure, that type of
24 a thing. So we've been -- you know, and very closely
25 monitor all of our press releases or product literature

1 to make no claim about the camera, other than the fact
2 that the use of the camera doesn't impact the
3 performance of the SCBA or the pass device.

4 MR. KERRY M. BELL: Just a follow-up question
5 on that. So it's your position there's been no cases
6 that you're aware of where these accessory devices had
7 adversely impacted firefighter safety?

8 MR. BRAD HARVEY: Compliant devices or
9 noncompliant?

10 MR. KERRY M. BELL: Compliant devices.
11 Compliant to what?

12 MR. BRAD HARVEY: So yeah, I should be more
13 clear. Anybody that attaches anything -- so the 1981
14 and 1982 standards kind of identify accessories in a
15 couple of fashions. One is an accessory is something
16 that a firefighter might choose to attach. So if I'm
17 wearing an SCBA and I attach a flashlight to it, the
18 standard kind of recognizes that as an accessory.

19 A compliant accessory is one that was
20 submitted with testing proof that it doesn't impact the
21 performance of the product that it's attached to; and so
22 I think, you know, when you say does an accessory impact
23 safety, you know, of a compliant, you know, one that's
24 certified as compliant as an accessory, I'm going to
25 defer to Bill on that.

1 MR. BILL PARSON: So bill Parson, Scott
2 Safety. I think the answer is -- where Brad was
3 going -- the -- any accessory that we sell as a part of
4 the SCBA, we insure and it is tested and certified as
5 compliant to either the 1981 or the 1982 standard.
6 Typically, in the accessories that we're attaching to
7 the SCBA, 1981 is the governing standard and what it
8 applies to. So we are not aware of any case where any
9 of those devices had any affect or compromise to the
10 safety or the use of the SCBA.

11 MR. JOHN MORRIS: John Morris, Scott Safety.
12 To the contrary, we've had instances where people using
13 the Scott Sight, for example, an FD department in, I
14 believe, Massachusetts were going in searching a
15 basement for a victim, walked past the victim numerous
16 times. Had a couple of Scott Sights that they were
17 demoing, the second group went in wearing those and
18 found the victim approximately 10 feet from the door
19 where they had walked past several times; in this case,
20 an accessory saved a life.

21 MR. KERRY M. BELL: Mr. Golinveaux.

22 MR. JAMES E. GOLINVEAUX: James Golinveaux,
23 member of council. The question I have is I keep
24 hearing certified and tested in accordance with and TIA
25 is to say that they want the accessories tested and

1 certified or tested to a standard but what I'm assuming
2 you're saying is you're self-testing these devices to be
3 certified to be used with your equipment? This is not a
4 third party testing, FM or some other third party --

5 MR. BRAD HARVEY: It is a third party. So
6 Brad --

7 MR. JAMES E. GOLINVEAUX: What is that
8 certification that we're talking about that you're
9 testing to for this device?

10 MR. JOHN MORRIS: John Morris, Scott Safety.
11 Any accessory that's attached to, for example, an SCBA
12 has to be approved as accessory and undergo all the same
13 physical testing. Typically, Intertek does the physical
14 testing to the NFPA standard. All the accessories that
15 are approved have to undergo the testing along with the
16 SCBA when it's submitted. Also, the accessories have to
17 be submitted to NIOSH to make sure that they don't
18 affect the performance of the respirator.

19 MR. JAMES E. GOLINVEAUX: Okay. So this --

20 MR. JOHN MORRIS: And any accessory, also, for
21 example, if they have electronics, they have to meet the
22 requirements under the standard that they're being
23 submitted as accessory to.

24 MR. JAMES E. GOLINVEAUX: All right. So one
25 follow up. So it seems like the issue is a gap in the

1 standards of what applies to your product because it's
2 sort of a halfway in between two standards between 1801
3 and -- is that -- is that the issue at hand that we're
4 discussing, is that there's a gap between the standards
5 that applies to your product?

6 MR. BRAD HARVEY: So let me grab that one. So
7 this is actually part of our concern when we talk about
8 making standards, you know, dependent upon each other
9 and kind of tie together because a standard like 1801,
10 which governs thermal imagers, the scope is thermal
11 imagers used in the fire service, okay? So that's kind
12 of sloppy in terms of a scope definition because thermal
13 imagers have applications to fireboats, which are
14 covered by 1925, every fire boat has a thermal imager on
15 it, primarily used for navigation of the boat, not
16 necessarily for fire fighting but it could be considered
17 in scope here. We have -- because the price of thermal
18 imagers has fallen, we have things like aerial
19 apparatus. So, you know, 1.2 million-dollar trucks that
20 are governed by NFPA 1901, they're putting a thermal
21 imager on the tip of that ladder so an incident
22 commander could get an overhead view, arguably a great
23 thing, but that camera doesn't have a display, so it
24 can't be tested to 1801 but 1801 seems to encompass that
25 camera. So if a fire chief today puts that camera on

