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Transcript of Day 3

Wednesday, June 18, 2025

OSHA Heat Injury and Illness Prevention Hearing

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OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

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OSHA'S INFORMAL RULEMAKING HEARING

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FOR HEAT INJURY AND ILLNESS PREVENTION IN OUTDOOR AND

11

INDOOR WORK SETTINGS

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Day 3 of 12

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Wednesday, June 18, 2025

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9:30 a.m.

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PRESIDING:

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JOHN CHRISTOPHER LARSEN, Administrative Law

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Judge, Office of Administrative Law Judges, United

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States Department of Labor

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18	MARIAM CARLON, Abt Global	
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1 P R O C E E D I N G S

2 JUDGE LARSEN: And good morning, everyone. We're
3 on the record and will come to order in this informal
4 public hearing. It's a hearing on the Occupational
5 Health and Safety Administration's proposed rule for
6 heat illness and injury prevention in outdoor and
7 indoor work settings. The notice of proposed
8 rulemaking on that rule was published in the Federal
9 Register on August 30th, 2024, that's volume 89 of the
10 Federal Register, beginning at page 70,698.

11 I'm Administrative Law Judge Christopher Larsen
12 from the US Department of Labor. I preside over the
13 hearing today. At the hearing, we're going to receive
14 testimony and other information about the proposed rule
15 from interested parties. When the hearing is over and
16 all the post-hearing comments have been filed, OSHA
17 will review and consider the entire record before
18 issuing the rule in its final form.

19 My job today is to ensure that we have a complete
20 and accurate record of the hearing, and that all
21 interested parties have a fair opportunity to present
22 their comments and their concerns about the proposed

1 rule. But we're not going to have a rhetorical free
2 for all; there are some rules that we will follow.
3 Particularly, we're going to keep track of the time and
4 keep the hearing on schedule. We've asked witnesses to
5 stay within their allotted time and to avoid undue
6 repetition or excessive argument. All of us will
7 listen very carefully to everything that the witnesses
8 say the first time they say it, so there should not be
9 a need to say the same thing over and over again.

10 Most of you should have the schedule for today.
11 It's also available on the website for the hearing at
12 www.osha.gov/heat-exposure/rulemaking, all one word.
13 Now if you've submitted written comments, those
14 comments are already part of the record. So when you
15 testify, you can highlight the most important points or
16 clarify anything that's in the written submission. You
17 don't need to repeat it in its entirety. If there is
18 an important reason to file documents that are not
19 already part of the record, you can email those to
20 OSHAevents_dsg@dol.gov before you testify and we'll
21 enter those into the record. You can also file
22 additional evidence or statements for up to 90 days

1 after the hearing closes, and by my calculation that is
2 until September 30th of 2025. After September 30th,
3 the entire record of this hearing will be closed.

4 Today, after each speaker or panel has finished
5 testifying, OSHA representatives may ask questions.
6 After the OSHA people have finished their questions,
7 the speaker or the panel may take questions, as time
8 allows, from people who have filed a timely notice of
9 intention to appear. To ask a question, press the
10 raise hand button on the WebEx screen. Or if you're on
11 the telephone, press star three on your telephone
12 keypad.

13 I will determine the order in which questions get
14 asked. And I also have to watch the clock, but I will
15 do my best to accommodate as many questions and
16 questioners as our schedule today will allow. Any
17 witnesses who run out of time to answer a question can
18 expand on their answer in the post-hearing comment
19 period up until September 30th. Also, please remember,
20 you can only ask a question of a witness with whom you
21 have no organizational affiliation.

22 A court reporter is transcribing what we say

1 today, so it is important not to talk at the same time
2 as someone else is speaking. It's also important to
3 give a verbal response, to say yes instead of nodding
4 your head, or no instead of shaking your head, or I
5 don't know instead of shrugging your shoulders, that
6 sort of thing.

7 Also, please remember to identify yourself for the
8 reporter before you start testifying or before you
9 answer a question. If you forget, I'll have to nag you
10 about that. The transcript of the hearing should be
11 uploaded to the hearing docket on regulations.gov,
12 about two weeks after the hearing.

13 Okay. I've had my say. I think we're ready to
14 begin public testimony. The expected speaking order
15 is -- there it is. It just -- it's now displayed on
16 the screen. The contractor is going to introduce each
17 speaker in turn and promote them to be panelists. When
18 you are called to testify, again, please state your
19 name and your affiliation for the record and speak
20 slowly and clearly enough so the court reporter can
21 make an accurate record. All right. Let's hear from
22 our first speaker.

1 MS. CARLON: Thank you, Your Honor. The first
2 speaker group is the Associated General Contractors of
3 America and Kwest Group, represented by Kevin Cannon
4 and Stephen Kinn. Please state your name and
5 affiliation for the record.

6 MR. CANNON: All right. Excuse me. Good morning.
7 Kevin Cannon, Senior Director of Safety, Health, and
8 Risk Management with the Associated General Contractors
9 of America.

10 MR. KINN: And I am Stephen Kinn. I am the Senior
11 Environmental Health and Safety Manager for Kwest
12 Group.

13 MR. CANNON: Should we begin?

14 JUDGE LARSEN: Yes, please.

15 MR. CANNON: All right. Good morning and thank
16 you to the OSHA staff, Administrative Law Judge Larsen,
17 and others at the Department of Labor for hosting this
18 public hearing on OSHA's proposed heat injury, illness
19 prevention in outdoor and indoor work settings.

20 As I mentioned, I'm Kevin Cannon, Senior Director
21 of Safety, Health and Risk Management with AGC of
22 America, and we welcome this opportunity. You know, in

1 our written comments we submitted, we identified some
2 concerns with the proposal in its current form, and it
3 strongly encourages the agency to meaningfully consider
4 the arguments that we put forth.

5 Just a little background, AGC is the nation's
6 leading commercial construction trade association,
7 representing more than 28,000 member firms. This
8 includes contractor firms, both general contractors and
9 specialty contractors, as well as union and nonunion
10 contractors, suppliers, and service providers as well.
11 We operate through a network of 88 chapters. And our
12 members are engaged in the construction of the nation's
13 highways, bridges, utilities, airports, transit
14 systems, public and private buildings, pretty much
15 everything except for single family homes. And nearly
16 all of these firms will be impacted by the proposed
17 rule.

18 I do want to highlight that the health and safety
19 of the men and women in the construction industry is an
20 absolute priority to AGC and our members and this
21 includes risk related to excessive heat. However, OSHA
22 should recognize, and I believe has recognized in the

1 past, that the construction industry faces unique
2 challenges compared to those in other industries.

3 While OSHA presents the Notice of Proposed
4 Rulemaking as a performance based standard, the
5 prescriptive nature of several of the provisions
6 suggest otherwise. And AGC and its members strongly
7 believe that a regulatory approach must provide more
8 flexibility. The construction environment is ever
9 changing, and -- and any regulatory approach that
10 imposes prescriptive, complicated requirements on
11 construction must be avoided.

12 I think we all can agree that the more complicated
13 a standard is and the more complicated the compliance
14 obligations are, the greater the chance it will cause
15 confusion or inconsistent implementation across the
16 entire construction industry. You know, as I
17 mentioned, not every construction site is the same, and
18 the very nature of construction means that the work
19 site will change constantly. I noted -- excuse me --
20 that we submitted written comments, but in -- you know,
21 in review of those, I think there are a couple of other
22 points that were not touched on in those. And I just

1 want to briefly highlight that before I turn it over to
2 Steve.

3 You know, one is, you know, when you look at --
4 especially vertical construction, you know, this is a
5 standard that is designed to address both indoor and
6 outdoor. And you know, it goes back to, you know,
7 complex and -- and complicated, where you'll have both
8 indoor and outdoor on construction projects at some
9 point in time. And I believe that, without any clear
10 guidance, that would create confusion amongst -- you
11 know, especially trade partners who have to work in,
12 you know, both what would be considered outdoor and
13 indoor environments.

14 One of the other issues that we'd like to raise
15 is, you know, our belief is that construction should be
16 exempt from the recordkeeping requirements specific to
17 monitoring temperatures due to the uniqueness of the
18 construction process. You know, our belief is that
19 this data has limited utility in predicting the
20 environmental conditions on future projects and would
21 not necessarily, you know, be considered representative
22 sampling or objective data.

1 One other thing I want to highlight, and -- and I
2 believe it was mentioned maybe the first day, was a
3 recommendation put forward by the National Safety
4 Council regarding acclimatization. And I think that
5 warrants further consideration as it allows more
6 flexibility. And specifically, they said, you know,
7 they would be supportive of allowing employers to
8 develop acclimatization processes that would be
9 specific to their operations.

10 But with that said, you know, if OSHA, you know,
11 moves to promulgate a final rule, again, you know,
12 flexibility is key while also affording employee
13 protection from excessive heat and with the primary
14 focus on water, rest, shade, education and training.
15 Pardon me.

16 For the rest of the testimony, I will now turn it
17 over to Stephen Kinn, who will be providing the
18 contractor's perspective and highlighting the effective
19 approaches that his firm has implemented to protect
20 workers from heat.

21 MR. KINN: All right. Thank you, Kevin. And
22 thank you, everybody, for this -- this public hearing.

1 As Kevin said, I -- I represent both AGC and a -- a
2 large contractor. Kwest group is a environmental,
3 heavy civil, and industrial contractor. We currently
4 have performed work in 40 states, including the
5 Caribbean as well.

6 So we have a unique, I guess, exposure in that
7 most of our work is outside with -- with some indoor
8 exposures. But I also have a unique experience in that
9 in my 30 year career, I've worked for vertical
10 construction as a general contractor, I've worked for a
11 large oil and gas organization across the US, and now
12 with -- with Kwest Group. I want to concentrate on --
13 on just five basic issues.

14 I think one of the biggest ones with a one-size-
15 fits-all standard is the geographical differences. We
16 have crews that are -- are working, currently, in South
17 Texas all the way up to Massachusetts. Our crews in
18 South Texas and Florida deal with heat drastically
19 different than our crews in Arkansas or Indiana.
20 They -- because it just feels different to them. The
21 heat index may -- may be a uniform number to read, but
22 it feels different for those individuals that are

1 acclimated to those locations. So I think acclimation
2 is a -- is a big issue with geographical differences.

3 A one-size-fits-all rule that's prescriptive on
4 the amount of water, the break schedules, and the other
5 controls isn't going to fit well. My guys in South
6 Texas are automatically looking and saying, hey, an 85-
7 90 degree heat index down here is a vacation compared
8 to their 104 degree heat index that they're getting in
9 the middle of summer. Whereas my crews in -- in
10 Massachusetts, a 90 degree heat index and, you know,
11 they're -- they're thinking that the world's going to
12 start coming to an end because that's unusual for them.

13 I think the -- the major concentration shouldn't
14 be a prescriptive heat index number, but more of the
15 change, you know, going from what is a normal heat
16 index in that location to what is a significant change
17 or deviation from -- from what that normal heat index
18 is in that location. That's when we -- we start seeing
19 our problems and our projects. And that's --
20 personally, that's where we really concentrate and get
21 notice out to our guys saying -- hey, it's going to be
22 unusually warm today. It's going to be unusually humid

1 today. Let's concentrate on making sure people are
2 taking those breaks. So it's not a uniform, one-size-
3 fits-all. It's look at each location and what's
4 significantly different.

5 The second issue I want to look at is the amount,
6 location, and temperature of water. Under the proposed
7 standard we're expected to provide one quart of water
8 per person, per hour in addition to the requirements of
9 1926.51 says you have to have an adequate supply of
10 drinking water. So that would require an employer to
11 supply more than one quart of water per hour per
12 person. From a logistics standpoint, that's roughly
13 one case of water per person, per hour for an entire
14 day. That's a lot of water to store on a -- on a good
15 sized project.

16 But from a health standpoint, according to
17 university hospitals and other medical references,
18 water toxicity is prevented by ensuring that your water
19 intake is less than what the body can excrete.
20 According to -- to the sources, the -- the body can
21 excrete approximately 800 milliliters, or roughly one
22 quart per hour. So if we have a standard that says I

1 have to supply more than one quart per hour, but a
2 healthy individual can maximum wise excrete one quart
3 per hour, I'm -- I'm right there at that limit. I'm
4 supplying more water than what the body can excrete.
5 And I understand supplying doesn't make -- make them
6 drink it, but having to supply more than what the body
7 can tolerate seems to be a very, I guess, dangerous
8 number to be at.

9 In addition to -- to the water being there and how
10 much has to be there, being readily accessible, I
11 currently have a couple projects that are a 40 mile
12 right of way. And there's going to be four crews
13 working along that 40 miles. Each crew will have a
14 large cooler with water that's in the cooler, and --
15 and it's suitably cool, you know, by -- by our
16 definition. But in order to replenish that, the supply
17 may be 5 to 10 miles away. So periodically during the
18 day, one of the crew members drives back, replenishes
19 the cooler, and brings it back to them.

20 Well, during that time period, they may not have
21 readily accessible water because they're going to fill
22 up the cooler again because it's 8, 10 miles down the

1 right of way. So it's not a quick drive. It's a slow
2 10 mile an hour drive, all the way down, replenish the
3 cooler, all the way back, because those supplies have
4 to be stored at a central location for all four crews.
5 So I think, logistics wise, that could create a major
6 issue.

7 So I think the -- the term readily accessible
8 could create a lot of interpretations. How is a CSHO
9 going to -- to interpret -- is driving down ten miles
10 to replenish the cooler and bring it back, does that
11 all of a sudden make that water not readily accessible
12 because it's too far away? There has to be an ability
13 to do that and I can't just have one person -- add a
14 new person to a crew that does nothing but drive the
15 water to the different locations. That's adding more
16 people to a crew that -- that's not needed.

17 And then the definition of suitably cool, I'm not
18 sure that's a -- that's a great definition. It seems
19 to be a -- a very gray definition or arbitrary term.
20 And the -- the Notice of Proposed Rulemaking further
21 explained and said, well, it must be low enough to
22 encourage employees to drink it. Again, you defined a

1 gray arbitrary term with another gray arbitrary term,
2 so it really doesn't help tell me how cool it needs to
3 be.

4 I have crews that do not want their -- their water
5 on ice. They -- they just want it in a shaded area, so
6 it's -- it's somewhat cool. I have others that want it
7 on ice. That's more of a personal preference of what
8 that suitably cool is. So I think that supplying
9 the -- the drinking water should be the goal --
10 supplying it so it's acceptable to the crews should be
11 the goal. So having a -- an arbitrary gray term of low
12 enough or suitably cool is going to be extremely hard
13 to find, extremely hard to enforce, because each crew
14 is going to be different. So there's going to be no
15 uniform one prescriptive way of doing this. It's going
16 to be crew based, right?

17 The third area I want to concentrate on is with my
18 crews working at so many locations that are remote
19 along, you know, right of ways with heavy equipment. A
20 lot of their break areas are the actual heavy equipment
21 they're working on. We may have a crew truck, but
22 again, if I've got five people in a location, I can't

1 get five people into a crew truck, so they rotate their
2 break schedules. If somebody needs a break, they go
3 sit in the crew truck and get cooled off. In most
4 cases, that crew truck could be 40 to 50 yards away
5 because we tell them we don't want the crew truck
6 anywhere near the heavy equipment that is rotating and
7 moving, because that would require an additional
8 spotter.

9 So being readily accessible for the break area, if
10 40 to 50 yards is that definition, I think that needs
11 to be defined as okay, how far is too far away?
12 Readily accessible, again, is a gray arbitrary
13 reference. I don't want to get that truck any closer
14 to them because it could become an obstruction. And
15 then we have vehicle on vehicle interactions, which can
16 be a major problem on our projects.

17 Having a prescription of prescriptive nature that
18 says everybody must take breaks, may work on some
19 projects. But on our projects where we're having large
20 pours of concrete pads, I cannot have the entire crew
21 take a break all at the same time. That's going to --
22 that's going to interfere with the quality of the pour.

1 So I have to rotate my people. Some are going to be on
2 break, while others are finishing the concrete, while
3 others are pouring. I just rotate those crews around
4 so they can take breaks as needed. But it's not a
5 prescriptive every two hours, there's a 15 minute
6 break, everybody take their break. It's rotating those
7 things. So I -- I have to be able to be flexible. So
8 a prescriptive nature standard is not allowing that
9 flexibility to rotate those -- those break schedules to
10 ensure continuity of the pour.

11 The fourth one I want to talk about is the actual
12 heat stress injury and illness plan. So our approach
13 has been -- we've created a -- a simple four page
14 company safety plan that says, how are we going to
15 approach this on our job sites? And then we added a
16 one page heat stress plan to our JHAs every morning,
17 with the very first question saying, are you going to
18 be over 80 degree heat index today? If yes, fill out
19 the plan; if no, this plan is not required.

20 But that -- that one pager that every crew fills
21 out discusses what are the -- what are the, I guess,
22 the hazards of that heat index and at what level are

1 you going to be working at, where are -- is your water
2 supply at, where is your breaks? So it -- it covers
3 those things that are required in that heat illness
4 plan that's in the notice of proposed rulemaking. But
5 it's a one pager that we use on the job site that
6 identifies where's your break area, where's your water
7 at, what's your break schedule, what are additional
8 controls that can be used? And it's more, I guess,
9 crew specific. So my crews that are -- are four miles
10 apart may have different approaches of how they're
11 doing that and when they're taking breaks, how they're
12 rotating those things. That JHA is signed off on by
13 our project competent person or that crew's competent
14 person.

15 With the notice of proposed rulemaking, they're
16 creating a new job title, heat stress coordinator, that
17 has to have additional training on top of that, that
18 can only monitor 20 people at a time. Now my crew
19 competent person, can monitor as many people as they
20 can visibly control and -- and communicate with. So
21 that -- that creates an arbitrary, I guess, position.
22 And I'm not sure that suits us, that -- I don't think

1 that accomplishes anything other than did you name
2 somebody? My site competent person is the person in
3 charge of the entire site. They're already in control
4 of that site, they're already filling out this heat
5 stress plan, they're already on top of that.

6 And to limit them to -- to only monitoring 20
7 people seems arbitrary, especially when we turn around
8 and look and say, my competent person on the roof
9 working as a safety monitor can, according to the
10 standard monitor, as many people as they can visually
11 and verbally communicate with. And that's dealing with
12 fall hazards, which is the number one cause of deaths
13 in our industry.

14 So I don't know why we would limit that heat
15 stress coordinator, or specifically, the competent
16 person to only monitoring 20 people. I don't know if
17 that serves any real purpose other than naming a new
18 person, creating a new job title.

19 JUDGE LARSEN: All right. Mr. Kinn, I'm going to
20 have to interrupt you. Your -- your time is up. Is
21 there anything else?

22 MR. KINN: No. Those are my final comments.

1 Thank you very much.

2 JUDGE LARSEN: All right. Thank you both, Mr.
3 Kinn, Mr. Cannon. Let me ask the OSHA panel, any
4 questions for the witnesses?

5 MR. SCHAYER: Yes, Your Honor, we do have some
6 questions.

7 JUDGE LARSEN: Fire away.

8 MR. SCHAYER: Thank you. First, I'd like to thank
9 you, Mr. Cannon and Mr. Kinn, for your testimony today.
10 My name is Stephen Schayer. I'm from the Directorate
11 of Standards and Guidance, and I had a few questions
12 first. And then I believe we have some on the panel
13 here as well.

14 So first, I wanted to ask a question about scope
15 that was in your written comments. There in the
16 comments you had indicated that the rule should not
17 apply to employees whose primary job functions are
18 related to the inspection, oversight, and coordination
19 of work tasks. So I was just hoping you could further
20 explain this a little bit and also describe these
21 employees' work activities with respect to heat
22 exposure. That would be helpful for us.