1 his aerial, there's -- there's really kind of no issue.
2 What the broadness of this TIA suggests is that if a
3 standard exists, the product must first be compliant to
4 that standard and if not, it violates the parent
5 standard that it's being attached to. And so in this
6 case, you would have a 6,000-dollar camera that is put
7 on a 1.2 million-dollar truck and it prevents that truck
8 from being 1901; and so what happens when these things
9 become dependent like this is -- I actually don't think
10 that the scope definition is sloppy, unless we start
11 tieing things together because, now, I'm going to have
12 concern about my fireboat, my apparatus, my unmanned
13 drone, all of these things could lose their parent
14 certification because the thermal imaging testing didn't
15 encompass that embodiment of a thermal imager. And so
16 again, that's why I kind of think, purposeful or by
17 accident, you guys as a group should take a bow because
18 I think this has been readily addressed in the
19 standards, is that you have performance standards on the
20 products and selection standards when I create an
21 assemblage of those products, and that division is
22 critical to understanding the fact that there is no
23 underlying problem here.

24 So the TIA goes to great I'm going to say
25 emotional lengths to create a problem that actually has

1 been thoughtfully addressed and appropriately resolved
2 by the NFPA itself in separating things out between
3 performance and selection standards.

4 MR. KERRY M. BELL: Any further questions?

5 MR. KENNETH E. BUSH: Ken Bush, member of
6 council. So what I'm trying to understand here, correct
7 me if I'm wrong, is what we may have are accessories
8 which are tested to certain standards that are not NFPA
9 standards that are being attached to other devices or
10 equipment, which would then cause that device or
11 equipment to fail the base standard; is that basically
12 correct?

13 MR. BILL PARSON: Bill Parson with Scott
14 Safety. I think what the TIA is proposing is that any
15 accessory that exists or that is attached to the device,
16 if there is a standard for that, then that device has to
17 meet that NFPA standard that would apply to that -- to
18 that device and if not, then it could not be attached as
19 an accessory to the device. So in the case of -- we
20 continue to go back to the integrated thermal imager
21 because that really was the crux and impetus for this.
22 So for instance, the argument that was at play was that
23 the thermal imager -- if the TIA had been in place, for
24 instance, then the integrated thermal imager, because it
25 could not meet -- in its embodiment, it could not meet

1 the requirements of 1801, then it would not be allowed
2 to be attached to the SCBA and the SCBA be certified to
3 1981, if that makes sense. And I think it belies one of
4 the significant dangers that the TIA kind of sets up for
5 us, where there is a standard in place for an accessory,
6 however, that standard really didn't take into account
7 where technology or innovation may lead. A manufacture
8 may develop some innovative application of a device that
9 is very similar to the devices governed by that standard
10 but different enough that it can't meet the requirements
11 of it. The integrated thermal imager that is produced
12 by ourselves as well as another manufacturer in the
13 marketplace right now is a good example of that, where
14 the physical embodiment of an integrated thermal imager
15 cannot meet the test requirements of a handheld thermal
16 imager. So there is a standard that establishes all
17 those requirements for a handheld thermal imager but
18 what the TIA has proposed in place, manufacturers would
19 never have been able to bring that innovation -- as was
20 alluded has already saved lives -- would not be allowed
21 to be brought into the marketplace until -- unless and
22 until that standard around the cameras got around and
23 had the opportunity to address whatever that new
24 technology was. I think the danger there is that you're
25 really going to stifle innovation into the marketplace.

1 The standard fully -- we've stated it several
2 times, the standard fully governs right now that there
3 is -- we can't attach an accessory to the product that
4 compromises the underlying standard. In the case of the
5 thermal imager, it met all the requirements of 1981 of
6 the SCBA; so that's already -- that's already
7 incorporated into the standard and the accessories --
8 all the accessories that we provide do meet those. What
9 you're really precluding is any innovation that may be
10 very close to a standard that already exists.

11 MR. DANIEL J. O'CONNOR: I have one
12 clarification -- not clarification, a question,
13 gentleman. Dan O'Connor, member of council. So you
14 have SCBA that you can integrate this thermal imager to.
15 So I take it, you know, Honeywell Safety Products,
16 they're obviously a competitor of yours, do they have a
17 thermal imager that they can integrate in an SCBA
18 that --

19 MR. BRAD HARVEY: Brad Harvey with Scott
20 Safety 3M. No.

21 MR. DANIEL J. O'CONNOR: They don't. Okay.
22 Thank you.

23 MR. BRAD HARVEY: I do want to be really clear
24 and maybe we didn't make this argument upfront just out
25 of our own comfort but we didn't really come here to

1 defend Scott Sight as a product that ought to be out,
2 that's a pretty narrow focus of the issue. We're
3 concerned about the broader implications, what happens
4 if this becomes a norm, what happens to other products;
5 whether we make them or not, our goal is and always has
6 been the safety of the firefighters themselves and of
7 concern -- in that kind of future thinking context, what
8 the crux of the language here, this was introduced, you
9 know, 1981 and 1982, same language; this same language
10 is being considered in 1802 as a part of that standard.
11 When these things start tieing together, you generate
12 real concern looking forward as a manufacturer, how do I
13 navigate when all the standards are tide together. As
14 a -- as a fire department, how do I understand when I'm
15 making a decision that impacts products I already own.
16 But as a council, how do you get people to serve on a
17 committee that could understand the implications of what
18 they're writing into a thermal imaging standard, what
19 implications that has on a fire apparatus or drones or
20 what have you. And I think a really good easy to
21 understand example of that is NFPA 950, which is the
22 data standard first created in 2015; you know, it's very
23 short, there's only, like, eight pages long but it's
24 very specific in how data needs to be structured when
25 that data is transferred from one discrete device to

1 another. The intent of the writing of that standard --
2 and it was written in NFPA journals and you know, lots
3 of press at the time of that writing -- was to allow
4 fire departments to integrate data into one, you know,
5 analytics time system, which, of course, is a great idea
6 but if the language here that says if a standard exists,
7 things have to meet that or they fail, then that brings
8 up questions to us about right now our SCBA transmits
9 data to software that's on the outside of the building,
10 it's relaying pressure levels, it's relaying, you know,
11 various information about that firefighter's condition.
12 Does that mean that, you know, we have to be -- we have
13 to meet 950 when we're transferring data to our own
14 software, you know; does it mean that when the
15 firefighter uses an app on his phone, that that data has
16 to meet 950 and if it doesn't, you know, do they lose a
17 certification on the device that's being run on.

18 So again, we -- today, we think this is very
19 clear in the separation between performance and
20 selection standards but if that line goes away, if
21 these -- as the TIA suggests, all standards have to be
22 met within an ecosystem, there's no way for a
23 manufacturer to forward think the implications, there's
24 no way for a fire chief to back think the implications,
25 the whole thing really becomes muddy; and I'm going to

1 come back again to the fact that we have no problem
2 today, this TIA doesn't cite any problems and the NFPA
3 has thoughtfully separated these concerns and they're
4 appropriately addressed within the structure.

5 MR. KERRY M. BELL: Thank you. Any final
6 questions? If not, we'll move into the closing remarks.
7 You have a total of five minutes.

8 MR. JOHN MORRIS: Well, I feel like a deer in
9 headlights. John Morris with Scott Safety. I hope that
10 wasn't recorded. I just really feel that this is
11 harmful to the fire service because the way it will
12 stiffen innovation. I mean, our goal is to think of new
13 products, come out with better ways to protect and make
14 their jobs easier.

15 MR. BRAD HARVEY: Brad Harvey, Scott Safety.
16 I want to thank you for the time to be able to come here
17 and talk to you about it, you know. I understand we're
18 time compressed and, you know, it's kind of a -- we have
19 to make a case but we welcome the opportunity to pursue
20 this further, whether that's in, you know, through
21 writing or through future meetings, we'll come to you.
22 We do think this is a worthy topic to be understood and
23 it's implications not just to the thermal imager but
24 it's implications across all aspects of product
25 conversions and integrations that are happening in the

1 marketplace. I don't want you to think that we're here
2 to throw a bunch of problems on the table and then walk
3 away from it. We'd love the opportunity to continue but
4 we want to be respectful of the time and we thank you
5 for what you granted us this morning.

6 MR. KERRY M. BELL: Thank you. And with that,
7 we're going to close this hearing; before I do, I just
8 want to take this opportunity to thank you for
9 participating in the NFPA standards develop process and
10 sharing this valuable information with us here today. I
11 do want to remind everybody that the official decision
12 of the standards council will be issued in writing by
13 the council secretary, Dawn Michelle Bellis and no staff
14 or council member is authorized to convey any
15 information regarding that decision. So with that,
16 we're going to close this hearing and move directly into
17 next hearing, staying on the record. So if the
18 individuals who are going to be speaking at the next
19 hearing, if they could come to the table, I'd appreciate
20 that.

21 This next hearing is related to agenda item
22 17-12-9-D, which is an appeal to approve the issuance of
23 TIA 1301 and NFPA 70. And before we start this, I just
24 want to ask any statements from council members?

25 MR. MICHAEL J. JOHNSTON: Mike Johnston,

1 member of council. For the record, I'm recusing myself
2 on this agenda item, I will not participate as a member
3 of standards council in the hearing deliberations or
4 voting on this matter. Thank you.

5 MR. KERRY M. BELL: Thank you. All right.
6 We'll go ahead and get started with this hearing. Can I
7 ask who's going to be speaking in support of this
8 appeal?

9 MR. JOEL GOERGEN: Yes, George Goergen, Cisco
10 Systems.

11 MR. GEORGE ZIMMERMAN: George Zimmerman, CME
12 Consulting. If questions are directed to me, I'll
13 answer them or if Mr. Goergen refers to me.

14 MR. KERRY M. BELL: Anybody speaking against
15 the appeal? Seeing none. I think that we're ready to
16 get started here. We're going to basically use the same
17 format for the previous hearing. Giving you a total of
18 ten minutes to make any opening remarks and we'll follow
19 that up with questions from the council members and then
20 we'll close the hearing and you will be allowed a total
21 of five minutes for any closing remarks. Mr. Goergen,
22 I'll turn the floor over to you.