1 MR. CANNON: This is Kevin Cannon. And Steve,
2 feel free to jump in. That comment was more specific
3 to those who are serving in the supervisory role, who
4 you know, may not be involved in the manual labor, but
5 their job is to make sure the project is progressing
6 along. So you know, the example Steve gave, you know,
7 with a 40 mile right of way, right -- you know, his
8 superintendent foreman they're making sure that the
9 work is being done. So you know, they're not, you
10 know, digging trenches, installing piping, or anything
11 along those lines. And I just think that you know,
12 the -- the exemption should be applied to those
13 individuals who aren't, you know, actively involved in
14 the construction process other than a -- a supervisory
15 role. Do you have anything to add to that, Steve?
16 Stephen Kinn?

17 JUDGE LARSEN: I think -- I think we should take
18 that as a no.

19 MR. SCHAYER: Okay.

20 JUDGE LARSEN: Next question.

21 MR. CANNON: He may be having challenges with his
22 audio. I'm not for certain.

1 JUDGE LARSEN: That could be. We'll give him a
2 chance if he comes back.

3 MR. KINN: Can you hear me now?

4 JUDGE LARSEN: Yes, Mr. Kinn. Go ahead.

5 MR. KINN: For some reason, it wouldn't let me
6 unmute. No, I would agree. Our -- our -- our
7 superintendents will -- will bounce around from project
8 to project and be on a site for 15 minutes to a half
9 hour and then move to another site. So they're not
10 performing work. They're just verifying work is
11 getting performed.

12 MR. SCHAYER: Okay. Great. Thank you very much,
13 appreciate that clarification. The other question I
14 have is about performance based standards. So in your
15 testimony today, also in your written comments, you had
16 indicated that the proposal is too prescriptive for
17 construction industry and should provide more
18 flexibility and be more performance oriented. So I was
19 just hoping either now or in your post-hearing comment
20 that you might be able to provide some recommendations
21 on how OSHA should structure, or could structure a more
22 performance oriented standard?

1 Over the course of the past few days, we've
2 received some testimony and also have some comments
3 from folks that there should be at least some
4 prescriptive elements so employers can ensure they're
5 in compliance without unnecessary ambiguity. So I was
6 wondering if you'd be able to speak again now or in
7 your post, hearing comments on any elements in a heat
8 injury prevention plan that you'd envisioned to be
9 prescriptive and which could be more performance based?

10 MR. CANNON: Kevin Cannon again. And again,
11 Steve, if you are able to unmute, chime in. But I -- I
12 think Steve touched on some of that, you know, in the
13 written -- pardon me -- in the written plan. You know,
14 it says identify the specific location for the -- the
15 break areas. You know, in construction that could be
16 in one place today, a different place tomorrow. You
17 know, another element of it was, you know, the one
18 quart per employee per hour. You know, again, there
19 aren't any walk in coolers on the construction project.
20 And so you just, you know, provide what you can
21 accommodate, you know, at the beginning of the shift
22 and you replenish accordingly.

1 So I think Steve touched -- gave a couple of
2 examples of that. But we'll work to provide any more
3 recommendations on how it could be, you know, more
4 performance based as -- as we recommended.

5 MR. SCHAYER: Great. Thank you very much.
6 Anything that you could add in your post-hearing
7 comments on -- on the structure of a performance based
8 plan would be very helpful.

9 And finally, my last question was for Mr. Kinn. I
10 was wondering if you might be able to share with OSHA
11 the one page heat addendum that your company uses. If
12 not, that's okay. But if you're able to share it in
13 post-hearing comments, or at least a summary of what it
14 contains, that would be very helpful as well.

15 MR. KINN: Yeah, I have no problem sharing that
16 whatsoever. I've given it out to multiple contractors
17 as a -- at least a stepping stone. It was -- it was
18 actually built around the notice of proposed rulemaking
19 and say, okay, let's -- let's come to a standardized
20 approach. I don't think it meets the letter of what's
21 written, but I think it gets us to that performance
22 base of, hey, I'm at least performing to that level.

1 But absolutely, I'll -- we'll include that in the --
2 the post-hearing comments.

3 MR. SCHAYER: Great. Thank you. That would be
4 very helpful. So those were my questions. Now I will
5 turn it to Terry Goodwin from our Directorate of
6 Construction.

7 MR. GOODWIN: Hello, I'm Terry Goodwin with
8 Directorate of Construction, OSHA. In your comments
9 you expressed express concerns about the proposed
10 rule's lack of consideration for the dynamic nature of
11 the construction industry, and advocated for a
12 construction specific standard. Could you provide
13 specific recommendations for how OSHA might revise the
14 proposed rule to better accommodate variability in site
15 conditions and resources across the construction
16 industry?

17 MR. KINN: This is Steve Kinn. I'll start just in
18 case. Yeah, I think the -- the approach of it being
19 part -- I think that's -- from my opinion, I think
20 that's one of the lacking points in the OSHA standards,
21 is it doesn't require a daily plan, such as a JHA type
22 of approach. I think that in a fixed facility, a -- a

1 general industry facility, they may not take that
2 approach, where in construction that daily plan is a
3 necessity.

4 And I think that's where the two versions of this
5 could, could diverge and say -- say, hey, in -- in
6 general industry, you need to have one general approach
7 in where your break areas are, they're sit, they're --
8 they're fixed. Where, in construction, they're
9 constantly variables, so it's a daily how is it
10 changing? What is today's change? What is today's
11 environmental conditions. What are today's break
12 locations. So it becomes a -- a daily plan versus a --
13 a written heat injury and illness prevention plan that
14 is stagnant and not flexible.

15 MR. CANNON: And you know, this is Kevin Cannon
16 again. And you know, one of the things, again, the
17 monitoring and retention of those records for
18 temperatures. You know, what -- you're working in --
19 it -- well -- you know, we're currently having to build
20 out; we're moving offices. And, you know, it would do
21 no contractor no good to monitor temperatures, retain
22 that information, because they're not going to be

1 working in a similar or the same environment. So it's
2 not -- you know, maintaining those records is not
3 predictive of what a future project may look like.

4 MR. GOODWIN: Okay. Thank you. This is Terry
5 Goodwin with Directorate of Construction, OSHA.
6 Additionally, are there examples of effective
7 performance based standards that OSHA could use as a
8 model? I know, Stephen, you mentioned your one page,
9 but if you guys have any other examples or could
10 provide them in the post-hearing comments, that would
11 be appreciated.

12 MR. CANNON: Kevin Cannon. We will do our best
13 to -- to respond to that in our post-hearing comments.

14 MR. GOODWIN: Hey, Terry Goodwin, Directorate of
15 Construction, OSHA. Could you elaborate on the
16 specific aspects or changes of the construction
17 industry that you believe necessitate a separate
18 standard than the current proposal and what components
19 or criteria would you recommend OSHA include in a
20 construction focused standard?

21 MR. CANNON: Given -- Kevin Cannon -- given
22 Stephen Kinn has a very diverse background, I'll punt

1 that to him and give him a shot at answering that.

2 MR. KINN: Yeah. I think the uniqueness of the
3 construction industry is that in most -- especially
4 contractors of -- of my, I guess, setup. I've got, you
5 know, roughly 42 projects running at any one time in 20
6 different states. And -- and each day is different.
7 So I think the -- the daily change is the biggest issue
8 that we have with that and that our crews are
9 different.

10 We -- we -- last year we tried to implement a long
11 sleeve wicking shirt for everybody on every crew. And
12 our crews in Arkansas and Texas adopted it
13 wholeheartedly, no problem. And our crews in West
14 Virginia basically told us if we have to wear long
15 sleeves while we're operating heavy equipment, we quit.
16 Because they didn't see the value in -- in that for
17 them. So I think it's -- it's arbitrary depending on
18 what location you're working in. So I think it's --
19 it's even more than just, hey, construction's different
20 than general industry.

21 Unfortunately, one piece that's missed with a lot
22 of standards is the attitude of the construction worker

1 is different depending on which geographical location
2 you're in. So I -- I think that any standard that is
3 written that says general industry works exactly like
4 construction is not taking into consideration those
5 issues. I think that's where the construction industry
6 needs that -- that additional help saying, hey, let's
7 be more flexible. Let's be more performance based,
8 that you are achieving certain things.

9 And I agree, you have to have some numbers there.
10 You know, at what temperature do you -- or what heat
11 index should you start, you know, when do you have to
12 have training, those types of things. But having, you
13 know, the, I guess, prescription of one quart per hour
14 per person and those types of things are where it can
15 create problems on a job site.

16 MR. GOODWIN: Thank you. Terry Goodwin,
17 Directorate of Construction, OSHA. As far as
18 prevention plans, with respect to observing employees
19 for signs and symptoms of heat-related illness, what's
20 a feasible ratio of the heat safety coordinator or
21 supervisor to employees?

22 MR. CANNON: This is Kevin Cannon and I'll start.

1 And again if Steve has something to -- to add in -- I
2 don't know if there's a specific number. You know, as
3 I think -- you know, we -- and even OSHA recognizes,
4 right, with your most recent -- well, not just your
5 most recent, but in your resources as you head into
6 your heat illness and prevention campaign, that heat
7 is -- you know, the way an individual responds to
8 excessive heat is so individualized, and there are so
9 many factors that play a role.

10 So, you know, our thinking is, you know, everyone
11 should be trained to the same level. Everyone should
12 be educated as to how to understand and identify how
13 their bodies respond. And you know, I -- I don't
14 necessarily think a heat coordinator -- a heat safety
15 coordinator would be able to pick up on those things.
16 I mean, you know, the low hanging fruit for the heat
17 safety coordinator is do we have water, do we have
18 shade? But there are so many other factors that come
19 into play. I don't know if there's a magic number for
20 that.

21 MR. KINN: Yeah. This is Steve Kinn. I would
22 agree in that I don't know if there is a magic number.

1 I think that on our large projects we have one
2 competent person for one task. We have another
3 competent person for another task. But it's task
4 based, it's not numbers based. It's not -- you know,
5 in the excavation standard, I don't have a competent
6 person for excavations and they can only monitor, you
7 know, 10 people in a hole.

8 So I don't think it's numbers based; I think it is
9 performance based. And -- and I -- we really promote
10 that buddy system of, hey, the foreman and the
11 competent person can give you the water, can tell you
12 to take the breaks, can tell you to take it easy if
13 you're starting to -- to get hot. But it's your buddy
14 that you're working with that's going to be most close
15 to you to say, hey, I think we need to take that break.
16 You're looking awfully red. Or hey, you're -- you're
17 awfully sweaty. That competent person, whether they
18 are monitoring 20 people, 50 people, or they're
19 monitoring three different crews, isn't there every
20 second of the day his buddy is.

21 I think that's where we concentrate our efforts
22 on, and that's where we do our trainings and say --

1 hey, you have to watch each other. I'm not going to
2 know it. Your buddy might know if you've got a medical
3 condition that you haven't told us about, he can be
4 more, I guess, visual with that and have an
5 understanding of that. We encourage them, if you've
6 got something that is going to interfere from a
7 personal standpoint, let us know, we'll make
8 accommodations. But they don't always share that, but
9 their buddies might.

10 MR. GOODWIN: Thank you. Terry Goodwin,
11 Directorate of Construction, OSHA. Finally, with
12 drinking water, you've expressed concerns that suitably
13 cool for water temperature is too subjective, which may
14 lead to inconsistent enforcement. If OSHA were to
15 provide a more detailed definition using a temperature
16 cutoff, would that help alleviate your concerns? Do
17 you foresee any issues of requiring a specific
18 temperature cutoff for water?

19 MR. KINN: This is Steve Kinn with Kwest Group.
20 Yeah, I think being prescriptive with a specific
21 temperature could be very problematic. I think there
22 needs to be a range. I think that it all depends on

1 the atmosphere you're working in. If you're working in
2 an atmosphere that is 84 degrees and 40 percent
3 humidity, so it feels like it's 86 degrees heat index,
4 I think that having water that is just a little bit
5 lower temperature than -- than the room temperature
6 might be acceptable to some people. I think that if
7 you've got somebody that's working in South Texas and
8 it's 104 degree temperature, and the -- the heat index
9 makes it feel like 105 or 106 or even higher. You give
10 that person water that is, you know, 40 degrees, it's
11 going to feel like it's putting them into shock because
12 it's too cold for them.

13 So I think, again, it is more performance based.
14 So I think it does need to be a range, but I think it
15 needs to be more -- more defined than suitably cool.
16 So I think there has to be some type of compromise
17 between those two things, because given a prescription
18 for a specific temperature, I -- again, I think it
19 should be the water needs to be a different temperature
20 than what the atmosphere is. So maybe a range of how
21 much cooler does it need to be than the -- the current
22 heat index or the current temperature that's outside,

1 versus just one set number across all geographical
2 locations.

3 MR. SCHAYER: Okay. Thank you. Your Honor, if I
4 could turn it over to Patti Downs for a few more
5 questions, we'd appreciate it.

6 JUDGE LARSEN: Surely.

7 MS. DOWNS: All right. Good morning everyone.
8 Patti Downs with the Directorate of Standards and
9 Guidance. First, let me just start by saying OSHA is
10 really interested in learning more about the controls
11 that are being implemented in the workplace. So if you
12 have any information you could provide in your post-
13 hearing comments on the controls in use, we would
14 really appreciate that.

15 Mr. Cannon, in your testimony earlier today, you
16 briefly mentioned how monitoring for temperatures might
17 not be representative of actual working conditions as
18 they continue throughout the job site. And I'm curious
19 to know how you are currently determining when to
20 implement or use controls to prevent overexposure to
21 heat?

22 MR. CANNON: Kevin Cannon. In the absence of

1 monitoring temperatures, I think it's more of going off
2 of the feel, you know, and using, you know, the ambient
3 temperature outside as a, I guess, a starting point to
4 understand how that might impact the indoor
5 environment. And so, you know, I would say we know
6 what hot is, right? And so I just think it's more of,
7 you know, this is feeling a little warmer than it did
8 yesterday or whatever the case may be. And then, you
9 know, again, as Steve said, you inform the folks, you
10 know, take the -- the breaks as necessary, you know,
11 make sure you're hydrating. So currently there is no
12 set method that contractors are using. I mean, some do
13 track the indoor temperatures, but, you know, I don't
14 know if that's widespread. Do you have anything to
15 add, Steve?

16 MR. KINN: Yeah, this is Steve Kinn with Kwest
17 Group. I would add -- add the same thing. It's --
18 it's not so much that you're not monitoring these
19 things. It's -- it's we're not tracking it. I -- I
20 see no value in -- in saying what was the heat index
21 on -- on July 4th, you know, 2022, because that's not
22 predictive of the heat index this coming July 4th.

1 And even from an indoor standpoint, a lot of my
2 locations have shop areas on a job site that are three
3 walls and a garage door that I can do the monitoring in
4 that space for today. But telling me that that's going
5 to be the condition at my other shop location 40 miles
6 away, is not predictive. It doesn't help me with
7 that -- that anticipation. It's just what is it today.
8 So tracking it long term for six months because it's an
9 indoor location does me no value.

10 MS. DOWNS: Okay. Thank you. And then you had
11 also briefly mentioned where you keep water and break
12 areas on some of the -- the job sites. So I'm curious
13 with some of the difficulties with relocating break
14 areas and water as workers move through locations.
15 Have you found any, I guess?

16 MR. CANNON: Kevin Cannon, could you clarify what
17 you're asking?

18 MS. DOWNS: Yes.

19 MR. CANNON: Are you asking if there's
20 difficulties with relocating the break areas and water?

21 MS. DOWNS: Yeah. Mr. Kinn had mentioned that
22 some of his work areas are up to 40 miles long and

1 spread out. And so I'm just curious if you've
2 struggled or if -- if it's pretty simple for you to
3 relocate where you're keeping the water throughout the
4 worksite, throughout the day, where you're keeping
5 break areas, that sort of things, for employee access.

6 MR. KINN: Hey, this is Steve Kinn with Kwest
7 Group. It's extremely difficult, especially on some of
8 our bigger projects where, you know, that 40 mile right
9 of way access roads that we're putting in for our --
10 our owner that we're working for has two lay down
11 yards. And those lay down yards are 20 miles apart.
12 And in order to give me a different lay down yard to
13 store water, then I have to go lease new property
14 that's not part of the project site. So that becomes a
15 logistics nightmare of, okay, now I'm adding costs that
16 weren't anticipated because I want to try to get that
17 stored water closer to the crews versus the crews
18 having to go to the lay down yards to grab the water
19 they need to take it back to their work location.

20 So each crew will have a cooler, and they'll have
21 enough water that can fit in the cooler for the crews
22 for a time period, but they don't make large enough

1 coolers for -- to hold 10 cases of water for each hour.
2 They have to go back and periodically replenish that
3 cooler back at the laydown yard, which could be 20
4 miles away.

5 MS. DOWNS: Okay. Okay. So OSHA -- I guess I
6 should say should OSHA -- OSHA require -- I'm sorry.
7 Let me start over.

8 How close should OSHA require the break areas to
9 be to workers, and when should a break area be
10 considered too far away? Then I'd also like to note
11 that there are several states Maryland, Colorado,
12 Oregon, Washington and California that all have
13 requirements for shade to be close to workers. So I'm
14 wondering how workers in those states currently comply
15 with that requirement as well.

16 MR. KINN: So this is Steve Kinn with Kwest Group.
17 In those areas -- out are shaded areas are a little bit
18 more -- I guess I won't say -- are a little bit easier
19 to control, in that most of our areas will have a --
20 a -- a project truck or a project vehicle that they can
21 cab up in and use as a shade area. And in those
22 locations where we have trees areas, we get those

1 trucks and vehicles parked in the shade areas so they
2 can get into a shaded area for a break.

3 But that break area is going to change every day
4 because the site is constantly moving down the road.
5 The -- the biggest logistics area is having
6 accessibility to get more water.

7 MS. DOWNS: Right.

8 MR. KINN: So it's not so much having that water
9 on hand, having it all suitably cool. It's okay --
10 I've got this much now. If I need more, I have it 20
11 miles away. I can go get it and bring it here. It'll
12 take time to get it cooled off because it's stored at a
13 location that has no power, nothing. It's just a
14 storage yard. So they can go get it, they can bring it
15 here, we can put it on ice. That's the biggest
16 logistics.

17 The -- the break areas. A lot of times -- I'll be
18 honest, I've got some of my sites down in South Texas,
19 because there are no trees, their best break area is
20 they -- they lift up, you know, a canopy and put it on
21 the -- the top of the -- the loader bucket and create a
22 shaded area off of the piece of equipment. Because

1 there is no other shade available, because the tallest
2 tree is, you know, four and a half foot tall in some of
3 these areas.

4 MS. DOWNS: Okay. Thank you. I appreciate your
5 responses. And then in the interest of time, I just
6 have a couple of questions I'd like to read into the
7 record to be answered later in post-hearing comments.

8 In construction, some commenters stated that a
9 mandatory 15 minute break every two hours would be too
10 rigid due to the types of work being performed, and
11 asked for flexibility with this requirement. Can you
12 describe how you would suggest OSHA modify the proposed
13 rest break timing requirements to allow the flexibility
14 that would help address this concern, while still being
15 protective?

16 And then Oregon's rule for outdoor work has a
17 provision that allows for the use of cooling vests,
18 either with fans or ice packs, water dampened cotton
19 clothing, or similar effective measures in lieu of
20 shade, when the employer can demonstrate that providing
21 access to shade is not safe, or when it interferes with
22 the ability of employers and employees to complete the

1 necessary work in a particular situation. Can you
2 explain if this flexibility would be beneficial to
3 employers, or if you are aware of any employers using
4 any of these cooling measures? That's it. Thank you.