23 MR. JOEL GOERGEN: Thank you, Mr. Chair. It's
24 humbling and an honor to be here. It's my second time
25 before the standards council and I really appreciate

1 you-all allowing me today to speak.

2 As you know from one of the last times we
3 spoke and if you -- any of you had an opportunity to see
4 me speak at the -- in the June NFPA event, you'll know
5 that technology is a huge passion of mine. One of the
6 roles as part of that passion in technology is to look
7 out a long ways into the future, four to six years to
8 ten years to try to figure out where we need to be as an
9 industry, where we need to be as a technology and then
10 put the pieces together to get us there because it
11 usually takes two to three years to get a product
12 together and out the door. So you have to have all the
13 pieces and standards in place, you have to have the
14 technology building blocks in place and so you really
15 have to have a passion and a need for innovation and
16 drive; and I'm, you know, very thrilled to have that and
17 to participate at that level in the technology.

18 So relevant to 1301, TIA 1301, power over
19 ethernet communications. Power over ethernet is a --
20 it's technology that's been around for a while, since
21 approximately 2003, 2005 range. What's unique about it
22 today is that with the advances in technology, what we
23 can do with power over ethernet is far greater than what
24 we could do back in early 2000. We can charge our
25 devices, we have wifi stuff in the ceilings, we can --

1 laptops, iPads, everything can interconnect and charge
2 through this; we can even power switches, switches,
3 routers, lighting, those time of things, right. So POE
4 was some -- in 2005 it was really just about powering an
5 IP phone at your desk but today we do so much more with
6 it and we do that over four pair communications wiring.

7 A year -- two years ago there was a number of
8 questions that we tried to address in the industry about
9 safety for power over ethernet and how much wattage that
10 we could have in a device, how much current and
11 ampacity that -- current/ampacity that we could put down
12 on a cable and safely put down on a cable, right. We
13 had a number of discussions on that and there was a lot
14 of work that was done; and at the end of the day, what
15 went in 840.160 that 1301 address, the wording still
16 focused on wattage, it didn't focus on ampacity.
17 Ampacity is the key driver in the thermal construct of
18 the cable, not wattage, it's an ampacity. And so it's
19 really important to make sure that the technology from a
20 safety point of view, that when we describe the wording,
21 when we focus on that technology, that we're applying
22 the right wording to it.

23 Now, at the council's directions, a task group
24 was created late last year to pull together a number of
25 industry experts both within NEC, within the code making

1 panels and from other aspects of industry, and two
2 really good things happened out of this. To me, the
3 most important thing is at the council's discretion, by
4 creating this task group, you guys brought or allowed a
5 number of people in the industry that couldn't
6 communicate, that couldn't have the hard conversations,
7 you got us in a room and you got us talking. Not only
8 did you get us talking but eventually, the spirited
9 debate as I'll refer to it, turned into collaborative
10 discussions, so I think from that point of view that was
11 a win-win success.

12 The second thing that happened out of this
13 task group was that under the direction of Ernie Gallo,
14 a member of the correlating committee and a phenomenal
15 task chair, several PIs for the 2020 cycle were created;
16 and there were three TIAs that were created, 1299 and
17 1300 were submitted to code making panel 3 and both of
18 those went through and were agreed to on both technical
19 merit and emergency nature. 1301, which was directed
20 towards code making panel 16, it's -- again, at the task
21 group level there was solid consensus on all three of
22 these TIAs and, of course, on all the PIs but the
23 important thing is the TIAs, there was solid
24 consensus -- my understanding is zero decent -- and a
25 lot of interaction went into putting this together.

1 What happened on 1301 is that -- or its
2 primary points that it tried to address is two things:
3 One, it changed that definition of wattage to ampacity,
4 which is the more important descriptor; and then, if
5 there were any other issues, it directed the reader to
6 another section 725144, so that's the exact right thing
7 to do. The second thing that it did is it addresses
8 some new and emerging technologies. There's a level of
9 new and emerging technology for single pair ethernet
10 that was adopted between 2016 and the end -- the end of
11 2016 and now here at the end of 2017 that basically
12 says, hey, we can have a 5-volt, a 12-volt, a 24-volt or
13 a 50-volt piece of electronics on a single pair
14 ethernet. So why is this relevant and why am I saying
15 this?

16 When the original 840.160 comment was
17 developed, it was assumed that the technology would be
18 using 50 volts, hence the 60-watt -- where the 60-watt
19 definition came from. Wattage -- just so we're on the
20 same page, wattage equals voltage times current, right.
21 So the current down a four pair cable would be very
22 small, it would be about 0.3 amps per conductor, okay,
23 very safe limit, not much temperature change, solid
24 thought process. But with this new technology, it
25 doesn't -- the 840.160 code didn't distinguish whether

1 it was a four pair or a single pair conductor. So this
2 new technology will allow me to put 5 volts down this
3 single pair of cable. So again, 60 watts equals voltage
4 times current, we're talking about 12 amps down a tiny
5 little light; that's a really bad idea from my humble
6 opinion, it's a very bad idea, and several people on the
7 task group thought so and hence how we ended up with the
8 terminology and the wording that we did in TIA 1301.

9 So I'm here today to appeal -- the 1301 was
10 denied on emergency nature and I'm here to appeal that,
11 based on the technology that I see coming. Remember, my
12 passion, my role at Cisco and my role in the industry is
13 technology, that's what I do. I look down the road, I
14 see where we need to go and then I drive in that
15 direction, I put all the building blocks together. All
16 the building blocks exist today. There are products
17 today that are coming out on single pair ethernet that
18 will be driving 5 volts and 12 volts and 24 volts down
19 that line and there's going to be unexpected users who
20 are going to be putting it through their hotel rooms,
21 through their homes and they're going to be expecting it
22 to be safe and it's not going to be safe.

23 So I'm here today to ask the council to adopt
24 TIA 1301. You know, again, all the issue from the task
25 group, we spent a lot of time on it. There was solid

1 consensus on the wording and adoption, so very
2 comfortable with that.

3 The second thing I'm here to ask is that,
4 again, in terms of the technology drivers, there's some
5 things that -- I'm a technology guy, so use me, use my
6 team; and there's some things in the industry, some
7 people in the industry that I think could help in CMP3,
8 CMP16 and CMP5. I'd like to use CMP5 as an example.
9 Alpesh Bhoje is a world authority in grounding, very
10 solid guy, very solid skills, his PHD and his work is in
11 three dimensional field solving model. So what does
12 that mean? It means that interesting enough, when you
13 pick up your cellphone and you make a call, there's --
14 the radiation, the communication that comes out of this
15 device and goes to the cellphone tower, it's not just a
16 string of bits that go, it's a wave, right, that goes to
17 the cellphone tower. There are people that study that,
18 that look at what that wave propagation looks like and
19 builds 3D models and constructs, so you can see what
20 happens when that wave hits the side of the building,
21 what happens when that wave hits free air. All of
22 those, in terms of the technology, before this device
23 could make it out to the rest of the world, we had to
24 study that.

25 A real life example in CMP5 is that the group

1 had a PI that said, hey, we should remove this sentence
2 that says if you use this ground technique -- and I
3 can't remember the technique right now off the top of my
4 head -- if you use this ground technique, you will have
5 less ground noise; that was never modeled, it was never
6 discussed until somebody wants to take it out. The
7 question was asked at the CMP5 level is, you know, is
8 that a true statement or not, right? And so, you know,
9 sure, we could try to set up a building and build the
10 ground up and we could get a bunch of guys out there
11 with measurement devices and measure the noise and try
12 to determine if that's the right thing to do or we could
13 build very complicated detailed 3D simulation models and
14 take a look at what that is doing. So one of the things
15 that Alpesh is doing is he volunteered to the code
16 making panel 5 chair, hey, look, we can model this, this
17 is what we do, we simulate this, we build it and we put
18 it together and we can --

19 MR. KERRY M. BELL: Going to need to wrap it
20 up.

21 MR. JOEL GOERGEN: Yes, sir. And then, the
22 last thing is is in terms of technology, I'm offering
23 myself, I'm offering my team, if there's anything that
24 we could do to help the standards council in technology
25 issues that you have or that you're concerned about,

1 you'd like analysis on. I'm not a one and done thing,
2 I've been here with NFPA now for a couple of years, I'm
3 here to stay, I'm here to input, use me, use my team.

4 MR. KERRY M. BELL: Thank you. Questions from
5 the council? Mr. Quiter?

6 MR. JAMES R. QUITER: Jim Quiter, member of
7 council. I was curious about your statement that
8 there's stuff in the ceilings or whatever that is
9 installed and unsafe; is that more likely or is it more
10 likely that products that are safe are not getting into
11 the marketplace because the code doesn't apply to that
12 properly? Which is the more expected scenario?

13 MR. JOEL GOERGEN: I believe it's the
14 latter -- excuse me, the former, that there's cabling in
15 place that -- as a user, you go and you buy the
16 technology and you install it and you're not aware of --
17 I know how to answer your question, I'm drawing a blank.

18 So the issue is this, when I wire out the
19 lighting in here, I use a four pair cabling or I could
20 use a two pair cabling to wire out the lighting, and I
21 work with you as the user, right, to install the
22 equipment and to make sure that the equipment that
23 you're installing and the wiring and the lighting, they
24 all match, they all work. A year from now you happen to
25 be on Amazon and you're looking through and you see that

1 you can upgrade your technology to this other product,
2 and what's not telling you on this other product is that
3 they're going to quadruple the amount of ampacity that
4 now can run across that wire and you're unsuspecting of
5 it. So you upgrade that technology and you put it in
6 place. Before, you were compliant; now, you're not
7 compliant, and that's the concern. Job.