5 MR. SCHAYER: Thank you, Patti And Your Honor, if
6 you could, we had one more question we'd like to read
7 into the record. And then that will conclude OSHA's
8 questions. So --

9 JUDGE LARSEN: Okay. Yes, of course.

10 MR. SCHAYER: Zoe Petropoulos.

11 MS. PETROPOULOS: I am sorry, I do have two, but
12 I'll -- I'll keep them quick.

13 Mr. Cannon, in your written comment on the NPRM,
14 you wrote that the triggers proposed by OSHA failed to
15 properly account for climatic differences among the
16 various regions in the United States, and we heard
17 something similar in your testimony. So are -- my
18 question was, if OSHA were to account for this, what
19 geographic area would you propose that OSHA consider
20 for establishing any such triggers, for example, at the
21 county level, state level or regional level? And what
22 data would you propose OSHA rely on for establishing

1 these triggers?

2 And kind of a subpart to that is, if you foresee
3 any issues with members complying with differing
4 triggers across the country, particularly -- excuse
5 me -- those that have operations in multiple states or
6 regions. I think I heard that the Kwest group operates
7 in 40 states, so would be interested to hear from them.
8 Sorry, I'm losing my voice.

9 My next question for the record, and we just ask
10 that you consider this in your -- your post-hearing
11 comments, Mr. Kinn mentioned an emphasis on considering
12 unusually warm days. And my question is, should there
13 be any protocols or control measures implemented on
14 days that are warm, but maybe not meeting what you
15 would consider to be unusually warm? And if you
16 already are doing something on those days we'd love to
17 hear about that in your comment.

18 And the sub part to that is, if you can share any
19 definitions that you currently use for unusually warm
20 at your work sites, we'd love to hear that. Thank you
21 so much.

22 MR. SCHAYER: Okay. Thank you again, Mr. Cannon

1 and Mr. Kinn for your testimony. Your Honor, I believe
2 that concludes OSHA's questions.

3 JUDGE LARSEN: All right. Thank you, Mr. Schayer.
4 Do we have any questions from the Solicitor?

5 MS. WILES: Hello. Thank you, Your Honor. Linda
6 Wiles for the Solicitor's Office. I don't have any
7 questions. Thank you, Mr. Cannon and Mr. Kinn.

8 JUDGE LARSEN: Okay. Do we have any participant
9 questions?

10 MS. CARLON: Yes, Your Honor, we have two. The
11 first -- we actually have three. The first is from Mr.
12 Schneider. Please state your name for the record.

13 MR. SCHNEIDER: Scott Schneider. Hi, Kevin. Hi,
14 Mr. Kinn, thanks for testifying. I had a question.
15 Mr. Kinn, in your testimony, you talked about this one
16 page heat stress checklist that you have, and -- and
17 you said that it started -- the first question was, is
18 it over 80 degrees and I assume that means 80 degrees
19 heat index. Is that correct?

20 MR. KINN: That is correct. And when I said that,
21 it actually states it on the form, is it going to be
22 above the 80 degree heat index?

1 MR. SCHNEIDER: Okay. Now is that does that vary
2 geographically or do you use the same checklist for
3 Texas versus Arkansas or South Dakota?

4 MR. KINN: So I'll be specific. The version that
5 I referenced in this testimony is one that we created
6 to -- to try to see how would we comply with the
7 standard. And what we're getting is the feedback that
8 is that it's different. You -- using arbitrary 80
9 degree heat index is great as a starting point, but the
10 guys in South Texas are like, why are we starting at
11 80? That's a vacation day. And the guys in Arkansas
12 are saying, hey, why are we starting that low? Whereas
13 the guys in Massachusetts, when it hits 80, they're
14 like, why are we waiting till now to get started on
15 this?

16 So I think that it is -- it has created a -- I
17 guess, a notice that it is different in each location.
18 So us using the 80 that was prescribed in the proposed
19 rulemaking as a -- as a testing point seems to be a
20 problem for us. We just haven't got a great solution
21 right now.

22 MR. SCHNEIDER: Uh-huh. Are you also in your

1 checklist looking at radiant heat exposures? Is that
2 included in your -- your JSA or your analysis.

3 MR. KINN: At this point in time, no. In that
4 each location being different, we -- there's no -- with
5 so many jobs, there's no way of getting wet bulb
6 temperature set for each location. The equipment
7 putting out there, getting the people trained to use it
8 properly has been an obstacle. So we're simply using
9 the OSHA, NIOSH heat guide that's available. And each
10 one of our crew members has that on their phones, and
11 we tell them to monitor that and -- and implement
12 controls as needed. And some crews go well above and
13 beyond and others, you know, we -- we constantly have
14 to harp on -- hey, guys, we need you to take your
15 breaks.

16 MR. SCHNEIDER: And are you aware of the new AIHA
17 heat stress app that includes wet bulb globe
18 temperatures?

19 MR. KINN: I am. We have not rolled that out to
20 our crews yet. We -- we stuck with the -- the
21 established NIOSH and OSHA heat stress guide for right
22 now.

1 MR. SCHNEIDER: Okay. And does your checklist
2 also include a high heat trigger?

3 MR. KINN: Yes. So what we did is we actually
4 broke it down into four categories 80 to 90 degree heat
5 index, 90 to 105 degree heat index, 105 to 129, and
6 then anything over 129. So for us, anything that
7 triggers -- and we've done this in South Texas and
8 other locations -- anytime there's a heat index that
9 that hits 129 or above all work is shut down and you
10 need to schedule work for different times of the day.
11 So our South Texas crews are pouring concrete mostly at
12 11 o'clock at night until 8 o'clock in the morning to
13 avoid those high heat index times.

14 MR. SCHNEIDER: Right, right. That's great. And
15 I assume as you -- as you go up that scale, you're
16 including more rest breaks for people, right?

17 MR. KINN: Yeah. Well, based off of the workload
18 they're doing. So we prescribed them -- is it light
19 duty, medium duty, heavy duty? We give them -- we give
20 them descriptions of what those things are. So if
21 you're doing heavy work activities in a high heat index
22 area, your break schedule needs to be different than

1 the operator that's running the -- the dump truck.

2 MR. SCHNEIDER: Right. And so do you think that
3 OSHA should include workload as a factor in determining
4 risk of heat stress?

5 MR. KINN: I -- I think that is a major factor on
6 the risk of heat stress is what work is being
7 performed. Again, as we -- as we testified earlier, my
8 inspector or my superintendent that shows up on the
9 jobsite, walks the jobsite to make sure that work is
10 getting done and people are complying with the JHA and
11 the -- and the heat stress plan has very little
12 workload other than walking through the project.
13 Whereas my laborer, that is, you know, laying out, you
14 know, ground stakes and things like that and pounded
15 them in the ground, has a lot different exposure based
16 off of the workload that they're performing.

17 MR. SCHNEIDER: Right. Well, it sounds like you
18 have a great program. And I'm really appreciate
19 your -- your sharing that with us today. Thank you.

20 JUDGE LARSEN: Thank you, Mr. Schneider. Who's --
21 who's next?

22 MS. CARLON: The final question is from Mr.

1 Lundegren. Please state your name for the record.

2 MR. LUNDEGREN: Hi, this is Bruce Lundegren at the
3 Office of Advocacy at the US Small Business
4 Administration. And hi, Kevin and Stephen. I think
5 you all know that the Office of Advocacy is a federal
6 agency, and we were one of the three members of the
7 small business SBREFA panel on this rule.

8 Kevin, I wanted to ask you and Stephen a question
9 about the hybrid and variable nature of the workplaces.
10 And OSHA proposed rule talks about indoor and outdoor
11 work environments, but it doesn't really deal with this
12 issue of hybrid work environments. And we raised this
13 in -- in our testimony on Monday morning. And Kevin,
14 at our -- at our roundtable a couple of weeks ago, you
15 talked about you know, changes in temperature based on
16 sun, shade, and wind. And it can change, you know,
17 very considerably in short amounts of time. So I
18 wanted to ask you if you could just talk a little bit
19 about the -- the hybrid and variable nature of the
20 workplace and how, you know, indoor or outdoor doesn't
21 really work for you. And then the second part of the
22 question is, can you talk a little bit about

1 impracticality and feasibility and creating a greater
2 hazard by some of these one-size-fits-all prescriptive
3 aspects of the rule. Thank you.

4 MR. CANNON: Thanks for the question, Bruce. And
5 you know -- Kevin Cannon -- that was part of, you know,
6 what I tried to touch on, whereas you have that mixed
7 environment -- I like the way you're saying it, the
8 hybrid environment. And, you know, how, you know, that
9 could create confusion and make compliance a little bit
10 more complex? I'm not for sure if there is a solution.
11 And again, you know, Steve being the -- the well
12 experienced construction safety professional, he may
13 want to chime in.

14 But it's just something that we've heard from
15 members that, you know -- especially our trade partners
16 or even, you know, our general contractors, but more so
17 our trade partners, our members who are working, And
18 you know, one part of the structure may be, by
19 definition from OSHA, indoor and they still have work
20 in what would be considered outdoor. And I'm not for
21 certain.

22 And then you also mentioned, you know, how

1 external environmental conditions can impact that; the
2 humidity, the wind temperature, you know, direct
3 sunlight. I think there's so many things to take into
4 consideration. But Kevin, not having a solution, I'm
5 going to put my partner, Stephen Kinn, on -- on the
6 spot to see if he has anything to add to that.

7 MR. KINN: No. This is Steve Kinn with Kwest
8 Group. I -- I will add, I know, like -- and I'll give
9 a good example. I've got a fixed facility that's --
10 that would be considered a hybrid location in Ohio that
11 is our training location. So every person that gets on
12 one of our pieces of equipment, or any person that does
13 work for us goes through that training location. When
14 they're in the field portion of that, it is 100 percent
15 construction activities. They're practicing their --
16 their skilled trades.

17 On the other side of that facility is my
18 maintenance yard. That's going to be more of a -- of a
19 fixed indoor facility. So I -- I think that, just not
20 in that location, a lot of our job sites are the same
21 way, where we're working at an owner's facility. We're
22 doing work both inside the location but outside the

1 location. So we have to have that flexibility of
2 identifying both of those.

3 I get to my South Texas jobs on high wind days
4 when there's zero humidity. My biggest issue is I want
5 to stop the wind, because that hot wind hitting them is
6 actually making it even worse for them. So I have to
7 change how I protect my people depending on what the
8 individual conditions are. And that indoor versus
9 outdoor -- and even to the point of the -- the hybrid
10 of -- I've got multiple crews from different
11 contractors and trying to coordinate those activities
12 could be problematic as well.

13 MR. CANNON: And Kevin Cannon again, Bruce, to
14 your second question about the greater hazard, you
15 know -- and I think you'll hear us -- I -- I think
16 you'll hear a little bit more later -- I'm calling this
17 the construction day -- from some of our other
18 association, you know, peers that might talk about, you
19 know, working at heights and -- and the greater hazard
20 that, you know, requiring folks to descend from
21 scaffolding and, you know, storm water and all of those
22 other provisions that OSHA has put forth could create

1 those greater hazards. But yeah, I -- I think you'll
2 hear more about that later this afternoon.

3 MR. LUNDEGREN: Great. Thank you, Kevin. This is
4 Bruce Lundegren again. And Stephen, I wonder if you
5 could just speak also to the issue of impracticality
6 and infeasibility. One of the questions OSHA asked us
7 on Monday morning was about -- because we had mentioned
8 road construction as being sometimes setting up
9 artificial shade can be problematic because of
10 impracticality, infeasibility or, you know, things like
11 traffic and just other outside variables. Can you
12 speak to that?

13 MR. KINN: Yeah. Steve Kinn with Kwest Group.
14 Yeah, we don't do a ton of road work. We've got some
15 road projects, especially in specific regions. Our
16 biggest issues there is -- is trying to create a
17 temporary shade area is going to have to constantly
18 change because as the road is moving, the shade has to
19 stay closer to them. I can't have the shade, you know,
20 500 yards or -- or, you know, a mile down the road from
21 them. So it's constantly having to change, which means
22 it has to be mobile. Well, if it's mobile and I've got

1 exposure to vehicular traffic even on the other side of
2 that -- that Jersey barrier, then high wind coming up
3 could knock that thing over and push it into traffic.
4 So I have to find that balance of how do I provide that
5 shade without potentially creating a greater hazard,
6 not just for my people, but creating a greater hazard
7 for the general public?

8 MR. LUNDEGREN: Okay. That's great. Thank you.
9 Thank you, Your Honor. And thank you to OSHA.

10 JUDGE LARSEN: Thank you, Mr. Lundegren. That is
11 the end of the participant questions, do I understand?

12 MS. CARLON: Yes, Your Honor.

13 JUDGE LARSEN: Oh, okay. Then let me ask the OSHA
14 panel, Solicitor, anything further on this?

15 MR. SCHAYER: OSHA has nothing further, Your
16 Honor.

17 MS. WILES: Nothing from me, Your Honor.

18 JUDGE LARSEN: Okay. Very good. Then let's hear
19 from our next witness.

20 MS. CARLON: The next speaker is Joseph Xavier.
21 Please state your name and affiliation. For the
22 record.

1 MR. XAVIER: My name is Joe Xavier, and I am
2 Senior Director of Health and Safety for Associated
3 Builders and Contractors. ABC's 23,000 plus membership
4 represents all specialties within US construction
5 industry, primarily in the industrial and commercial
6 sectors. It is ABC's purpose to ensure all our
7 construction workers get home in the same or better
8 condition than they -- than when they arrived on the
9 job site. And we mean everyone and every day.

10 ABC strongly supports worker health and safety and
11 protection from heat injury and illness, while
12 maintaining flexibility for the fluid nature of the
13 construction environment. ABC has been an active
14 participant in OSHA's heat rulemaking since 2021, and
15 we support the concerns and recommendations expressed
16 during this public hearing by our coalition partners,
17 the Construction Industry Safety Coalition and the
18 Coalition for Workplace Safety.

19 ABC has consistently urged OSHA to focus on the
20 key concepts of water, rest, shade, and training to
21 provide construction employers the necessary
22 flexibility to make such a standard effective. ABC's

1 comments on the rule explained that the proposal
2 imposes prescriptive, complicated requirements on
3 construction industry employers and limits flexibility,
4 which could weaken ABC contractors efforts to prevent
5 heat stress for workers.

6 For example, the rule's mandatory rest -- rest
7 breaks are impractical and would be exceedingly
8 difficult to manage on construction sites due to time
9 and schedule based activity interdependencies. And ABC
10 member reports that for concrete, mandatory breaks,
11 creating a -- can create a coordinating nightmare.
12 Quote, "if you have a large pour, you need all the
13 employees doing their task to ensure it is done
14 properly, since everything is timed in being concrete.
15 The mandatory rest breaks could cause a strain -- or
16 would cause a strain for the contractor to manage the
17 concrete truck timing, the concrete pour rate, as well
18 as coordinating trucks in and out, and the personnel
19 breaks."

20 Another ABC member said the requirements would be
21 difficult to implement when working on swing stage
22 scaffolds on tall buildings. The time to traverse the

1 building to get to a pre-set break location could take
2 longer than the break itself. Instead, ABC recommends
3 that OSHA allows supervisors and employees to work
4 together and coordinate safe approaches for rest
5 breaks, focusing on the individual employee's needs,
6 the nature of the work and the specific workplace
7 conditions.

8 Likewise, the proposal's acclimatization schedule
9 for new employees will be particularly onerous while
10 providing little to no safety benefit to the employees.
11 Compared to other industry, construction workers are
12 already more likely to be naturally acclimated to the
13 work. Often, workers are -- often workers start a new
14 job at a construction work site, are from the same
15 geographical location and accustomed to the weather, or
16 recently came from a job where they perform similar
17 tasks in similar conditions.

18 Further, the proposed rules acclimatization
19 schedule for employees returning to work after
20 vacations or short leave is impractical. Every time an
21 employee leaves work for two weeks, they would have to
22 reacclimatize anytime temperatures are 80 degrees or

1 higher. Construction projects are tightly scheduled,
2 requiring workers to be at a job site within a specific
3 time frame and complete their work within that specific
4 time frame. The acclimatization requirements would not
5 only hurt returning employees, but also employers who
6 have short windows to perform critical maintenance,
7 repair, and other jobs.

8 Moreover, construction employees move from job to
9 job and sometimes employer to employer. Establishing
10 who is acclimated and who is not will be difficult to
11 administer. ABC urges OSHA to focus on heat hazard
12 awareness training and allow employers to develop
13 acclimatization protocols tailored to their work sites.

14 Finally, ABC has consistently urged OSHA to
15 develop a separate regulatory approach for the
16 construction industry. To have one standard for
17 outdoor, indoor -- outdoor and indoor work involving
18 general industry, construction, maritime, and
19 agriculture is misguided. There is already existing
20 precedent for OSHA to develop a separate standard for
21 construction.

22 ABC remains committed to protecting workers from

1 recognized hazards, including heat injury and illness.
2 Any standard addressing heat injury and illness must be
3 flexible and performance based. ABC reiterates its
4 request that OSHA withdraw the current rule as
5 proposed, revise it to allow greater flexibility for
6 affected industries and, at a minimum, develop a
7 separate standard for the construction industry. Thank
8 you for the opportunity to testify today.

9 JUDGE LARSEN: Thank you, Mr. Xavier. Mr.
10 Schayer, do we have questions from the OSHA panel?

11 MR. SCHAYER: Yes. Sorry about that, Your Honor.
12 Yes, we have a few questions.

13 Thank you, Mr. Xavier, for your testimony. I just
14 wanted to follow up on acclimatization, which you
15 mentioned. So you said that, for the construction
16 industry, the proposed rules acclimatization schedule
17 for new and returning employees would be particularly
18 onerous and suggested that OSHA focus on hazard
19 awareness training and allow employers to develop
20 acclimatization protocols tailored to their work site.
21 And I was just wondering if you have any information
22 you could share that would be helpful for us on how

1 employers in the construction industry are currently
2 conducting acclimatization, or what protocols they may
3 be using. If you have anything on that -- like that
4 you could speak to either now or in your post-hearing
5 comments that would be helpful for us.

6 MR. XAVIER: Great. Thank -- this is Joe Xavier.
7 Thank you for the question. We would like to reserve
8 and submit in response -- submit our written response
9 in the post-hearing comments.

10 MR. SCHAYER: Okay. Thank you. Now I'd like to
11 turn to Brian Rizzo from our Directorate of
12 Construction.

13 MR. RIZZO: Thank you. Yes, this is Brian Rizzo,
14 Acting Director for the Directorate of Construction
15 with OSHA. Thanks again, Mr. Xavier, for your -- for
16 your comments here. And -- and so you mentioned
17 flexibility and the need for feasibility to ensure
18 compliance and -- and referenced burdensome effort and
19 a few cases. Can you talk to us a little bit about any
20 of the items in the proposed rule that would be
21 impossible to comply with?

22 MR. XAVIER: Brian, thank you for the question.

1 This is Joe Xavier. We can provide additional
2 responses in the post comment record. In general, we
3 do -- we are looking at more flexibility. The
4 construction industry as a whole is very complex. We
5 have complex worksite conditions, multiple tasks,
6 multiple trades, multiple locations, temperatures and
7 the nature of the work itself. It's a dynamic
8 workplace, so it's always changing. You know, every
9 five minutes we're -- we're in the construction
10 industry, we're building things, we're moving things,
11 we're changing things and there are, you know, people
12 moving in and out. It's -- it's highly variable; it's
13 very dynamic.

14 And then we have the entire workforce in our
15 workforce. It's multi-generational. We have personal
16 risk factors. And then of course the logistics with
17 the scheduling materials, equipment, delays, mismatch.
18 All of those things create a great deal of complexity,
19 and that's the reason why we're looking at the need for
20 flexibility and a performance based standard.

21 MR. RIZZO: Thank you.

22 MR. SCHAYER: Okay. Thank you. I'd now like to

1 turn to Tiffany DeFoe.