8 MR. GEORGE ZIMMERMAN: If I may.

9 MR. JOEL GOERGEN: Yes.

10 MR. GEORGE ZIMMERMAN: George Zimmerman, CME
11 Consulting. So with TIA 1301 -- I think the answer is
12 actually pretty clear. Right now without TIA 1301, the
13 code says if the -- if the power provided communications
14 device is 60 watts or less, look no further, you don't
15 have to do anything, it's permitted, doesn't matter what
16 the current is. So you're not -- TIA 1301, if
17 implemented, would change that to say if the current
18 provided is .3 amps or -- or less on all the conductors,
19 effectively, that's not the exact words but that's
20 effectively what it is. The way that works, it only --
21 it closes a loophole, it does not -- anything that is --
22 anything that is currently excluded would still be
23 excluded and anything that -- but what happens is there
24 are some things, the ones that Mr. Goergen talked about,
25 that might use lower voltages or fewer pairs of wire

1 that -- I'm the chair of a task force in IEEE, we're
2 developing standards that use that powering. I know
3 people who are -- who are developing products -- I've
4 seen products, actually, that use the single pair wiring
5 at the higher currents. We're trying to make sure that
6 the code doesn't have a loophole in it that those can be
7 inadvertently installed in an unsafe manner. So the
8 situation is definitely without TIA 1301, you include
9 all those things; with TIA 1301, you're now just
10 restricting the things that have current levels that
11 would be unsafe; and you're not eliminating them, you're
12 just saying if they have current levels at those unsafe
13 points, go look at 725.144, which has the detail of how
14 you deal with those current levels.

15 MR. JAMES R. QUITER: Okay. Thank you.

16 MR. KERRY M. BELL: Any other questions?

17 MR. JOHN A. RICKARD: John Rickard, member of
18 council. So one of the negative comments on emergency
19 nature was that there are now solution products
20 available to meet the criteria; and I hear you talking,
21 there are some products out there that you're concerned
22 with safety wise. So explain to me a little bit what
23 kind of products we're talking about here that are not
24 available.

25 MR. JOEL GOERGEN: Joel Goergen, Cisco

1 Systems. So first, if you go to Amazon and you do a
2 search for power over ethernet or power over
3 communications cables, you'll see a number of BeElion
4 devices that pop up that operate -- this is today,
5 right, that operate at both 5 volts and 12 volts, and
6 they put way beyond what UL and the industry has
7 determined to be a safe ampacity across a conductor on a
8 communications cable.

9 The second point in terms of products is that
10 within -- within Cisco, within Juniper and a number of
11 other telecommunications companies, there's a trend to
12 shift away from the four pair ethernet construct and go
13 to a single pair. If we would have had this
14 conversation two years ago that we would even consider
15 shifting away from a four pair communications cable, I
16 would have -- I think industry would have laughed and
17 said no, it would never happen, single pair low voltage
18 devices, it would never happen. Fundamental change two
19 years ago in the standards allowed these new products
20 that will be introduced in the next nine months that
21 have the capability of driving, they'll still meet the
22 60-watt exception, as Mr. Zimmerman pointed out in
23 840.160, but they will have the ability to drive much
24 lower voltages and higher currents. We recognized that
25 and we thought that with the adoption of 1301, we could

1 fix that and correct it. Without 1301, as Mr. Zimmerman
2 pointed out, you're opening up the door for a number of
3 those products to hit the market unregulated and they're
4 going to hit the market by the end of 2018, and the
5 individuals who submitted the negative marks on the
6 emergency nature are not aware of the proliferation of
7 that single pair technology.

8 MR. KERRY M. BELL: Any additional questions?

9 MR. JAMES E. GOLINVEAUX: James Golinveaux,
10 member of counsel. Most of the flavor of people that
11 were voting against the emergency nature that I read
12 were we've already talked about this, we already went
13 through this in the last cycle and we talked about it at
14 the certified meeting motion. What's different about
15 this that you put together, at a high level, I don't
16 need to know the -- I just want to know a high level you
17 did something different here with this TIA that went
18 through the normal process of the previous cycle, what's
19 that difference to us?

20 MR. JOEL GOERGEN: Joel Goergen, Cisco
21 Systems. The difference is that we -- we focused on the
22 terminology being ampacity, which is the component of
23 the -- the thermal component of the cable; and the
24 second thing that we did is we recognized that single
25 pair devices are going to be coming really soon, it's

1 right in front of us and that the current 840.160 text
2 wouldn't apply to those devices at all and our best hope
3 of changing that would be the 2020 or 2023 cycle and a
4 number of us felt that that was too late, it would be
5 incredibly unsafe to let that go.

6 MR. JAMES E. GOLINVEAUX: Thank you.

7 MR. GEORGE ZIMMERMAN: If I may add to that.
8 George Zimmerman, CME Consulting. So you asked
9 specifically what's different. And specifically what's
10 different is the discussion that happened in the normal
11 cycle -- and I was at the meeting myself, as was
12 Mr. Goergen -- was actually all about what kind of an
13 exception could be made, and they made an exception of
14 wattage. They didn't talk about wattage versus current,
15 they talked about levels of that and sometimes the
16 current was associated with wattage. The certified
17 amending motion at the technical meeting, which
18 Mr. Goergen made, was tied to a higher current level
19 than was in the UL report and that is being asked for in
20 TIA 1301, and you may recall -- and I was at the
21 standards council when the last appeal was heard -- that
22 there was discussion that .5 amps, which was the number
23 in the certified amending motion, was a higher current
24 level than the UL SPI fact finding report had found was
25 a safe level. TIA 1301 does not ask for the .5 amps.