2 MS. DEFOE: Good morning, Mr. Xavier. I wanted to
3 ask, when you spoke to your recommendation that OSHA
4 should allow supervisors and employees to work together
5 to coordinate safe approaches for rest breaks, did you
6 mean that in the sense that they should -- that they
7 should communicate in advance of -- like, you know, at
8 the start of the day, in advance of the work beginning,
9 to make a -- a break plan for the day, or were you
10 speaking more about people communicating during the
11 work process?

12 MR. XAVIER: So Joe Xavier with ABC. Tiffany,
13 thank you for the question. I believe Kinder Morgan
14 yesterday, I believe it was Richard, their safety
15 director as well as Steve from today's -- earlier
16 today's testimony from Kwest Group -- I believe they
17 answered very well when they talked about the job
18 hazard analysis, they talked about having a plan. And
19 then, in the construction industry, you know, things
20 change all the time. So have a general plan and then
21 use that daily job hazard analysis and that huddle time
22 to coordinate and make sure that the plan will be

1 effective for those specific worksite conditions and
2 that specific crew.

3 MS. DEFOE: Thank you very much. And I just also
4 wanted to ask -- so the survey of your membership that
5 you've referred to in your comments, it could be very
6 helpful to us if there's -- if it's possible to submit
7 the results of that survey or, you know, as complete
8 information as you're able to give about the different
9 conditions under which flexibility is needed on the --
10 on the rest breaks. Thank you.

11 MR. XAVIER: Sure.

12 MS. DEFOE: Thank you very much.

13 MR. SCHAYER: Thank you. And -- and finally, Your
14 Honor, our last questioner will be Zoe Petropoulos.

15 MS. PETROPOULOS: Hi, thanks so much. This is Zoe
16 Petropoulos from the Directorate of Standards and
17 Guidance. I have a couple questions about ABC's
18 written comment, specifically about triggers. So in
19 the comment you wrote that the heat trigger should be
20 determined by the contractor and those deemed competent
21 persons. And either now or in your written comment,
22 can you describe what data, evidence, and literature

1 you believe the contractor -- contractors would use to
2 determine their own triggers and -- and if they're
3 already doing this, what they currently use? And if
4 you believe for, those who maybe aren't already doing
5 this -- do you believe most construction employers
6 would have the capacity to do this for their work
7 sites?

8 MR. XAVIER: So we can submit our formal response
9 in the post-hearing comments. In general, we do not
10 believe in triggers, and we do -- do feel consistent
11 with what Steve from Kwest Group had testified on his
12 concerns, as well as some of that from Kinder Morgan.

13 MS. PETROPOULOS: Got it. Then I guess my next
14 question might be irrelevant, but I would still
15 appreciate, if you want to think about it in your post-
16 hearing comments. And -- and -- and provide any
17 insight or disagreement with this approach, either way.
18 So you also wrote in the comment that if we did decide
19 to move forward with heat triggers in the final rule,
20 that they should be tailored to -- to geographic
21 regions. And so if you would like to speak to this in
22 your post-hearing comments, what geographic area would

1 you propose that OSHA consider, for example, county,
2 state, regional level, and what data you would propose
3 OSHA rely on for establishing those, and whether you
4 foresee any issues with members complying with those
5 different triggers. And if you want to answer that now
6 or in your post-hearing comments, either is fine.

7 MR. XAVIER: Great. Thank you. We'll take that
8 in post-hearing comments.

9 MS. PETROPOULOS: Got it. And then I just have
10 two more that, for the sake of time, I'm just going to
11 read and -- and you can consider in your comments.
12 What are your member companies currently doing to
13 prevent exposure to heat and reduce exposure to heat?
14 And how do your member companies determine when to
15 start using these measures? And can you provide us
16 with any information about cooling spaces that are
17 provided to workers? Do they include fans or AC and
18 what have the difficulties been, if any, that you've
19 encountered when providing shade and cooling spaces?
20 Thank you so much.

21 MR. XAVIER: Great. Thank you.

22 MR. SCHAYER: And thank you, Mr. Xavier, for your

1 testimony. And Your Honor, that concludes OSHA's
2 questions.

3 JUDGE LARSEN: All right. Thank you, Mr. Schayer.
4 Do we have any questions from the Solicitor's Office?

5 MS. WILES: Thank you, Your Honor. Linda Wiles
6 from the Solicitor's Office. I do not have any
7 questions. Thank you, Mr. Xavier, for your time and
8 your testimony.

9 MR. XAVIER: You're welcome.

10 JUDGE LARSEN: Do we -- do we have any participant
11 questions?

12 MS. CARLON: Yes, Your Honor, we have two. The
13 first is from Mr. Schneider. Please state your name
14 for the record.

15 MR. SCHNEIDER: Hi, my name is Scott Schneider.
16 Thank you for testifying. I had a couple quick
17 questions. One of them is on rest breaks. If you
18 don't have a rest break schedule, then you're basically
19 saying to people need to take rest breaks as needed.
20 Is that correct?

21 MR. XAVIER: So that is one of the options that is
22 in the standard is rest breaks as needed. And in our

1 testimony we talked about that the supervisors or the
2 crew leaders should work in conjunction with the crew
3 and make those decisions as to what is appropriate for
4 the specific work site and the specific conditions and
5 the nature of the work. And you know, we already
6 talked about that -- you know, the job hazard analysis
7 should be pre-planned. And then as well as that daily
8 one for the -- the actual work site conditions and
9 leave those decisions at the you know, local most level
10 where the heat is being impacted and impacting those
11 affected employees.

12 MR. SCHNEIDER: And how do you or how would you
13 recommend that you prevent retaliation against any
14 employee that needs to take a rest break and is told,
15 well, we don't have time for it or it's not appropriate
16 or whatever?

17 MR. XAVIER: This is Joe Xavier with ABC National.
18 Scott, you know, with -- you know, at the end of the
19 day, these are human beings we're talking about. So
20 these aren't just X's and O's. These are, you know,
21 Janes and Joes. These are real people. Our members --
22 we represent 23,000 members, not the entire

1 construction industry, but, you know, what we'd like to
2 think is a higher echelon of the industry.

3 And you know, we have this thing called total
4 human health, and we call it total human health because
5 it places the importance and focus on the importance of
6 the human being in the center of everything we do, of
7 how we get things done. I would like to believe that
8 our -- our members, that they provide us all of the
9 materials for total human health, that they follow
10 those, and that they value their -- their frontline
11 workforce, and they properly train their crew leaders
12 and superintendents to provide appropriate care and to
13 receive input from their crew leaders.

14 MR. SCHNEIDER: Yeah. Thank you. Scott
15 Schneider, I'm -- in terms of -- of the triggers now,
16 OSHA has a mandate under the -- under the OSH Act to
17 make sure that no worker suffers from material health
18 impairment because of exposure to heat or any other
19 hazard. And I'm wondering, if there are different
20 triggers or triggers are being set differently by
21 different employers on different job sites, then how is
22 that going -- how is that going to be enforced by OSHA?

1 And how is OSHA -- how is that going to meet the OSHA
2 mandate to protect material workers from material
3 health impairment?

4 MR. XAVIER: Joe Xavier, ABC National. Thank you,
5 Scott, for the question. So we've talked about heat
6 and extreme heat. Heat is a recognized hazard, just
7 like sharp objects, just like rotating parts, just like
8 pinch points. These are things that can be observed.
9 These are things that can be measured. And these are
10 things that can be controlled using various controls
11 within the hierarchy of controls. As far as the
12 triggers, we've made it clear on several occasions that
13 we do not support the concept of a trigger when there
14 is -- when heat is recognized as a -- as a hazard, it
15 should be addressed.

16 MR. SCHNEIDER: So are you familiar with the
17 scientific literature, looking at heat exposures and
18 when it becomes dangerous to -- to employees?

19 MR. XAVIER: I cannot say that I personally have
20 looked at all the literature. I would not be able to
21 answer that in the positive, Scott.

22 MR. SCHNEIDER: Okay. Thank you very much. I

1 appreciate your comments.

2 MR. XAVIER: Great. Thank you.

3 JUDGE LARSEN: All right. Ms. Carlon, do we have
4 another participant question?

5 MS. CARLON: Yes. The next is from Ms. Cain.
6 Please state your name for the record.

7 MS. CAIN: Hi, Chris Cain with North America's
8 Building Trades Unions. Hi, Joe. I read your
9 comments, and I just honestly have to say they're
10 thoughtful, and I appreciate them. Obviously, I don't
11 agree with everything you've written, but they show
12 independent thought, and that's very much appreciated.

13 But my specific question is kind of to follow on
14 the one that Tiffany asked regarding your survey. It's
15 really easy to make assumptions about the survey
16 results based on what you reported in -- in your
17 comments that could be used to argue against your
18 points. So to that end, to kind of fill in the gaps,
19 you know, I would echo that if you would consider
20 sharing the survey instrument, the methods of the
21 survey, and the raw results into the rulemaking docket
22 so that they could be looked at as part of this

1 rulemaking, it would be really appreciated. And
2 hopefully you will. And I think that's the -- I guess
3 that's a question, but I anticipate you'll have to
4 weight -- have some time to weigh the answer to that.

5 MR. XAVIER: Great.

6 MS. CAIN: So thank you.

7 MR. XAVIER: Well, thank you so much, Chris.
8 Great to see you as well. Joe Xavier, ABC National.
9 As far as the survey itself, I will chat and see if we
10 can submit that in our post-hearing comments. The two
11 main things that came through there was that we did
12 want a performance based approach, and that we needed
13 flexibility specifically for the construction industry.

14 MS. CAIN: All right. Thank you.

15 MR. XAVIER: Sure.

16 MS. CAIN: Thanks, Judge Larsen.

17 JUDGE LARSEN: Certainly. Thank you, Ms. Cain.
18 Do we have any other participant questions?

19 MS. CARLON: No, we do not, Your Honor.

20 JUDGE LARSEN: All right. Anything further from
21 OSHA, Mr. Schayer?

22 MR. SCHAYER: No, Your Honor.

1 JUDGE LARSEN: From the Solicitor, Ms. Wiles.

2 MS. WILES: No, Your Honor, thank you.

3 JUDGE LARSEN: All right. Then, let's hear from
4 our next witness.

5 MS. CARLON: The next speaker is Charles
6 Trowbridge. Please state your name and affiliation for
7 the record.

8 MR. TROWBRIDGE: Good morning. My name is Chuck
9 Trowbridge, and I am a shareholder with the law firm
10 Littler Mendelson, which represents employers of all
11 sizes. Today, I'm here representing the Construction
12 Industry Safety Coalition, or CISC, and its members.
13 On behalf of the CISC, I appreciate the opportunity to
14 participate in today's public hearing.

15 The CISC is comprised of 25 trade associations
16 from sectors across the -- the construction industry.
17 Virtually every construction, trade, task, and activity
18 is represented by the member associations of the CISC.
19 CISC members have been at the forefront of industry
20 efforts to address heat illness on construction work
21 sites, and will continue to do so. While each member
22 may take a slightly different approach, their efforts

1 embody simplicity and are presented in formats that are
2 easy to understand and will penetrate the construction
3 industry. OSHA should follow this approach when
4 regulating hazardous heat in construction.

5 However, OSHA proposed rule does not account for
6 the complex issues associated with hazardous heat in
7 construction, and therefore OSHA must consider a
8 separate standard for the construction industry. The
9 CISC and other construction industry representatives
10 have repeatedly requested that OSHA consider a separate
11 rulemaking for construction, as the agency has done in
12 other significant rulemaking, such as silica, confined
13 spaces, fall protection, and many others. Now, a
14 separate rule is imperative, as construction work is
15 vastly different from general industries. It's wholly
16 unique from shipbuilding, from agriculture, and it
17 should not be regulated by the same set of requirements
18 as these industries.

19 So how is the construction industry unique? Well,
20 unlike other industries, multi-employer worksites are
21 prevalent throughout the construction industry. OSHA's
22 multi-employer worksite doctrine places the onus of

1 supervision on the general contractor, based on the
2 assumption that the general contractor, who is in the
3 best position to enforce safety hazards for all workers
4 on the job site. This is a false assumption.
5 Subcontractors are skilled tradesmen who have a better
6 understanding of the heat-related hazards they may
7 face. To place the burden on the general contractor,
8 which oftentimes are small businesses, to ensure that
9 all subcontractors are compliant with each new proposed
10 requirement, is infeasible.

11 How else are construction work sites different and
12 unique? Well, construction sites are not purely indoor
13 or outdoor environments. In its proposed rule, OSHA is
14 attempting to regulate both indoor and outdoor work
15 environments via heat specific standards. Construction
16 sites cannot be defined in such black and white terms.
17 A construction worksite will go through distinct phases
18 over the course of the project. While the worksite may
19 initially be a purely outdoor work environment, the
20 worksite will evolve as buildings are framed out,
21 drywall and insulation are installed, and doors,
22 windows and other infrastructure is put in. During the

1 evolution, the work site slowly transitions from an
2 outdoor work environment to an indoor work environment.
3 This dynamic is unique to construction and further
4 highlights the need for OSHA to consider a separate
5 rulemaking for the industry.

6 Now, regardless of whether OSHA moves forward with
7 its current one-size-fits-all approach or considers a
8 separate rule for construction, any regulatory
9 approach, if adopted, must be a flexible, performance
10 based standard. Safety programs are only effective if
11 they are implemented correctly. The more rigid and
12 complicated a standard is, the greater the chance it
13 will cause confusion or inconsistent implementation
14 across employers.

15 The construction environment is inherently fluid.
16 It has employers of all sizes spread across the
17 country, with access to varying economic resources and
18 administrative support. It is imperative that OSHA
19 afford these employers flexibility when developing a
20 programmatic approach that can be tailored to a
21 specific worksite to effectively address heat-related
22 injuries and illnesses.

1 And the construction industry has already shown
2 that thoroughly training employees is an effective way
3 to address heat at the workplace. Given that heat
4 illness can progress quickly when unrecognized and
5 untreated, educating employees on how to recognize and
6 address the signs and symptoms of heat illness is the
7 most effective way to protect employees from the
8 hazard. This training must emphasize the key concept
9 of water, rest, and shade.

10 Now, looking at the proposed rule, the agency has
11 put forward a one-size-fits-all blend of requirements
12 that are, at times, overly prescriptive and at other
13 times concerningly vague that do not, in reality, allow
14 for necessary flexibility for the construction
15 industry. Each construction job site is unique and
16 constantly evolving, demonstrating that one-size-fits-
17 all -- or one size simply cannot fit all. I apologize.

18 So one area where the rule is overly prescriptive
19 concerns the temperature triggers. The proposed
20 initial and high heat triggers fail to consider
21 regional differences throughout the United States.
22 What some may consider hot in northern states may be

1 very pleasant and ideal building weather in the
2 southwest. Yet in some regions of the country, the
3 initial heat trigger will apply most of the year, even
4 though the population working outdoors may be well
5 acclimated to the temperature. The temperature
6 triggers also do not consider the types of tasks
7 employees are performing and how they may be affected
8 by the heat.

9 Likewise, the proposed rules rigid acclimatization
10 requirements are concerning. Now, acclimatization is
11 an important tool to protect workers from hazardous
12 heat, and the economic costs of acclimatization
13 protocols do not outweigh the value of a human life.
14 However, when determining how best to acclimatize
15 workers, employers must be permitted flexibility to
16 implement procedures that best suit their workforce.
17 This flexibility will allow employers to develop
18 training and protocols that best address the unique
19 climates of various geographic regions.

20 Further unique to construction is that
21 construction workers, unlike workers in other
22 industries, are far more likely to be naturally

1 acclimated to the work environment before they start a
2 job. Requiring these workers to then undergo a strict
3 acclimatization schedule provides no safety benefit to
4 the worker. Moreover, the prescriptive acclimatization
5 schedules will result in significant financial
6 ramifications for workers as well as employers. For
7 example, the proposed acclimatization schedules could
8 prohibit construction employers from hiring temporary
9 workers for short-term assignments.

10 On the other hand, the proposed rules requirement
11 that drinking water be, quote, "suitably cool and
12 readily accessible" is concerningly vague. The
13 requirement that water be suitably cool is too
14 subjective and will lead to inconsistent enforcement.
15 What one person considers suitably cool may be too warm
16 or even too cold for others. Likewise, the requirement
17 that drinking water be readily accessible is
18 problematic in construction. Due to the nature of
19 construction work, providing drinking water within
20 arm's reach or even a short walk from where the work is
21 being performed may be infeasible and can create a
22 greater hazard at the work site, such as when the work

1 is being performed at heights or around machinery where
2 extra items could cause a tripping hazard. Yet an
3 employer may still be cited because the water is not
4 readily accessible, even though it is the safest
5 location to provide the water.

6 These are just a few of the reasons why OSHA's
7 proposed one-size-fits-all rule is unworkable and
8 ineffective for construction, further highlighting the
9 need to consider a separate industry rulemaking.

10 And looking at the written plan, the CISC remains
11 concerned that the written plan required by the
12 proposed rule, or the HIIPP, lacks the needed
13 flexibility to be workable in construction. While OSHA
14 appears to permit certain employers the flexibility to
15 develop their written plan by worksite type, this
16 flexibility cannot be reconciled with other
17 requirements of the regulatory text.

18 Another concern involves the impacts the HIIPP
19 replacement will have on small businesses. Now,
20 employers with 10 or fewer employees are technically
21 excepted from the written plan requirement, but that
22 flexibility is illusory as the small employers still

1 must have a verbal plan meeting all of the written
2 plan's requirements. The bottom line, the proposed
3 rules requirements result in a de facto requirement
4 that all employers, including those with 10 or fewer
5 employees, need to develop a written plan simply to
6 protect themselves from a citation.

7 Looking at the recordkeeping requirements, the
8 CISC is pleased that OSHA significantly curtailed the
9 recordkeeping requirements in the proposed rule.
10 However, the requirement that employers maintain
11 records of indoor temperature measurements for six
12 months is unnecessary in construction. The temperature
13 in indoor areas on a construction site is often --
14 often closely intertwined to the temperature outdoors.
15 Records of outdoor temperature measurements are readily
16 accessible through numerous resources, so making
17 construction employers keep records of indoor
18 temperature measurements becomes redundant and
19 unnecessary.

20 Furthermore, many contractors complete their work
21 on a construction site in less than six months. If
22 there are no reported heat-related injuries or

1 illnesses during their site time on site, it is
2 unnecessary to continue to maintain records for a
3 worksite where an employer no longer has any employees
4 performing work.

5 So in conclusion, if OSHA moves forward with a
6 heat rule, the CISC reiterates its request for phased
7 in compliance deadlines and that OSHA consider a
8 separate standard for the construction industry. Thank
9 you for the opportunity to testify today.

10 JUDGE LARSEN: All right. Thank you, Mr.
11 Trowbridge. Mr. Schayer, do we have questions from
12 OSHA?

13 MR. SCHAYER: Yes, Your Honor. Thank you, Mr.
14 Trowbridge, for your testimony. I just have one
15 question also on performance oriented standards. I
16 appreciate your -- your testimony. I was wondering if
17 you could also, perhaps in your post-hearing comments,
18 provide more information or specific recommendations on
19 how you think OSHA should structure a more performance
20 oriented standard. You -- you mentioned that, in the
21 proposal, there are some requirements that are too
22 vague, and I appreciate the examples you provided. If

1 you could give some recommendations on -- on how those
2 might become more prescriptive or how we could change
3 those. And conversely, for the ones that are too
4 prescriptive that you gave examples of, if you could
5 give some recommendations on how -- how we might revise
6 those or change them, that would be helpful as well.

7 MR. TROWBRIDGE: Sure. Thank you. And I -- and
8 thank you for your question. It's a very thoughtful
9 one. This is one that we'd like to address in our
10 post-hearing comments. Ultimately, it's a -- it's a
11 fact specific analysis that's going to be based on each
12 particular employer, which is why, you know, we're
13 looking for this flexibility for employers based on the
14 differences in their work sites, the job tasks, their
15 workforce, et cetera.

16 MR. SCHAYER: Okay. Thank you. I'd now like to
17 turn to Terry Goodwin from OSHA's Directorate of
18 Construction.

19 MR. GOODWIN: Thank you. Terry Goodwin,
20 Directorate of Construction, OSHA. I have two
21 questions. One is on acclimatization. So you said
22 acclimatization should focus on heat awareness training

1 and allow employers to develop their own protocols for
2 their current management methods. And do you have
3 specific recommendations that you could provide?

4 MR. TROWBRIDGE: Hi, Terry. And thank you as well
5 for that question. This is one that we can address in
6 our post-hearing comments as well. I think in order to
7 give you the most effective answer we can poll our
8 members, have some conversations, and prepare those in
9 our -- in our post-hearing comments.

10 MR. GOODWIN: Excellent. Terry Goodwin,
11 Directorate of Construction. And also you can answer
12 this in your post-hearing comments as well. This is on
13 training. You said the training requirements are
14 overly prescriptive, but could you provide
15 recommendations on modifying them so they are better
16 suited to the construction industry?

17 MR. TROWBRIDGE: Sure. Thanks, Terry. And again,
18 this is one that we can address in our -- in our post-
19 hearing -- post-hearing comments. When I said they
20 were overly prescriptive, I believe the proposed rule
21 has something like 16 separate training elements that
22 have to be touched on. But again, this is a -- we can

1 elaborate on this in our -- in our post-hearing
2 comments for you. Thank you.

3 MR. GOODWIN: Thank you.

4 MR. SCHAYER: Thank you. And now, Your Honor, I'd
5 like to turn to Brian Rizzo from the Directorate of
6 construction.

7 MR. RIZZO: Hello, Mr. Trowbridge, this is Brian
8 Rizzo from the Directorate of Construction. If I -- if
9 I understood your spoken comments directly, you said
10 that the acclimatization provided no benefits to
11 workers. Can you elaborate on and provide us with any
12 data or studies that support that statement?

13 MR. TROWBRIDGE: Hi, Brian. That comment, that
14 statement that I made was in relation to construction
15 workers being naturally acclimatized to the work
16 environment already, unlike workers in other
17 industries. It's part of the reason why we feel OSHA
18 should consider a separate rule for construction
19 workers. And oftentimes construction workers have just
20 wrapped up work on one job site, and they're hired by a
21 new employer on a separate job site. They're
22 performing similar tasks. They're -- they're used to

1 that environment already. So at that point, when you
2 have a worker who's naturally acclimatized already,
3 there's no safety benefit from having that -- that
4 employee undergo -- that worker undergo a strict
5 acclimatization protocol for their new employer. But
6 this is also something, again, Brian, we can elaborate
7 on in our post-hearing comments for you.

8 MR. RIZZO: Thank you.

9 MR. SCHAYER: And now, Jessica Stone, Directorate
10 of Standards and Guidance.

11 MS. STONE: Good morning, Jessica Stone with OSHA.
12 I'm going to add to your list of things to address in
13 post-hearing comments. If you have any information
14 from your members on current practices related to their
15 heat plan, what kind of plan they have, what they're --
16 and the controls and other protocols that they're using
17 to address heat in their workplaces, that would be of
18 great interest to OSHA. So we welcome any information
19 you might have.

20 MR. TROWBRIDGE: Sure. Thank you. Jessica.

21 MS. STONE: If it happened to be, you know, look
22 at job category and task, you know, we wouldn't turn

1 that down. Thank you.

2 MR. TROWBRIDGE: Understood. Sure, no problem.

3 Thanks.

4 MR. SCHAYER: And finally, Your Honor, Zoe

5 Petrooulos had one to read into the record.

6 MS. PETROPOULOS: Hi. Yes, this is Zoe

7 Petrooulos with the Directorate of Standards and

8 Guidance. And if you've been listening, you will

9 recognize this question. In your post-hearing

10 comments, can you discuss more about your thoughts on

11 geography and how OSHA should account for those, or not

12 account for, in any potential revisions to the

13 triggers? Specifically, what geographic area do you

14 propose OSHA consider for establishing any geographic

15 based triggers and what data do you propose OSHA rely

16 on for establishing these?

17 And then finally, related, if you foresee any

18 issues with members complying with differing triggers

19 across the country, particularly those that have

20 operations in multiple states or regions. Thanks so

21 much.

22 MR. TROWBRIDGE: Thank you, Zoe.

1 MR. SCHAYER: And thank you again, Mr. Trowbridge.
2 And Your Honor, that concludes OSHA's questions.

3 JUDGE LARSEN: Thank you, Mr. Schayer. Do we have
4 any questions from the Solicitor, Ms. Wiles?

5 MS. WILES: . Thank you. This is Linda Wiles
6 from the Solicitor's Office. My esteemed colleagues
7 from OSHA have asked all the wonderful questions I
8 would have asked. So I'm sorry. I have no questions
9 for you, Mr. Trowbridge.

10 MR. TROWBRIDGE: That's okay. Thank you.

11 JUDGE LARSEN: Thank you. Do we have any
12 participant questions?

13 MS. CARLON: Yes, we have one from Mr. Schneider.

14 MR. SCHNEIDER: Yes. Thank you very much. Scott
15 Schneider. Mr. Trowbridge, I -- my question is -- I --
16 Zoe asked almost the question I was going to ask. But
17 if you could tell me, like, for example, in Texas how
18 would the -- how would the trigger differ from someone
19 that's working in Baltimore? And what basis would you
20 use for determining what that trigger should be in
21 different geographic locations?

22 MR. TROWBRIDGE: Thanks, Scott. That's a -- thank

1 you for that question. And as you mentioned, that's
2 very similar to -- to Zoe's question. And that's
3 something that we can address in our post-hearing
4 comment. Thank you, Scott.

5 MR. SCHNEIDER: Okay. Thanks very much.

6 MS. CARLON: Our next one is from Ms. Cain, Your
7 Honor.

8 JUDGE LARSEN: Very well.

9 MS. CAIN: Good morning. Charles, you said a
10 couple of things I wanted to ask questions about.
11 Number one, you indicated that CISC has several trades
12 represented. Can you explain what trades are
13 represented in CISC?

14 MR. TROWBRIDGE: Sure. Yeah, we have virtually
15 every trade task in the construction industry.

16 MS. CAIN: I think maybe -- maybe if I can
17 interrupt you for a minute, can you explain what you
18 mean by trades?

19 MR. TROWBRIDGE: Sure. Sorry, Chris, give me one
20 second just to pull this up. I really appreciate that
21 comment. That's very helpful. You know, our members,
22 they represent virtually every aspect of the

1 construction industry from we have roofers, road
2 builders -- we really kind of go through the gambit of
3 construction here -- commercial building, heavy
4 equipment production, home building, road repair
5 construction equipment manufacturing, et cetera.

6 MS. CAIN: Okay. I -- we're not talking the same
7 language. When I hear that you're representing the
8 trades, that to me, sounds like you're representing
9 unions. So can you clarify who this represents?

10 MR. TROWBRIDGE: Well, we have 25 member
11 associations. And if -- if you're asking which of
12 those members are unionized -- have union employees
13 versus nonunion employees, that's --

14 MS. CAIN: No, I'm not asking that question.

15 MR. TROWBRIDGE: Okay. I guess, perhaps I'm not
16 understanding your question. I'm sorry.

17 MS. CAIN: When I hear you represent the trades,
18 it makes me think that you're representing unions. And
19 I think what you mean is contractors who employ
20 specialty trades or sometimes called specialty trade
21 contractors that are employers?

22 MR. TROWBRIDGE: Correct. Yes, sorry.

1 MS. CAIN: Okay.

2 MR. TROWBRIDGE: Yes. Specialty trade
3 contractors, yes. I apologize.

4 MS. CAIN: Thank you. I -- another question that
5 I had is, you know, based on what I've seen in the
6 science that, you know, if we think construction
7 represents somewhere between six and eight percent --
8 about seven percent of the workforce. But as far as
9 the percentage of workers who die from heat exposure,
10 that -- that percentage is more like 36 percent. So
11 while representing, you know, 7 percent of the
12 workforce, 36 percent of the deaths are in
13 construction. I guess, you know, how does that -- how
14 does that jibe with the concept that you've described
15 as -- that construction workers are naturally
16 acclimatized to heat? And -- and what -- on what -- I
17 guess, what's the science that you base, that concept
18 that, you know, I've heard repeated through several of
19 the employer's comments, both in writing and in their
20 testimonies.

21 MR. TROWBRIDGE: Yeah. Thank you, Chris. And I'm
22 not familiar with the data that you're referring to,

1 but certainly this is something --

2 MS. CAIN: It's in the docket.

3 MR. TROWBRIDGE: Okay.

4 MS. CAIN: It's one of the scientific studies in
5 the docket.

6 MR. TROWBRIDGE: Okay. And this is something that
7 we can elaborate on in our post-hearing comment later.

8 MS. CAIN: Fabulous. All right. Thank you. I
9 think that's the end of my questions. Thank you, Your
10 Honor.

11 JUDGE LARSEN: Thank you very much. Any other
12 participant questions?

13 MS. CARLON: Yes, Your Honor. We have two more.
14 The next is from Mr. Lundegren.

15 MR. LUNDEGREN: Thank you, Your Honor. This is
16 Bruce Lundegren at the Office of Advocacy at the US
17 Small Business Administration. Chuck, I just wanted to
18 ask you kind of the same question I just asked Kevin
19 Cannon and Stephen from the Associated General
20 Contractors. But you -- you obviously represent a very
21 broad coalition of construction sectors, running the
22 full gamut.

1 Can you talk a little bit about the -- what I call
2 the hybrid or the variable nature of the work
3 environment, and particularly given that OSHA has
4 proposed a rule that really only covers indoor and
5 outdoor. And then part two is, can you talk about any
6 of the provisions that you are concerned would
7 create -- or that are impractical, infeasible, or
8 create a greater hazard? Thank you.

9 MR. TROWBRIDGE: Thanks, Bruce. And you know, we
10 can certainly elaborate on both of these in our post-
11 hearing comments, but when you're asking about the
12 hybrid work environment, I think that kind of goes back
13 to a construction site cannot be defined in such black
14 and white terms, whether it's indoor or outdoor. That
15 as the site evolves, it transitions from a purely
16 outdoor environment to an indoor environment.
17 Likewise, you have employees that are performing tasks
18 indoors or possibly outdoors -- or I'm sorry, outdoors
19 or possibly indoors. And the -- the proposed rule
20 simply does not account for that dynamic in the
21 construction industry.

22 Now, as for situations where greater hazards can

1 be -- can be created by some of these prescriptive
2 requirements that -- that we were talking about. I
3 know I touched on some of that with -- related to
4 the -- the drinking water. There can be hazards there.
5 If you have someone on a roof or working at heights, if
6 they -- if we have to store water readily accessible to
7 them, you know, take it literally, put it right next to
8 them. Well, that can create a struck by hazard for
9 employees who are working down below if one of those
10 water bottles is to fall off and hit them.

11 Likewise, if we try to account for that and attach
12 the water to that person who was working at -- on the
13 roof or on a utility pole, that can create a hazard for
14 that employee, because having water attached to their
15 person could impact their fall arrest systems.

16 Likewise, requiring -- kind of thinking of these same
17 examples -- requiring these workers to, you know,
18 constantly descend and ascend at these various heights,
19 that in itself can be hazardous. And so these are all
20 things that -- that we want to consider and we can
21 address in our post-hearing comments, Bruce.

22 MR. LUNDEGREN: Great. Thank you, Chuck. And I

1 would just -- this is Bruce Lundegren from the SBA
2 Office of Advocacy -- I would just mention that all of
3 those types of infeasibility, impracticality, and
4 creation of greater risk were all issues that were
5 raised during the SBREFA panel.

6 And I would just -- one other comment to make is
7 that the agricultural folks also feel that a one-size-
8 fits-all or one industry for all approach doesn't work
9 because they, too, are working in very unique
10 environments, very variable based on crops and things
11 like that. So we'll -- we'll be hearing from them
12 later. But I think both construction and agriculture
13 feel that they have unique work environments that need
14 to be addressed. Thank you, Your Honor. And thank you
15 to OSHA.

16 JUDGE LARSEN: Thank you, Mr. Lundegren.

17 MS. CARLON: And then the final question is from
18 Mr. Parsons. Please state your name for the record.

19 MR. PARSONS: Yes, hello. And thank you for
20 having me here today. Travis Parsons with the Laborers
21 Health and Safety Fund of North America. I just have
22 one quick question. We keep hearing this -- that water

1 has to be within arm's reach. I don't think I've ever
2 seen that written in any OSHA language. If so, I've
3 missed it. It has to be, you know, readily accessible.
4 That's a long standing potable water standard. It's
5 been there for -- just having accessible water. But we
6 keep hearing this within arm's reach. So if you could
7 provide the reference to that statement or what -- you
8 know, that it has to be within arm's reach. I'd love
9 it.

10 MR. TROWBRIDGE: Okay. Thanks, Travis. I -- I
11 appreciate that question. And that example was a
12 reference to a concern with the ambiguity that can come
13 with the term readily accessible. What does that
14 necessarily mean? We can -- I think I addressed that
15 in my oral testimony today, but certainly we can
16 elaborate on this in our post-hearing comments.

17 MR. PARSONS: All right. Thank you.

18 JUDGE LARSEN: All right. Thank you, Mr. Parsons.
19 Mr. Schayer, anything further from your panel?

20 MR. SCHAYER: No, Your Honor. Thank you.

21 JUDGE LARSEN: And anything further from the
22 Solicitor?

1 MS. WILES: No, Your Honor, thank you. Thank you,
2 Mr. Trowbridge, for your testimony.

3 JUDGE LARSEN: All right. Mr. Trowbridge, thank
4 you very much. And we're ready for our next witness.

5 MS. CARLON: Thank you, Your Honor. The next
6 speaker is Tim Williams. Please state your name and
7 affiliation for the record.

8 MR. WILLIAMS: Hello. My name is Tim Williams,
9 and I'm representing the National Association of Home
10 Builders.

11 JUDGE LARSEN: All right. Mr. Williams, go ahead.

12 MR. WILLIAMS: Thank you, Your Honor. And thank
13 you, panel, for this opportunity to address you today
14 on the proposed heat standard. My name is Tim
15 Williams, and I serve as the chairman of NAHB's
16 Construction Safety and Health Labor Committee. I've
17 been involved in the residential construction industry
18 for more than 30 years as a builder and remodeler.
19 During my time with NAHB, I've served in a variety of
20 leadership positions at both state and national levels.
21 In addition, I'm also an OSHA Training Institute
22 authorized instructor. In that role, OTI instructors

1 provide safety -- occupational safety and health
2 training for construction workers to obtain their 10
3 and 30 hour OSHA certification.

4 NAHB is a Washington based trade association whose
5 members are involved in all aspects of residential and
6 light commercial industry, including home building,
7 remodeling, multifamily construction, subcontracting,
8 and building product manufacturing. NAHB builder
9 members construct about 80 percent of the new homes
10 built each year within the United States. Most
11 construction activities occur outdoors. Many of NAHB
12 members are considered small businesses within the
13 SBA's definition of a small business. NAHB is also a
14 member of the Construction Safety Industry Coalition,
15 who just provided testimony during this hearing, and
16 NAHB supports the points raised in that testimony as
17 well.

18 Today, I'm here to speak about the impacts of the
19 proposed heat standard. As an initial matter. NAHB is
20 urged OSHA to withdraw the current proposed rule, and
21 instead develop an industry specific standard to
22 account for the differences between the industries that

1 will come under the proposed standard. There is
2 support for this approach because OSHA has done this
3 exactly, in instances in the past, including the silica
4 rule and other rules that are specific to construction.
5 NAHB believes that OSHA and regulated employers are
6 better served by having standards that address and
7 account for the differences between their industries.

8 OSHA's one-size regulatory approach does not fit
9 all, and what may work in general industry or
10 agriculture won't work in construction or
11 manufacturing. NAHB urged OSHA to issue a specific
12 standard for construction, which the agency did not do
13 in the proposed rule. Regulated entities are already
14 struggling to navigate the patchwork of state heat-
15 related standards currently in place, and they are all
16 slightly different. Effective federal standard should
17 create uniformity so that the stakeholders know what
18 their compliance obligations will be. OSHA proposed
19 rule needs to be simplified, focusing on long standing
20 principles of water, rest, and shade, and strongly
21 emphasizing training focused on water, rest, and shade,
22 and recognizing the signs and symptoms of heat illness

1 and heat stroke. That will protect workers far better
2 than the proposed complicated and overburdensome heat
3 rule.

4 Currently, the proposed rule needlessly creates
5 additional compliance obligations which will negatively
6 impact the housing affordability. Housing
7 affordability remains a critical issue for NAHB
8 members. NAHB's 2025 annual Housing Affordability
9 Study reports that 79.4 percent of US households are
10 unable to afford the median priced home in 2025. This
11 translates to nearly 101 million households who are
12 priced out of the market. For every \$1,000 increase in
13 the median price of a new home, an additional 115,500
14 households are priced out of the market. Every
15 regulation adopted, regardless of the agency, impacts
16 compliance costs and affects everyone along the supply
17 chain, with the home buyer at the end paying for it
18 all.

19 After OSHA published its proposed rule, NAHB
20 conducted a Builder Practices survey asking for member
21 feedback on impacts to the businesses if the heat
22 standard is adopted as proposed. 75 percent reported

1 it would create delays or difficulty completing
2 projects, 69 percent reported it would cause them to
3 have to raise home prices, 53 percent reported it would
4 make it more difficult to hire and schedule
5 subcontractors, 37 percent reported the effects of the
6 proposed rule would make some projects unprofitable,
7 and 31 percent reported it would make it more difficult
8 to hire construction employees.

9 NAHB members are concerned with the prescriptive
10 requirements in the proposed rule, because it creates
11 several de facto recordkeeping requirements that are
12 unnecessary administrative burdens, particularly for
13 those small businesses. For example, the proposed rule
14 requires employers to develop and implement a work site
15 heat illness and injury prevention plan. 10 or more
16 employees must have the plan written. Employers must
17 get input and involvement from non-managerial
18 employees, regardless of the number of employees they
19 have. The employer must designate one or more heat
20 safety coordinators. The employer must review the
21 plan's effectiveness at least annually. They must make
22 the plan readily available at the work site, and it

1 must be in a language that each employee, supervisor,
2 and heat safety coordinator can understand.

3 OSHA does not require employers with 10 or fewer
4 employees to have a written plan, instead allowing it
5 to be verbal, but this exception creates immediate
6 conflicts. Here's the problem. How do home builders
7 with fewer than 10 employees comply with the
8 requirements that I just mentioned? They can't unless
9 the plan is in writing. That means, practically, that
10 the proposed heat rule has the de facto recordkeeping
11 requirement for all home builders to develop a written
12 plan, regardless of size.

13 The regulation requires the heat plan to include
14 several items; a comprehensive list of types of work
15 activities covered by the plan, all policies and
16 procedures necessary to comply, the heat metric by
17 which the employer will measure the heat, a detailed
18 emergency response plan. Again, no small home builder
19 can meet OSHA requirements if they only communicate
20 this information verbally.

21 The proposed heat rule also requires multiple
22 training topics, which effectively means home builders

1 must have all this information in writing, including
2 recordkeeping, to meet their compliance obligations.
3 For example, annual employee training covering 16
4 separate items, additional training for supervisors and
5 heat safety coordinators, supplemental training must
6 also be given if certain events occur.

7 The significant recordkeeping and duplicative
8 training requirements do not serve OSHA's purported
9 purpose of generally protecting workers from heat
10 illness and injury. Training should be streamlined and
11 be the same for all employees so everyone knows what to
12 do and when.

13 The proposed acclimation requirements also present
14 compliance challenges for home builders, who need to
15 refocus their approach away from OSHA's long promoted
16 principles of water, rest, and shade. Acclimation
17 options in the proposed rule are also too inflexible
18 because neither is workable for the home building job
19 sites. That's because work tasks and the site itself
20 are constantly changing as construction progresses.