1 TIA 1301 asks for the .3 amps that UL and the POE task
2 group and panel 3, now, with the other two TIAs, have
3 agreed is a safe level of current and that's
4 fundamentally different than what was asked for before.

5 MR. KERRY M. BELL: I have a question for you.
6 In your request for relief you asked for the power over
7 the ethernet to be represented on some of the code
8 making panel, code making panel 5 and 16, you talked
9 about a potential candidate for code making panel 5. My
10 question to you is, I believe, both NEMA and IEEE are
11 members represented on some of these panels. Are you a
12 member of NEMA or IEEE?

13 MR. JOEL GOERGEN: Joel Goergen, Cisco
14 Systems. I am a IEEE 802.3 member and a IEEE 802.3
15 liaison to IEEE SCC 18 and IEEE SC 18 represents a
16 number of groups and has representatives in a number of
17 code making panels. What's missing in that construct is
18 contributing technology advances, it's -- it's got to be
19 part of your job function, in my humble opinion; and the
20 example that I use with Alpesh Bhoje is that his sole
21 focus is 3D modeling in grounding and grounding
22 applications, this is what he does, and a panel -- a --
23 a code making panel such as 5, he doesn't just bring
24 IEEE experience, he doesn't just bring in IEEE
25 representation at that point, right? As an individual

1 contributor, Alpesh brings in a wealth of simulation
2 that's not brought in in any of the SEC 18 external
3 representatives that are on any of the other panels,
4 none of them are simulation experts.

5 MR. KERRY M. BELL: So I guess to follow up on
6 that, you know, there's a lot of individual companies
7 that are represented by associations and you're
8 suggesting some special expertise here; so I guess from
9 my standpoint, do you feel that you're represented --
10 your company is represented by the IEEE or NEMA at these
11 code making panels?

12 MR. JOEL GOERGEN: Joel Goergen, Cisco
13 Systems. No, I do not, I do not believe that SCC 18 is
14 representative of the communications industry. I don't
15 believe that NEMA is representative of the
16 communications industry or in terms of IoT. I
17 believe -- and I'm certain that from the June 2017 NFPA
18 discussions, there was a panel session put together by
19 Mark Early and Ernie Gallo to address power over
20 communications and there was some discussion on IoT, the
21 Internet of Things; but NEMA is a follower of the
22 Internet of Things, SCC 18 is a follower of the Internet
23 of Things. The work I'm doing is so far front in -- far
24 forward focused in the Internet of Things where the
25 technology is going, where it's coming from. In terms

1 of even grounding, the work that we've been doing in
2 grounding and analysis shows that the next biggest issue
3 that NFPA and IEEE are going to have to address for
4 communications is high frequency grounding with terabit
5 ethernet coming up, grounding and the ground rings that
6 are currently associated in our buildings and
7 communication centers need to be addressed and need to
8 be looked at for effective digital communications and
9 there isn't anybody in the panel to represent that and
10 to drive that view.

11 MR. KERRY M. BELL: Just another follow up,
12 then. Is there another association that could represent
13 the power over the ethernet industry?

14 MR. JOEL GOERGEN: Joel Goergen, Cisco
15 Systems. There is the Ethernet Alliance Association,
16 which is a representative of the number of manufacturers
17 and that -- in that segment that has put forward
18 applications in both code making panel 3 and code making
19 panel 16, they've been denied, from my perspective. The
20 reasoning, I believe -- and I'll yield to Mr. Zimmerman
21 on the answer to this -- the reasoning, specifically, is
22 that there already is representation there but I just
23 don't -- I don't see it.

24 MR. GEORGE ZIMMERMAN: Again, for full
25 disclosure, I'm also the technical committee chair for

1 the Ethernet Alliance and I'm an applicant in the CMP3
2 from the Ethernet Alliance. I believe that the Ethernet
3 Alliance had applied for panel 16 membership in the last
4 fall and has now realized that panel 3 is probably more
5 appropriate for that and perhaps has more room for
6 manufacture input on it. The feedback that we received
7 was that panel 16 already had its balance of
8 manufacturers; and I'll point out that the -- the bulk
9 of the representatives in this technology area are --
10 actually represent a very different segment, they
11 represent wire and cable companies. The type of
12 technology that Mr. Goergen is talking about, that I
13 generally represent, that is in the power over ethernet
14 world, is actually in the electronics, not in the wiring
15 and the cables, and the key safety factors and what
16 drives what happens over those wires is all -- it all
17 comes from the electronics and manufacturing, so it
18 would -- that's why, in my opinion, the current
19 representation is not adequately representing the
20 ethernet technology industry.