21 Regardless of which option an employer chooses,
22 they will have to maintain records involving

1 acclimation in the event of an OSHA inspection, even
2 though OSHA does not explicitly mandate employers to
3 keep these records. Because otherwise, how does a home
4 builder defend against a claim or citation if they
5 didn't follow the regulation? So to avoid a possible
6 citation for noncompliance, home builders will have to
7 document how they've implemented their plans in the
8 event of an inspection or audit.

9 Essentially, OSHA is impermissibly shifting the
10 burden to employers to prove compliance. This results
11 in a de facto recordkeeping requirement. Many have to
12 hire or retrain staff, acquire monitoring tools, and
13 dedicate time and resources just to meet the
14 regulation's requirements. Acclimation isn't uniform.
15 Factors like regional climate differences, the workers
16 age, physical fitness, and underlying health
17 conditions, including medications, play a major role in
18 how an employee acclimates to heat.

19 If OSHA does not revise the rule and develop one
20 specific for construction, these realities need to be
21 reflected in the final rule to ensure that it's
22 practical, flexible, and effective across diverse work

1 environments. As an additional comment, NAHB
2 respectfully recommends that it exclude from any final
3 heat standard any reference to the multi-employer
4 citation policy. It's infeasible for general
5 contractors to be required to monitor workers whom they
6 do not control, do not train, or maintain accurate
7 records that would meet the compliance expectations.

8 In conclusion, I urge you to keep it simple,
9 emphasizing water, rest, and shade and educating
10 workers on how to recognize the signs of heat illness
11 and injuries. That is what will work to protect
12 workers and make it practical and simple for employers
13 to train and reinforce. This approach, rather than
14 paperwork and red tape, will better protect workers
15 from serious heat illness and injuries. Thank you for
16 this opportunity to testify.

17 JUDGE LARSEN: All right. Mr. Williams, thank you
18 very much. Mr. Schayer, does your panel have
19 questions?

20 MR. SCHAYER: Yes. Thank you, Mr. Williams, for
21 your testimony. And I'd like to turn to Brian Rizzo.

22 MR. RIZZO: Good morning. And thank you, Tim.

1 This is Brian Rizzo from the Directorate of
2 Construction. With regards to your comments on a
3 construction specific work rule, can you provide us
4 with some examples of effective, performance based and
5 simplified standards that we might use as models?

6 MR. WILLIAMS: Brian, Tim Williams again,
7 representing NAHB. We'll because our diverse -- our
8 membership is very diverse, we'd like to have the
9 opportunity to consult with different members to -- to
10 answer those in the post-hearing comments, please.

11 MR. RIZZO: Absolutely. Brian, with the
12 Directorate of Construction. One more question for
13 you. The NAHB stated that their members have provided
14 examples of workers performing their duties for three
15 to six hours with little or no rest breaks, then
16 resting in a shaded or air-conditioned area during the
17 time when it's the warmest outside or the hottest, when
18 the sun is at its peak. Is this time resting paid?
19 And then what are the challenges and benefits
20 associated with this type of schedule structure?

21 MR. WILLIAMS: Sure. Tim Williams, representing
22 NAHB. It is traditional in the -- in the industry for

1 workers. And again, you have to understand the --
2 what -- typically how the worksite is set up. So you
3 have a hosting or controlling employer, which is
4 generally the general contractor, and then multiple
5 subcontractors. And it's traditional for those
6 subcontractor bases to come to the site as early as
7 possible, at daybreak or when there's sufficient light,
8 and then work until 11 o'clock, then take off until two
9 or three in the afternoon and come back and finish
10 their work. That's been -- historically been an
11 example of how employers have dealt with the heat -- of
12 our subcontractors ourselves.

13 Our particular -- in many cases, in NAHB members
14 the -- the member is -- is the general contractor. And
15 so the --, the subcontractors, of course, are
16 responsible for their employees and how they protect
17 them against the heat and other standards. So I don't
18 know if that answers your question, but I'll be happy
19 to provide more in-depth answers in our post-hearing
20 brief.

21 MR. RIZZO: Very good. Thank you for that answer,
22 Tim. And at this time, I'll turn it over to Mr.

1 Schayer.

2 MR. SCHAYER: Thank you. And I was just going to
3 pass it to Jessica Stone for a question.

4 MS. STONE: Jessica Stone with OSHA. In your
5 SBREFA comments, you discussed microclimate variation
6 within warm regions. I'm assuming that that means some
7 of your members are in regions where that's an issue.
8 We'd just be interested either now or again in post-
9 hearing comments, if you can expand on kind of what the
10 issue is there and also how employers are currently
11 dealing with issues of microclimate with regards to
12 either designing their plans and monitoring the
13 temperature, keeping their workers safe. Thank you.

14 MR. WILLIAMS: We'll be happy to provide more
15 information in post-hearing comments. But one simple
16 example is -- we are -- I'm located in the state of
17 Georgia. And so we have -- part of the state is a very
18 flat plateau area, part of the state is mountainous.
19 And simply within a range of 30 miles, you could either
20 be in a flat area where there's no -- very little
21 shade, concentrated heat, or you could be on -- on a
22 mountain site, building a home where there's shade

1 everywhere, a lot of trees, a lot of breeze -- cool
2 breeze coming up and those type of things. So it
3 does -- it is very diverse depending on the specific
4 area that you're in. And we'll be happy to, like I
5 said, answer more questions in post-hearing. Thank
6 you.

7 MR. SCHAYER: Thank you, Your Honor. And if we
8 could just read a couple into the record that we're
9 hoping, in the interest of time, that you might be able
10 to address in post-hearing comments, Mr. Williams.

11 One was what are your member companies currently
12 doing to prevent exposure to heat and how do they
13 determine when to start using these protective
14 measures? And the other was any information you could
15 provide us about cooling spaces that are provided to
16 employees, including if they include fans or air-
17 conditioning, and what have been the difficulties
18 you've encountered when providing shade and cooling
19 spaces to employees? So any information you could
20 provide on those topics in post-hearing would be very
21 helpful to us as well.

22 MR. WILLIAMS: We'll be happy to provide those.

1 Thank you.

2 MR. SCHAYER: Sure. And Your Honor, that
3 concludes OSHA's questions. Thanks again.

4 JUDGE LARSEN: Thank you very -- thank you very
5 much. Any questions from the Solicitor?

6 MS. WILES: No, thank you, Your Honor. Linda
7 Wiles from the Solicitor's Office. Thank you, Mr.
8 Williams, for your time and your testimony today.

9 JUDGE LARSEN: All right. Thank you. Do we have
10 participant questions?

11 MS. CARLON: Yes, Your Honor, we have two. The
12 first is from Mr. Schneider. Please state your name.

13 MR. SCHNEIDER: Hi, my name is Scott Schneider.
14 And thank you for your testimony, Mr. Williams. You
15 were talking about how the -- the standard is overly
16 prescriptive and complicated. And I'm wondering if
17 you -- could you compare the difference between having,
18 like, a 90 -- an 80 degree trigger that contractors can
19 then know with certainty if they're above or below the
20 trigger versus having a more vague programmatic
21 requirement, saying basically -- leaving it up to them
22 to determine when to start protecting workers.

1 MR. WILLIAMS: We'd be happy to provide specifics
2 on -- on post-hearing comments. But certainly, you
3 know, the 80 degrees here in Georgia, like has been
4 testified earlier this morning, is a -- is a great day,
5 a fantastic day. It feels great, everything's good.
6 But you know, in a northern climate it would be much
7 different. And so we'll be happy to, like I said,
8 provide more details on post-hearing comments. Thank
9 you.

10 MR. SCHNEIDER: So are you recommending that there
11 be different trigger levels in each geographic area?
12 Like it'd be 90 in Georgia and -- and a hundred in
13 Texas. How would you do that?

14 MR. WILLIAMS: Well, I think the standard needs to
15 recognize that -- that heat at different geographic
16 areas is different, and how workers acclimating to that
17 difference is different per -- per geographic region
18 and their -- their -- their experience on construction
19 sites as well as their health and other things. So
20 yes, just setting a one-size-fits-all heat trigger does
21 not -- I don't -- I don't believe works or supports,
22 you know, protecting workers. So --

1 MR. SCHNEIDER: So you're suggesting that there be
2 different triggers in different regions? Is that what
3 you're saying?

4 MR. WILLIAMS: I think that's a better approach
5 than having a one-size-fits-all trigger, yes.

6 MR. SCHNEIDER: And how would that trigger differ
7 from region to region? I mean, is it based on
8 temperature, on humidity, on -- on what -- what else
9 would you include?

10 MR. WILLIAMS: I think all those are factors in
11 the trigger. But like I said, I'll be happy to poll
12 our members and get you a more exact answer for post-
13 hearing comments.

14 MR. SCHNEIDER: Okay. Thank you. I have one
15 other question. You were talking about the impact
16 on -- the cost impact of the standard. I'm wondering
17 if you're familiar with the literature, looking at the
18 impact of heat on productivity, that people, that are
19 under stress from -- from exposure to heat don't work
20 as productively as people who are taking rest breaks
21 and getting water, et cetera.

22 MR. WILLIAMS: I'm not necessarily familiar with

1 the specific study that you're talking about, but
2 certainly, you know, people under heat stress are not
3 as productive. No, that's correct. And just -- just
4 as an example, for many years in the beginning of my
5 career, the first 20 years, I was -- I was a worker in
6 the field as well. So I know the heat exposure well
7 and -- and what effects it has on my body. And I know
8 when -- you know, to certainly hydrate before I get to
9 the job and stay hydrated throughout the day and take
10 breaks as needed. So --

11 MR. SCHNEIDER: Okay. Thank you very much.

12 MR. WILLIAMS: Thank you.

13 JUDGE LARSEN: All right. Next question.

14 MS. CARLON: Ms. Cain, please state your name.

15 MS. CAIN: Hi, Chris Cain, North America's
16 Building Trades Unions. Tim, the question I have for
17 you is, if you would please consider submitting the
18 survey that you conducted, the survey instrument, the
19 methods, and the raw data to the docket. Thank you.

20 MR. WILLIAMS: Yes, thank you. We'll be happy to
21 do that.

22 JUDGE LARSEN: All right. Thank you very much.

1 Anything further from OSHA, Mr. Schayer?

2 MR. SCHAYER: No, Your Honor. Thank you again,
3 Mr. Williams.

4 JUDGE LARSEN: Ms. Wiles, anything further?

5 MS. WILES: No, Your Honor.

6 JUDGE LARSEN: All right. Let's hear our next
7 witness.

8 MS. CARLON: The next speaker is Mike Starner.
9 Please state your name and affiliation for the record.

10 MR. STARNER: Mike Starner, National Electrical
11 Contractors Association. Well, thank you, Your Honor.
12 And thanks for the panel, for allowing us the chance to
13 participate in this important process. My name is Mike
14 Starner, and I am the Executive Director for Outside
15 Line Safety at the National Electrical Contractors
16 Association, or NECA. Representing over 70,000
17 electrical contracting firms employing more than
18 650,000 electrical workers, NECA performs essential
19 electrical work under challenging conditions, including
20 emergency storm response and disaster recovery.

21 Today, I represent NECA's perspective on OSHA's
22 proposed heat injury and illness prevention standard.

1 Worker safety is and always has been our utmost
2 priority. Our members already maintain robust heat
3 safety programs incorporating comprehensive training,
4 access to water, rest breaks, shade, and tailored
5 acclimatization procedures specific to their
6 operational and environmental conditions faced by their
7 electrical construction work. We recognize heat-
8 related illness as a significant concern impacting both
9 occupational and public health, exasperated by broader
10 environmental factors like climate change.

11 It is essential to understand that heat illness is
12 not isolated to the work environment, but is equally
13 prevalent in public and recreational settings. Data
14 from the Centers of Disease Control and Prevention
15 indicate that heat-related deaths among the general
16 population increased approximately 1069 in 1999 to 2325
17 and 2023. That's a 100 percent -- 117 percent rise,
18 highlighting the growing public health challenge posed
19 by extreme heat conditions.

20 OSHA data reveals that occupational heat-related
21 fatalities have averaged around 40 deaths per year from
22 2011 to 2022, demonstrating the relative scale and

1 scope of heat-related risk beyond the workplace. Given
2 the diversity of operations, regional climates, and
3 work environments our members encounter, NECA advocates
4 strongly for a flexible, performance based approach to
5 heat safety, rather than an overly rigid, prescriptive
6 regulation. It is crucial to acknowledge that employer
7 driven measures, while critical, are part of a broader
8 societal need to address heat exposure comprehensively
9 across both work and public domains. To that end, NECA
10 recommends OSHA's standard focus primarily on four
11 essential components; water, rest, shade, and worker
12 training.

13 Specifically for water, hydration is a cornerstone
14 of heat illness prevention. Leading research indicates
15 that water intake requirements vary significantly based
16 on factors such as individual physiology, work
17 intensity, environmental conditions, and
18 acclimatization status. NECA supports OSHA requirement
19 for suitably cool water, but recommends that guidance
20 language be provided rather than specific temperature
21 ranges. Specific temperature ranges are challenging to
22 maintain consistently, especially in dynamic

1 construction environments with limited temporary power
2 and working in remote areas. Providing general
3 guidance on maintaining potable water at temperatures
4 conducive to consumption ensures effective hydration
5 without creating impractical burdens.

6 Recent studies from organizations like the
7 National Institute for Occupational Safety and Health
8 underscore that the availability of sufficient drinking
9 water is paramount to reducing heat stress. For
10 example, workers performing physically demanding tasks
11 in hot conditions can require up to one liter of water
12 per hour to maintain safe hydration levels.

13 Let's talk about rest. Research consistently
14 supports that rest periods significantly reduce heat
15 stress and related heat illness. However, studies
16 published in occupational health journals highlight
17 that rigidly scheduled breaks do not accommodate for
18 individual heat tolerance and task specific demands.
19 NECA proposes allowing supervisors the flexibility to
20 schedule rest intervals based on real time assessments
21 of heat conditions, workloads, individual worker needs,
22 and physiological responses. Practical experience

1 indicates that work rest schedules, tailored to
2 specific tasks and conditions, rather than fixed
3 intervals, significantly enhance both safety and
4 productivity.

5 Shade. Scientific literature confirms that
6 providing shade can drastically reduce heat stress by
7 decreasing solar radiation exposure and ambient
8 temperature experienced by workers. However, research
9 highlights that physical shade structures are not
10 universally feasible in dynamic or spatially
11 constrained environments, such as active construction
12 zones or areas near live electrical equipment, or in
13 spaces that are public right of ways.

14 NECA supports OSHA permitting scientifically
15 validated alternative cooling measures such as climate
16 controlled vehicles, portable cooling stations, or
17 wearable cooling technologies. These alternative
18 methods have proven effective in scenarios where
19 traditional shade is impractical.

20 Training. Extensive research confirms the
21 critical role of training in preventing heat-related
22 illnesses by enabling workers to recognize early

1 symptoms and take corrective actions. NECA emphasizes
2 adaptable training programs, allowing customization
3 based on the industry, the work type, and individual
4 worker characteristics. This aligns with scientific
5 findings that education tailored to individual risk
6 factors significantly enhances preventative outcomes.
7 Well-informed workers who understand their individual
8 risks and symptoms are significantly less likely to
9 experience a severe heat-related illness.

10 Additionally, NECA urges OSHA to clearly define
11 exemptions for emergency storm response scenarios.
12 Given the critical nature of emergency power
13 restoration, especially after severe weather events,
14 rigid heat illness prevention requirements could
15 significantly impede rapid and essential lifesaving
16 emergency responses. During emergencies, workers often
17 face unpredictable, demanding conditions where
18 immediate and continuous response is essential to
19 public safety and infrastructure restoration. NECA
20 recommends explicit exemptions allowing necessary
21 operational flexibility, supported by research,
22 demonstrating the unique challenges inherent in

1 emergency scenarios.

2 In conclusion, NECA advocates for OSHA to adopt a
3 balanced, flexible, scientifically supported,
4 performance based standard emphasizing water, rest,
5 shade, and comprehensive training. Clear exemptions
6 for emergency storm response and practical compliance
7 tools will effectively enhance worker safety and
8 accommodating the operational realities faced by
9 electrical contractors. Thank you for the
10 consideration. NECA remains dedicated to collaborating
11 with OSHA to ensure the highest standards of safety and
12 health within our industry. That is all.

13 JUDGE LARSEN: All right. Thank you, Mr. Starner.
14 Mr. Schayer, if we have questions from the OSHA panel,
15 may I suggest, in the interest of time, that we ask Mr.
16 Starner to answer questions exclusively in post-hearing
17 comments so that we have time for our final speaker
18 today. But Mr. Schayer, what questions would you like
19 him to address?

20 MR. SCHAYER: Sure. Yes, Your Honor, we can do
21 that. Thank you, Mr. Starner, for your testimony.

22 One question is just in response to something that

1 you mentioned, that many of your members already have
2 heat safety plans. So if you're able to address in
3 post-hearing comments how those plans are -- are
4 different or structured differently from what's in the
5 proposal, that would be very helpful. And if possible,
6 to even submit any of them during the post-hearing
7 comments, that would be helpful as well. And then
8 Jessica Stone, did you have any economics questions
9 you'd like to read in for the record?

10 MS. STONE: Sure. I just have a -- Jessica Stone
11 with OSHA. I just have a couple on your suggestion
12 that -- for exemptions from emergency work.

13 First, if you could elaborate on what portions of
14 the proposal, what specific requirements, you think
15 would be infeasible to take place during emergency
16 restoration work and why? We'd be interested to know
17 what percent of work done by your member companies is
18 emergency versus nonemergency work. Are there other
19 industries or types of workers who are performing
20 similar work alongside you that OSHA should consider
21 including if this exemption were to be included? And
22 finally, are there any -- are -- are there any --

1 anywhere in the standard, anything that you think is
2 infeasible for workers performing routine work for
3 your -- the NECA employers versus just when it's an
4 emergency. And that's all. I hope that makes sense.

5 MR. STARNER: Yeah.

6 MR. SCHAYER: Thank you again, Mr. Starner. We
7 appreciate you addressing these topics in post-hearing
8 comments, if you're able to. And that concludes OSHA's
9 questions, Your Honor.

10 JUDGE LARSEN: Thank you, Ms. Wiles. Do you have
11 any questions you'd like Mr. Starner to address in
12 post-hearing comments?

13 MS. WILES: None for me, Your Honor. Thank you,
14 Mr. Starner.

15 JUDGE LARSEN: All right. Mr. Starner, thank you
16 very much for being here with us today. We appreciate
17 your comments. All right. Do we have participant
18 questions for the record?

19 MS. CARLON: We do have one participant.

20 JUDGE LARSEN: Let -- let's get that one. I
21 should have --

22 MS. CARLON: No problem.

1 JUDGE LARSEN: Remembered to allow time for that.

2 MS. CARLON: No problem, Mr. Schneider, please
3 state your name for the record.

4 MR. SCHNEIDER: This is Scott Schneider. I was
5 just going to ask if you could supply to the record any
6 information that you provide to your members about how
7 to protect their workers from heat stress.

8 MR. STARNER: Sure.

9 MR. SCHNEIDER: Okay. Thank you very much.

10 JUDGE LARSEN: All right. Thank you. Let's --
11 let's hear from our final witness today -- this
12 morning.

13 MS. CARLON: And the next speaker is Bob Kunz.
14 Please state your name and affiliation for the record.

15 MR. KUNZ: Good morning, and thank you for the
16 opportunity to speak. My name is Bob Kunz. I'm the
17 Corporate Safety Director for Dimeo Construction.

18 JUDGE LARSEN: All right --

19 MR. KUNZ: Go ahead. I'm sorry.

20 JUDGE LARSEN: No, please proceed.

21 MR. KUNZ: Thank you, Your Honor. I've held this
22 position at Dimeo since September of 2007. I started

1 my career in 1992 working as a safety director for a
2 highway contractor in Mass, Connecticut, and -- and
3 Rhode Island as well. I've had the -- I've been very
4 fortunate to be working for union contractors. And I
5 continued my work with heavy civil highway
6 construction, surface mining, concrete and asphalt
7 production up until September of 2007.

8 Dimeo construction is a regional construction
9 manager. We have offices in Rhode Island, New Haven,
10 and Boston. We have approximately 200 employees in the
11 field. At any given day, we have approximately 1100 to
12 1600 subcontract workers that build alongside us. On
13 any given project, we have 1 to 35 subcontractors that
14 are supporting this effort. And those -- they employ
15 most of the workforce.

16 Since 2022, Dimeo has worked 10 million hours
17 along with their subcontract workforce and the men and
18 women that are building our projects. We've had no
19 recordable -- OSHA recordable heat-related illnesses on
20 any of our work. Over this period, though we've had
21 two first aid and -- two first aid related illnesses.
22 One was treated on site, the other required evaluation

1 at a local urgent care center.

2 Dimeo requires subcontractors to provide -- I'm
3 not going to list everything, but I just want to just
4 give you an example of some of the things we require
5 our subcontractors to provide; at least one documented,
6 competent person for each project, we ask them to
7 develop a severe weather JHA, provide certified first
8 aid personnel -- we do not allow them to use the
9 exemption that's permitted by interpretation -- provide
10 drinking water, train existing and new workers,
11 including the JHA specifically for that project.

12 And let me just explain JHA, job hazard analysis.
13 Dimeo provides safety onboarding training for each and
14 every new worker. Among other things, we talk about
15 incident response, emergency response, how to make a
16 jobsite suggestion anonymously. Portable drinking
17 water supply as soon as possible. Not all job sites
18 have portable or potable water, but as soon as it's
19 possible, we do provide that to our subcontractors. We
20 also provide the subcontractors a location for their
21 field offices. Sometimes that's inside, sometimes
22 that's a portable facility located outside. All of our

1 projects, as the phase of construction advances, we do
2 provide 48 inch barrel fans to circulate air within
3 buildings.

4 While Dimeo embraces the development of a heat
5 injury and illness prevention standard, it maintains
6 reservations about the proposed rule when placed within
7 the context of building construction, which introduces
8 a complexity of multi-employer work site.

9 For example, when we're budgeting -- building
10 budgets and schedules at pursuit and prior to award, we
11 don't always have the -- we don't really have any
12 information for the subcontractors relative to how
13 they're going to implement their scope of work. The
14 proposed rule requires each employer to develop a plan.
15 The plan must incorporate feedback from employee
16 representatives. Dimeo was only signatory to two
17 unions, the laborers and the carpenters, when there
18 could be as many as 15 to 18 union trades working on
19 our projects.

20 The plans developed by each employer will uniquely
21 address the scope of work, logistics and schedule
22 that's necessary for them to execute their work. We

1 don't -- at the time we're budgeting and -- and
2 building our proposals for project pursuits, we do not
3 have the location and supply specifications for the
4 electrical power necessary for cooling areas and
5 equipment. For example, we don't have the location for
6 condensate lines that might be necessary for cooling
7 equipment. We can't anticipate the relocation of rest
8 areas, cooling areas, and associated infrastructure
9 during the progression of construction, which does
10 require budget and schedule.

11 In the absence of subcontractor unique health --
12 I'm sorry -- heat illness and injury prevention plans,
13 this will be difficult, if not impossible to accurately
14 define during project pursuit. This can result in
15 exaggerated budgets that can increase project costs or
16 our loss of a project opportunity. The proposed rule
17 is silent on the amount of square feet for -- per
18 worker required for rest areas, shade, and cooling
19 areas. This makes it very difficult for us to
20 anticipate, during project pursuit, that space that
21 might be necessary over the phase of construction, and
22 in particular, during scheduled periods where it might

1 be warmer, for example, the summer. The international
2 building codes do provide some information that might
3 be useful.

4 The implementation and management of the proposed
5 rule. The proposed rule is silent on the role and
6 responsibility of the construction manager as it
7 relates to the controlling contractor. The utilization
8 of the multi-employer citation doctrine by OSHA to
9 assert that the construction manager is the controlling
10 contractor responsible for overall management of
11 individual subcontractor heat injury and illness plans,
12 would require a full time position and result in
13 inefficiency not anticipated within the economic
14 analysis of the proposed standard, along with possible
15 jurisdictional interferences.

16 You know, for example, the subcontractors already
17 manage work hours and break times based on weather and
18 work activities. Collective bargaining agreements that
19 the subcontractors may hold have unique benefits and or
20 constraints associated with work hours and break times.
21 For us to dictate would interfere with that,
22 potentially. The subcontract workforce holds

1 confidential information regarding the personal medical
2 history of -- of its employees. Workforce turnover and
3 building construction can range as high as four to six
4 times the full employee equivalent. Only
5 subcontractors can really manage new and returning
6 workers during acclimatization periods to ensure the
7 planned work is completed on time and within the
8 budget.

9 For these reasons, the Dimeo Construction Company
10 maintains that the building construction should be
11 excluded from the proposed one-size-fits-all heat
12 injury and illness prevention rule and requests that a
13 flexible, performance oriented standard be -- be
14 developed. For example, water, rest, shade, training
15 with a feedback loop included with that, so we get
16 input from the workforce and subcontractors.

17 Additionally, the economic analysis includes costs
18 not typical of construction in our market area. I'll
19 point to several examples from the -- from the proposed
20 rule. There were some tables included in the proposed
21 rule. Rest breaks at high heat trigger outdoor for
22 industry class 23, they used a rate of \$34.43. The

1 annual employee refresher training, at-risk worker, a
2 rate of \$21.97 was used, for supplemental employee
3 refresher training, at-risk worker, a rate of \$21.97
4 was used. In Boston -- in Boston a carpenter's fully
5 burdened rate is \$122.73 per hour. A laborer's fully
6 burdened rate is 106.65 per hour. These rates do not
7 include overhead and profit. Accordingly, we request
8 that the economic analysis be reviewed to ensure that
9 it is reflective of regional and negotiated wage rates.
10 That concludes my testimony.

11 JUDGE LARSEN: All right. Mr. Kunz, thank you
12 very much. Let me again suggest that, to the extent we
13 have questions for Mr. Kunz, we ask him to address
14 those in post-hearing comments. Mr. Schayer, let's
15 start with your panel. What would you like him to talk
16 about?

17 MR. SCHAYER: Yes. Thank you, Mr. Kunz, for your
18 testimony. We just had a couple of questions about
19 engineering controls. If you could address either how
20 you or your subcontractors provide shade and the types
21 of shade that are provided on your jobs, and also any
22 difficulties you've encountered when providing shade.

1 And then also the types of cooling spaces that are
2 provided, whether they include fans or ACs, and again,
3 any difficulties or challenges with those as well. We
4 would appreciate if you're able to submit post-hearing
5 comments, that would be very helpful.

6 MR. KUNZ: Yes, I can do that.

7 MR. SCHAYER: Thank you.

8 JUDGE LARSEN: All right.

9 MR. SCHAYER: Those are our questions.

10 JUDGE LARSEN: Excellent. Ms. Wiles, any
11 questions from the Solicitor's Office?

12 MS. WILES: Yes. This is Linda Wiles from the
13 Solicitor's Office. Thank you so much for your
14 testimony. I did have one question. You mentioned a
15 severe weather JHA that you utilized for your -- for
16 your company and perhaps for your subcontractors. If
17 you could provide the sample or a summary of what that
18 includes in your post-hearing comments, I think that
19 will be really helpful for us to consider.

20 And then I just wanted to ask you to clarify. It
21 sounded like you were saying that there were some
22 difficulties with work sites that have multiple

1 employers all having different plans. And I just would
2 like you to clarify in your post-hearing comments, if
3 you had a recommendation as to how to implement that,
4 whether the general contractor controlling employer
5 plan should dictate the work environment or if there is
6 a way to tailor to job specific -- task specific jobs
7 that could be incorporated or considered when
8 implementing plans. Any insight in terms of how the
9 contracting workplace works and how that would play out
10 would be really helpful as well.

11 MR. KUNZ: Yes, I can provide that.

12 MS. WILES: Thank you, Your Honor. And thank you
13 very much, Mr. Kunz. That's all for me.

14 JUDGE LARSEN: All right. Thank you very much.
15 Any participant questions?

16 MS. CARLON: Yes. We have one, Your Honor, from
17 Ms. Cain.

18 JUDGE LARSEN: Again. Let's ask Mr. Kunz to
19 address your question in post-hearing comments. Ms.
20 Cain, go ahead.

21 MS. CAIN: Thank you, Chris Cain, NABTU. Hi, Bob.

22 MR. KUNZ: Hi, Chris.

1 MS. CAIN: I was curious if you can expand on how
2 you used the two reports of first aid only incidents,
3 in Dimeo's experience, because it just would provide
4 some insight on how tracking those types of incidents
5 were helpful to you. And that's it. Thank you. Thank
6 you, Your Honor.

7 JUDGE LARSEN: Thank you very much, Ms. Cain.

8 MR. KUNZ: Yes, we can outline that, Chris.

9 JUDGE LARSEN: Further questions?

10 MS. CARLON: No, Your Honor.

11 MR. SCHAYER: No, Your Honor.

12 JUDGE LARSEN: All right. I -- I think this
13 brings us to the conclusion of our morning session.
14 And we will resume at 1 o'clock Eastern Time. Anything
15 further we need to address before we go off the record?

16 MS. WILES: No, Your Honor.

17 JUDGE LARSEN: Going once, going twice. All
18 right. We stand adjourned until 1:00 p.m.

19 (Lunch break.)

20 JUDGE LARSEN: All right. I think it's about time
21 for us to resume.

22 MS. CARLON: Yes, it is, Your Honor. I'm going to

1 go ahead and back through the logistics for our
2 afternoon group. This is Mariam Carlon from ABT
3 Global, OSHA's contractor. It's 1:00 Eastern Time and
4 we are now rejoining OSHA's informal rulemaking hearing
5 for heat injury and illness prevention in outdoor and
6 indoor work settings. Before we begin, we'd like to go
7 over some logistics for today's public hearing.

8 As a reminder, all attendees are muted
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1 please send an email with your name and phone number to
2 public_hearing@abtassoc.com. The first speaker group
3 should be showing on the slide now. North America's
4 Building Trades Unions represented by David Wysocki,
5 Tarn Goelling, Kenneth Seal, Ryan Papariello, Esmerelda
6 Aguilar, Christina Cain, Cora Roelofs, Gavin West,
7 Richard Tessier, and Kalima Walker. We are working on
8 promoting you all individually, but as you are promoted
9 please state your name and your affiliation for the
10 record as you transition between your testimony.

11 (Pause)

12 JUDGE LARSEN: All right. Are our speakers ready
13 to begin?

14 MR. WYSOCKI: This is Dave Wysocki. I am.

15 JUDGE LARSEN: All right. Mr. Wysocki, let's
16 proceed.

17 MR. WYSOCKI: Hi. My name is David Wysocki. I am
18 the National Safety Director for the International
19 Masonry, Training, and Education Foundation. We are
20 the training organization for the members of the
21 International Union of Bricklayers and Allied
22 Craftworkers. Thank you Judge Larsen and OSHA for the

1 giving me the opportunity to speak on this proposed
2 heat standard.

3 The IUBAC has members that work in high heat
4 exposure areas. For example, new and existing
5 construction sites, steel mills, glass plants,
6 limestone plants, et cetera. I will be talking
7 specifically on indoor refractory members working in a
8 steel mill. They work in different capacities
9 throughout the country from relining a kiln, repairing
10 a kiln that is shut down but still hot, and repairing
11 kilns that are in working order and are in need of
12 repair.

13 One job task I'm going to speak about is relining
14 of a rail car that transports molten steel to smaller
15 steel shops in neighboring areas. One particular rail
16 car was being repaired because it was damaged while
17 emptying the molten steel at a smaller steel
18 manufacturing shop. The rail car is brought back to
19 the maintenance shop, cooled for days before allowing
20 members to start the demolition of the firebrick
21 inside. This rail cart is still warm when they start
22 their work.

1 So during the repair, members are moved to other
2 tasks in the mill that are not in high heat areas, for
3 example, laying brick in a ladle or shooting gunite.
4 The contractor at this location had fans pointing to
5 the opening of the rail car. This process is moving
6 warm air back into the rail car. The contractor has
7 since then purchased a portable air-conditioning unit
8 to cool the train car while work is being performed.
9 With this air conditioner unit in place, they have seen
10 increased production in members who are less fatigued.

11 This is all part of the planning stages of the job
12 task at hand. It is not only beneficial, but crucial
13 to train the workforce as well as the supervisor in how
14 to plan and also prevent heat-related illnesses. Thank
15 you again for giving me the opportunity to testify
16 today.

17 JUDGE LARSEN: Thank you. Who's our next speaker
18 on the panel?

19 MS. CAIN: Pardon me, Judge Larsen. This is Chris
20 Cain, Safety and Health Director for NABTU. The order
21 on this slide is not the correct order for our --

22 JUDGE LARSEN: Oh.

1 MS. CAIN: -- testimony.

2 (Cross talking.)

3 MS. CAIN: Thank you, Dave, for going first. He
4 was not slated to go first. I was going to start with
5 opening remarks for our panel. I thought I had
6 communicated this through the contractor for OSHA in
7 advance of this hearing, but apparently --

8 JUDGE LARSEN: You know, you --

9 MS. CAIN: -- it wasn't understood.

10 JUDGE LARSEN: -- you probably did, and the water
11 just didn't get to the end of the row, which is me. So
12 I apologize for that.

13 MS. CAIN: No -- no worries, Your Honor.

14 JUDGE LARSEN: Let -- let's hear from you now, as
15 the lawyers say, nunc pro tunc.

16 MS. CAIN: Okay. I'm not a lawyer. So I don't
17 understand that. But I was just hoping, sir, if we
18 could verify that our panel was indeed present. There
19 seems to be a lot of participants in the panel room.
20 So I'm not sure how to look through them. I wonder if
21 we could --

22 JUDGE LARSEN: Oh, I'm the wrong person to ask.

1 Maybe Ms. Carlon could help us with that.

2 MS. CARLON: Yes, Judge, everybody is present as a
3 panelist.

4 JUDGE LARSEN: Okay.

5 MS. CAIN: Okay. Thank you. And does that
6 include McKenna Holtz too, as counsel to the Building
7 Trades instead of Esmerelda Aguilar?

8 MS. CARLON: Yes.

9 MS. CAIN: Fabulous. Thank you so much.

10 I'm going to go ahead and get started and then,
11 you know, we'll go through the comments. But just to
12 kind of lay the groundwork, I wanted to thank you, Your
13 Honor, as well as the OSHA staff and Solicitor's Office
14 for moving forward with this rulemaking and working on
15 this effort to protect construction workers. In this
16 case from exposure to heat and death from it. It's --
17 I just want to acknowledge that these are very, very
18 difficult times in the federal sector, and that we
19 really appreciate your work and understand that there's
20 a lot of distress among the ranks of federal employees
21 and appreciate your work all the more in these
22 difficult times.

1 As I start, as I mentioned, I'm Chris Cain. I'm
2 the Director of Safety and Health for North America's
3 Building Trades Union. Ryan will describe a little bit
4 of what the Building Trades are. But before I turn it
5 over to Ryan, I just wanted to raise a couple of
6 issues. We respectfully request that OSHA reconsider
7 the post-hearing instructions. Right now there is one
8 post-hearing period after the close of this informal
9 hearing where all comments and briefs are due at the
10 same time.

11 We request -- respectfully request that OSHA
12 establish a post-hearing comment period for 90 days
13 after the posting of the official transcript from this
14 hearing followed by a post-hearing briefing period of
15 at least 60 days following the closing of the post-
16 hearing comment period. In our experience this has
17 been the way that OSHA has conducted most rulemakings
18 at least in the last 20, 25 years with the -- what
19 flipped was we think during COVID. When there was an
20 expedited rulemaking taking place, the post-hearing
21 briefing period was combined with post-hearing
22 common -- comment period.

1 I think it's essential so that participants and
2 stakeholders are able to fully consider the evidence
3 that's provided into the docket during the post-hearing
4 comment period in order to reflectively -- or
5 effectively state their -- and a closing position on --
6 based on all of the evidence in the docket that we
7 should have access to prior to creating our final
8 brief. Really appreciate the consideration. I think
9 it's completely doable over the next week or two to
10 consider that and then, you know, make the
11 determination at the close of this hearing if the
12 original post-hearing commenting procedures as already
13 distributed could be updated and changed and hearing
14 participants informed.

15 And then, before -- again, one more thing before I
16 turn it over to Ryan. Oh, two more things. The --
17 we've heard a lot about this one-size-fits-all
18 rhetoric. And it's really confusing in some ways
19 because at the same time commenters have been stating
20 that we can't have this -- this kind of approach, we
21 need to have a performance based standard, but they're
22 asking for specifications in the standard at the same

1 time. Sometimes in the same breath. The definitions
2 of distance to break areas or water temperature.

3 I -- I don't know ultimately what OSHA should do
4 as long as it's protective. However, contractors in
5 our experience really like specification based
6 standards so that they have a -- a way to determine
7 that they are in compliance with the rule, and they
8 know that they are doing the bare minimum OSHA would
9 ask them to do in a final rule. And so I am going to
10 act as kind of the moderator for this panel. And after
11 the prepared comments are made by our panelists, I will
12 go ahead and potentially assign questions that come in
13 from the OSHA panel and others and assign them to the
14 various participants. And with that, we have a
15 speaking order of Ryan, Ken, Rich, Tarn, Dave already
16 went, and then Kalima. So with that I'm going to turn
17 it over to Ryan. Go ahead, please.

18 (Pause)

19 MS. CAIN: We see you, Ryan.

20 JUDGE LARSEN: Mr. Papariello, I -- I can see you,
21 but I cannot hear you.

22 MS. CARLON: Ryan, it looks like your unmuted. I

1 would just double check -- if you see the drop down by
2 your unmute button -- that Webex is connected to the
3 right speaker system for your computer because it seems
4 like you can hear us, but we can't hear you.

5 (No response.)

6 MS. CARLON: No. Still cannot hear you. Not yet.

7 MR. PAPARIELLO: Can you hear me?

8 MS. CARLON: There we go.

9 MR. PAPARIELLO: Oh, perfect. All right. So good
10 afternoon and thank you to the OSHA staff and
11 Administrative Law Judge Larsen for the opportunity to
12 present our testimony. My name is Ryan Papariello, and
13 I am the Safety and Health Specialist for the Laborers'
14 Health and Safety Fund of North America. I also serve
15 alongside my fellow panelists as a member of the North
16 America's Building Trades Unions Safety and Health
17 Committee.

18 Heat is one of the most serious occupational
19 hazards facing our workforce today. Rising
20 temperatures combined with strenuous physical nature of
21 construction work have created dangerous conditions
22 that put -- put workers at risk of serious illnesses

1 and death. Each year construction consistently ranks
2 among the top industries of heat-related injuries and
3 fatalities, which are entirely preventable.

4 Heat-related fatalities are a serious concern, but
5 the true scope of the problem is often hidden. Heat-
6 related illnesses are significantly underreported for
7 multiple reasons, including lack of information,
8 communication, and fear of retaliation. A meaningful
9 and effective heat standard must go beyond basic
10 provisions like water, rest, and shade. It must be
11 comprehensive, enforceable, and rooted in prevention.
12 A standard should include a written heat illness
13 prevention plan, an acclimatization plan, high heat
14 practices, employee and supervisor training, clear
15 temperature triggers, a buddy system, and
16 antiretaliation language that ensure workers can speak
17 up without fear.