21 MR. KERRY M. BELL: Okay. Thank you. Any
22 additional questions from council members?

23 MS. PATRICIA A. GLEASON: Patricia Gleason,
24 member of council. In your statement, you indicated
25 that there's no personal benefit to your organization

1 for the passage of this particular TIA. Is there,
2 contrary to that other, organizations who would have the
3 opposite opinion, in terms of benefit to their company,
4 if this particular TIA were to pass?

5 MR. JOEL GOERGEN: Joel Goergen, Cisco
6 Systems. That's a really good question. If the TIA
7 doesn't go through, there's -- there's a good thing and
8 a bad thing to different technical sectors. So a good
9 thing is that a -- if you've had time to read the NEC,
10 you'll see in section 725.144 and 725.121, there's
11 discussion and reference to what's called an LP cable;
12 and what the LP cable was is it's a -- same as a
13 standard communications cable but now there's an
14 ampacity rating on the end of it, and that ampacity
15 rating tells the user/installer how much current can
16 safely go through that cable up to a specified
17 temperature of 60, 75 or 90 degrees. If we don't adopt
18 1301, the only relief that a user would have is to go to
19 that industry and get that cable and that industry would
20 -- the cabling industry, particularly those few
21 manufacturers that are focused on helping cable, would
22 thrive and if they were here, I would think that from
23 their business point of view, that they would want to
24 see that cable go forward.

25 The other side of that technology, right, the

1 equipment side of that, my side of the business, you
2 know, from a Cisco perspective, is now I'm in the
3 unfortunate position of trying to figure out how to
4 prevent -- because I don't want to get sued, right, so I
5 need to figure out how to prevent someone from taking
6 this piece of equipment and using it on a cable that's
7 not specified, right, or that's not listed for that
8 level of ampacity, and I don't have an answer to do
9 that. My only answer right now is 1301, right, to -- in
10 terms of protecting that. No one could argue as an
11 equipment vendor, should I be worried about a user who
12 has sole control of their cable plant, connecting to my
13 equipment and burning their building down? I say yes,
14 right, I should be worried about that because somebody
15 will do it; and for me, 1301 is the way to address that.
16 So that's the two sides of it, right, that I see. I
17 mean, the only solution is really to go for the extended
18 cable and replace your cable plant, and that industry
19 has a huge benefit there.

20 On the emerging technology side, though, now
21 I've got to go back to the drawing board and figure out
22 how to prevent somebody from being unaware and plugging
23 that cable in. I probably should do that any way but --
24 Mr. Zimmerman, do you have anything to add to that?

25 MR. GEORGE ZIMMERMAN: Not much to add. There

1 are vendors out there today, as Mr. Goergen mentioned.
2 You can go on Amazon and you can buy these devices. I
3 wish I brought some with me, I used to have a few I
4 carried around. They're nothing more than BeElion, it
5 looks like the ethernet plug that most people use -- you
6 still got one on your laptop there -- that you have on
7 your laptop, it's got that on both ends and one end
8 splits out to a power connector and an ethernet
9 connector, you plug any ole power source into it and it
10 puts a high current on that line, usually because it's
11 running one pair of the four pairs in the cable. Those
12 types of devices, essentially, can extend your class two
13 power supply over this narrow gauge land cable, which
14 can be bundled up in there to power phones, security
15 cameras, access points for wireless, anything that you
16 can power with a power supply. People who make those
17 things, I think, would stand to lose a little bit but I
18 don't think it's because of something they're watching
19 out for, I don't think they want the building to burn
20 down either, they're just not necessarily paying
21 attention to it.

22 MR. KERRY M. BELL: Any other questions,
23 council members? If not, we'll allow you five minutes
24 for your closing remarks.

25 MR. JOEL GOERGEN: I won't put you guys

1 through five more minutes of me talking. I really
2 appreciate the opportunity and you know, again, I really
3 support 1301, I support the work of the NFPA and support
4 the work of the standards council. So thank you for
5 having us, appreciate it.

6 MR. KERRY M. BELL: Thank you for taking the
7 time to come here to Galveston and participate in the
8 NFPA process, sharing this valuable information with us.
9 Again, I want to remind everybody that the official
10 decision of the council will be issued in writing by the
11 council secretary Dawn Michelle Bellis and no staff or
12 council member is authorized to give any information
13 regarding that decision. So with that, we're going to
14 close this hearing, go off the record, and we'll take a
15 15 minute break for the council members' benefit and go
16 back into executive session. Thank you.

17 (Concluded at 10:17 a.m.)

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REPORTER'S CERTIFICATE

DECEMBER 6, 2017

I, Lani LeBouef, Certified Shorthand Reporter in and for the State of Texas, hereby certify to the following:

That the transcript of the meeting is a true record of the testimony given by the parties;

I further certify that I am neither counsel for, related to, nor employed by any of the parties in the action in which this proceeding was taken, and further that I am not financially or otherwise interested in the outcome of this action.

Certified to by me on this 19th day of December, 2017.

Lani LeBouef

Lani LeBouef, CSR
Texas CSR 9008
Certified Shorthand Reporter
Galveston Island Reporting
2724 61st Street
Suite B - PMB #77
Galveston, Texas 77551
Telephone: 409-750-1833
Expiration: 12/31/2017
Firm Registration No. 565