18 We must shift from a reactive to a proactive
19 strategy that centers on worker health and safety.
20 Feasibility and flexibility have been -- have been
21 raised as a concern throughout these hearings. But our
22 experience tells a different story. We work closely

1 with contractors and union members who are not only
2 willing but eager to implement protections against
3 extreme temperatures. In states with -- with states
4 with existing heat standards, contractors are already
5 operating under clear, practical requirements whether
6 on large job sites or in small crews. All workers
7 want, expect, deserve protections. And they have a
8 legal right to a safe and healthy workplace.

9 State heat standards have shown that feasibility
10 and flexibility are not a barrier. In fact, as the
11 more recently developed heat standards illustrate,
12 these can go hand in hand. The bottom line, the sky is
13 not falling, and this standard is long overdue. In our
14 ongoing efforts to protect workers from the dangers of
15 extreme heat, I chair the NABTU Safety and Health Heat
16 Illness and Prevention subcommittee. A dedicated
17 working group composed of union safety professionals,
18 occupational health experts, and frontline worker
19 representatives.

20 Collectively, we represent the safety interest of
21 over 3 million workers in the Building Trades. We are
22 committed to addressing the growing threat of heat-

1 related hazards and advocating for comprehensive,
2 enforceable protections for workers. Their wellbeing
3 depends on our shared responsibility to act to ensure
4 that no worker is left unprotected from the dangers of
5 extreme heat on the job. In our panel today, like you
6 heard from Mr. Wysocki, you'll hear directly from union
7 safety representatives. Real workers from the field
8 with boots on the ground.

9 Their voices carry the weight of lived experiences
10 and must be at the center of any meaningful heat
11 protection standard. In closing, NABTU commends OSHA
12 but urges the agency to act swiftly and decisively to
13 finalize a strong enforceable heat illness and -- heat
14 injury and illness prevention standard, excuse me. One
15 that ensures our members return home safely to their
16 families each day. Thank you for your time and I'll
17 defer back to Chris Cain.

18 MS. CAIN: Awesome, Ryan, thank you. Ken, you're
19 up.

20 MR. SEAL: Can you hear me?

21 JUDGE LARSEN: Yes.

22 MR. SEAL: Thank you, Your Honor. I appreciate

1 the -- the panel and OSHA for allowing me this -- this
2 time. My name is Ken Seal with the International Union
3 of Painters and Allied Trades. We cover multiple
4 crafts and trades, and just to name a few, commercial
5 and industrial painters, bridge painters, glazers,
6 drywall finishers, public sector workers, floor
7 coverage, trade show, and sign and display. Heat
8 doesn't tap you on the shoulder and say, I'm coming; it
9 hits fast and hard. And sometime it doesn't give you a
10 second chance.

11 Today is -- today, it's over 100 degrees in Las
12 Vegas, and I stand here not just as someone who spent
13 time in the field but as someone who's felt that heat
14 firsthand. And who's made it his responsibility to
15 make sure others don't suffer from it. I spent 25
16 years in the field. Boots on the steel, in the lift,
17 and on scaffolds before I started my new role. Today I
18 live in Las Vegas, and I work across the United States
19 and Canada to keep workers safe.

20 IUPAT treats its members like family, and in
21 family we watch out for each other. We don't leave
22 someone to fight the heat alone. We prepare, we

1 protect, and we plan. Before I moved to the desert
2 heat of Nevada, I worked in Fairbanks, Alaska running a
3 job on Fort Wainwright Army base. You want to talk
4 about extremes. I stood in -30 degrees Fahrenheit and
5 110 degrees Fahrenheit heat. And I learned fast
6 conditions change but responsibility doesn't. Your
7 people still need you to protect them no matter
8 where -- where you are.

9 When I moved to Vegas, I knew I had to change how
10 I ran my crews. I attended heat illness prevention
11 training through the IUPAT. That training didn't just
12 teach me how to react, it taught me how to lead. It
13 taught me that planning isn't optional, it's life or
14 death. On the job I had crews working inside and
15 outside of two-story condos in Las Vegas. We were
16 fighting the sun every day. I didn't just hand out
17 water and hope for the best. I bought Rubbermaid carts
18 and filled five-gallon coolers, placing them in every
19 work area. I made hydration accessible because five
20 floors away is five floors too far when someone's
21 overheating.

22 We chase the shade, letting the sun chase us. If

1 the sun was beating down on one side of the building,
2 we moved to the other. We adapted. We looked ahead,
3 we planned, and most importantly, we acted. And I told
4 my crew straight up, If you don't feel right, you stop.
5 No shame. No punishment. Your health comes first.
6 And you know what, productivity didn't drop. Because
7 when people feel safe, they perform better. They trust
8 leadership. They know someone has got their back.

9 I worked right next to other crews who were
10 clearly struggling with the heat. Wiping sweat from
11 their eyes, moving slower, heads down. And I walked
12 over and asked them, "What's your heat plan? What do
13 you -- what do you have in place to keep you safe?"
14 More than once I heard the same response, We just do
15 what the foreman tells us. No plan, no water station,
16 no break schedule. Just blind trust in someone who may
17 or may not be thinking about their safety, or even
18 worse, has no training in how to recognize or respond
19 to any heat-related symptoms.

20 Right now across the country -- sorry about that.
21 And that's the problem. When there's no standard,
22 workers are left guessing, or worse, suffering in

1 silence. Right now across the country there are work
2 sites where people are laboring in 100 plus degree heat
3 and there's no shade, no hydration plan, no breaks, and
4 no awareness training. We wouldn't let someone blast
5 lead paint without protection. We wouldn't -- we would
6 not hang them off a 20-story building without fall
7 protection. So why are we letting them suffer in
8 extreme heat with no protection plan?

9 Because here's the truth. Having a plan is not --
10 is one thing, putting it to action is another. But
11 even a great plan means nothing if there's no standard
12 to back it up. If there's no heat protection standard
13 in place, no real accountability, then it's just talk.
14 And talk doesn't save lives, action does. When there's
15 a standard, everyone is everyone is responsible,
16 everyone has to step up, that's how we change the
17 culture. That's how we stop losing lives to something
18 that is entirely preventable.

19 We need real, enforceable heat standard that not
20 just are written down, but live out on every job site.
21 We need everyone to understand protecting workers isn't
22 a nice to have, it's a requirement. And we need to

1 empower every worker with the right to say, it's too
2 hot and we need to follow the plan. Because if we
3 don't have a plan, if we don't act on it, and if we
4 don't hold people accountable when they don't follow
5 it, then we have failed.

6 Every heat-related illness is a warning, every
7 death is a tragedy that could have been prevented.
8 Let's stop guessing, let's stop hoping, let's stop
9 leaving it up to luck. Let's build a plan, live the
10 plan, and enforce the plan. Let's make that at the end
11 of every shift and every worker goes home safe. Thank
12 you, Your Honor. That's the end of my testimony.

13 JUDGE LARSEN: Thank you.

14 MS. CAIN: Thanks, Ken. We've got Rich Tessier up
15 next. Rich?

16 MR. TESSIER: Yes. My name is Rich Tessier.
17 Is -- is everybody good. Can you hear me?

18 JUDGE LARSEN: Yes, thank you.

19 MR. TESSIER: Okay. Thank you. Thank you, Your
20 Honor -- Your Honor. Thank you everybody else involved
21 in this. So for the record once again, my name is
22 Richard Tessier. I'm the Safety Director for the

1 United Union of Roofers and Waterproofers. And for the
2 last 15 years in addition to that, I developed
3 curriculum for our training centers around the country.
4 Year after year, roofing has been between the second
5 and fourth most dangerous occupation in the United
6 States. A stat that we're not proud of. But without
7 OSHA standards, we could easily have been number one.
8 Standards do work.

9 I am here for a different reason a little bit. I
10 want to give a brief perspective from the employee side
11 of the roofing industry. Almost every building in this
12 country has a roof. The main purpose of these roofs is
13 to protect the occupants and the interior of the
14 building from the weather elements which include heat.
15 Most working people work inside of these buildings.
16 These workers are protected from most recognized
17 hazards by OSHA and other standards. Although they may
18 not be protected from heat, they are at least protected
19 from the elements, and in most cases can control these
20 conditions inside these buildings to make it a more
21 comfortable work environment.

22 Now on a warm day, many of these workers leave

1 these buildings with controlled atmospheres and walk to
2 their cars, busses, trains, et cetera to another
3 controlled atmosphere only to notice the heat while
4 walking across that parking lot. Asphalt parking lots
5 can reach 90 degrees -- on a 90 degree day -- excuse
6 me -- can reach temperatures of 140 degrees. Imagine
7 if that was where your desk was. And with all of this
8 in mind I'm going to give you a quick understanding of
9 the conditions on the roof. Keep in mind that the roof
10 is our working, walking surface.

11 A surface we do not choose, the customer does. A
12 surface that changes constantly. And a surface that
13 has an unlimited supply of hazards. For this example
14 I'm going to use a large warehouse building where
15 workers will remove an existing asphalt roof with
16 gravel and install a white PVC roof. On a 90 degree
17 day, the existing roof can exceed 125 degrees. Other
18 roof surfaces easily reach well over 140 degrees.
19 Although the surface temperature -- this is surface
20 temperature, not air temperature, which could still be
21 well over 110 degrees.

22 The workers still need to walk and work on these

1 surfaces. In addition to these temperatures, the work
2 itself is very strenuous, causing the body to heat up
3 more rapidly. Once a section of the roof has been
4 removed, the new roof is installed. And in this case,
5 it's a white roof. A white roof on a 90 degree day,
6 believe it or not, can still reach temperatures of over
7 120 degrees. At this point, the work must continue
8 until the new roof is watertight. Now, with a little
9 more understanding of this work environment, what can
10 be done to help protect these workers from heat?

11 Well, in my opinion, a well written heat standard
12 would not only protect these workers, it would also
13 help employers have a better understanding of how to
14 assist with heat hazard protection that would include,
15 for example, work/rest cycles, hydration, shade
16 structures, training, recognizing the symptoms,
17 emergency response, heat toolbox talks. Which all have
18 been -- we have been training and implementing for
19 years. They are all doable. Again, standards work,
20 and I will leave it at that. Back to you Chris. Thank
21 you. And thank you, Judge.

22 MS. CAIN: Thanks, Rich. Next up we got Tarn.

1 MS. GOELLING: Hello. Good afternoon. Can folks
2 hear me?

3 MS. CAIN: Yep.

4 MS. GOELLING: Okay. Excellent. My name is Tarn
5 Goelling, and I am an inside wireman electrician of 19
6 years. I'm currently an international representative
7 with the International Brotherhood of Electrical
8 Workers in our Safety and Health Department. The IBEW
9 represents 860,000 members across U.S. and Canada, and
10 we work in a wide variety of fields, including
11 utilities, construction, telecommunications,
12 broadcasting, manufacturing, railroad, and government
13 employees. Many of our local unions represent workers
14 in multiple fields with the majority in utilities and
15 construction. I'd like to start with sharing some of
16 the specific examples to heat hazards that electrical
17 workers face while on the job.

18 Our members in both the utilities and construction
19 face elevated heat exposure both indoor and outdoor
20 that are specific to their respective occupations. And
21 due to the physical nature of our work, these put
22 electrical workers at added risk to injury and illness

1 from these heat hazards. For example, on occupied
2 properties where many construction workers do their
3 work, the electrical closet is an enclosed area where
4 transformers, electrical panels, and switchgear produce
5 significant heat during normal operation.

6 In commercial and industrial spaces where there is
7 a motor control center and a bank of motors that
8 operate HVAC systems or industrial machinery, the heat
9 that these motors produce can be enough to burn your
10 skin if you accidentally brush against them.
11 Additionally, much of the equipment is housed in an
12 area of the building that is unconditioned space. Like
13 the penthouse or frequently on the rooftops of these
14 buildings where exterior conditions create additional
15 sun exposure hazards.

16 Both construction and utility workers are exposed
17 to boiler rooms and other power generation sources like
18 nuclear radiation and gas powered generators. All
19 which contribute significant to extreme heat hazards in
20 these job conditions. In new construction, many of our
21 workers are outside in the elements. Especially when
22 working on what we call deck work. Where a conduit is

1 placed in the flooring and tied down with the rebar
2 prior to final concrete pouring for each floor of a
3 building or a garage. In those instances, workers can
4 be exposed to blistering heat from the sun during the
5 hottest portions of the day.

6 And one last example. One of the newest areas of
7 electrical work emerging over the past decade, utility
8 grade solar generation. Our members are building solar
9 arrays on fields of land that are specifically chosen
10 for direct solar exposure. Putting them in some of the
11 hottest working environments that receive 10 to 12 plus
12 hours of solar sun every day in parts of the country
13 that are literally deserts. As you can imagine, these
14 sources of heat that are an inherent hazard to our
15 workers have caused considerable illness and injury to
16 electrical workers. One example of such a situation
17 entailed a worker who went back to work after taking
18 time off in Austin, Texas, where temperatures are
19 regularly above 105 degrees. Over the course of the
20 day, he became pale, was confused, and complained of
21 dizziness. Despite resting in the shade after these
22 illness effects became visible, he still felt unwell

1 and left the job site early. On his drive home, he
2 passed out and flipped his truck. Upon medical
3 examination, it was determined that this worker
4 suffered from a heat stroke.

5 Another incident took place in Southern
6 California, where outside temperatures reached 114
7 degrees. This member was working in a non-air-
8 conditioned space, on a ladder, inside of a temporary
9 modular trailer. He began to feel lightheaded at the
10 top of the ladder, where he stated he could feel the
11 heat radiating from the roof of the trailer. As he
12 descended his ladder, he collapsed onto the floor.

13 In both of these situations, the workers were not
14 properly acclimated to working in extreme heat, one
15 having come back to work after taking time off, while
16 the other increased his workload due to overtime and an
17 advanced job completion schedule. Many of the injuries
18 and illnesses resulting in exposures to these heat
19 hazards on the job are easily preventable with an
20 appropriate heat illness prevention plan.

21 I am grateful to report that many of our
22 management partners recognize the risks and they

1 qualify as responsible contractors that mitigate the
2 hazards by having a heat plan in place. These heat
3 plans outline engineering and management controls that
4 effectively reduce exposures to our workers. One
5 contractor in particular, CSI Electrical Contractors,
6 oversees a number of solar generation installations in
7 California.

8 Some of the practices that they shared with me
9 include a cooling trailer, which is a trailer that they
10 actually drive out into the solar field, which is air-
11 conditioned and provides the workers a place for safe,
12 cooled, air-conditioned space when needing to be cooled
13 off. Most of these installations are in the high
14 desert that reach and exceed 115 degrees Fahrenheit and
15 have a number of electrical workers on the job.

16 Additionally, the CSI contractors supply shade
17 structures to every single crew. Every crew has
18 available a towable shade structure that is always
19 available and is mobile enough to work in the fields.
20 They also provide cooling personal protective
21 equipment, including evaporative towels and technology
22 that fits inside of a hard hat to provide additional

1 cooling air. All of the employees are trained to
2 recognize the symptoms of heat stress, heat illness,
3 and heat stroke. And freezers are available in their
4 trailer city, where they keep ice vests in extreme
5 emergency situations to get the core body temperature
6 down when someone is suffering from a heat illness. In
7 addition to providing cooled water bottles to every
8 single worker, they also provide electrolytes to help
9 with hydration.

10 This contractor has been building solar projects
11 since 2013, which is prior to the California heat
12 standard update, which occurred in 2015. Their
13 policies and procedures outlined in their heat illness
14 prevention plans clearly provides evidence that a
15 strong heat standard protects workers when applied from
16 a management perspective. Controlling for hazards
17 results in increased productivity and allows workers to
18 best complete their work and then return home safely at
19 the end of the day.

20 As a construction worker, I'm asking on the behalf
21 of 860,000 IBEW members that OSHA provide a strong heat
22 standard that has been illustrated to be feasible by

1 many of our contractors and utility providers. Thank
2 you.

3 MS. CAIN: Thank you, Tarn. And next on our list
4 was Dave Wysocki, who gave his comments at the
5 beginning, focusing on brickwork and refractory work,
6 which is often incredibly hot. And then last
7 representative that we'd asked to prepare comments is
8 Kalima Ramsey-Walker.

9 Kalima, would you please introduce yourself and
10 get started?

11 MS. RAMSEY-WALKER: Good afternoon. Can everyone
12 hear me?

13 MS. CARLON: Yes, we can hear you.

14 MS. RAMSEY-WALKER: Good afternoon, Judge and OSHA
15 panel. My name is Kalima Ramsey-Walker. I am a sheet
16 metal worker of over 17 years, and just in the last
17 couple of months, I've been appointed to SMOET, which
18 is our Sheet Metal and Occupational Health and Trust
19 Institute, where we see over the health and occupation
20 of the sheet metal workers.

21 SMART, the International Association of Sheet
22 Metal Workers, Air, Rail, and Transportation Workers,

1 is one of North America's most dynamic and diverse
2 unions with over 230,000 members. Our members ensure
3 that the quality of air we breathe promote energy
4 efficiency and produce and provide the vital services
5 that move products to market and passengers to their
6 destinations. We are sheet metal workers, service
7 technicians, bus operators, railroad engineers,
8 conductors, sign workers, welders, and product
9 employees, and more.

10 Now, a little bit on my personal experience as a
11 sheet metal worker I'd like to share. From my
12 experience as a welder with the sheet metal workers, I
13 worked in a shop during the summer, as you can imagine,
14 often got hotter than the temperatures outside. Heat
15 quickly became a serious safety condition.
16 Fortunately, the contractor took heat safety seriously.
17 The regular health toolbox talks that covered the signs
18 and heat-related illnesses like dizziness, nausea, and
19 confusion. Workers were encouraged to speak up if they
20 experienced any symptoms. They were told to take a
21 break when needed. Cold water was always available,
22 and it wasn't just an option, it was an expectation.

1 Staying hydrated was built into the training and a
2 part of the job culture. Large fans were placed
3 throughout the shop, and workers could use them when
4 needed. The shop also implemented straightforward,
5 efficient measures like stop work authority, or SWA,
6 and enforced open communication among the co-workers.
7 These were simple steps that didn't require major
8 change or add any cost, but made a real difference in
9 keeping us all safe. Thank you.

10 MS. CAIN: Thanks so much, Kalima.

11 So, Your Honor, we also have our attorney and two
12 scientists on our panel who will not provide prepared
13 remarks. Gavin West and Cora Roelofs are our
14 scientific support. And with that, I wanted to
15 conclude our prepared remarks. And hopefully, OSHA
16 will take advantage of the fact that we have reps of at
17 least some of our 14 unions on our panel who have real
18 in-the-workplace experience, both with heat and with
19 the trade.

20 So, with that, we'll be very happy to take
21 questions, and as I mentioned earlier, I'm happy to
22 direct them to the appropriate person. Thank you.

1 MS. NAUGHTON: Your Honor, you were muted. This
2 is Sheila Naughton with the Solicitor.

3 JUDGE LARSEN: Oh, well, you know, I probably
4 shouldn't do that. I apologize. Do we have questions
5 from the OSHA panel, Mr. Schayer?

6 MR. SCHAYER: Yes, Your Honor, we do. And thank
7 you so much for your testimony to the panel. I wanted
8 to follow up with something that Mr. Seal said, that
9 you have found with rest breaks, that they did not
10 affect productivity, and was wondering if you or anyone
11 else on the panel could speak to that problem.

12 MS. CAIN: Go ahead, Ken.

13 MR. SEAL: That was my experience in the field
14 that no matter, you know, I just allowed them to take
15 breaks. I had a Rubbermaid cart, I had water in the
16 stations, and I told them anytime that they felt hot,
17 take breaks. If they're out in the sun, they get
18 slower as they get hotter and as they suffer from, you
19 know, the heat and the sun glaring in their eyes. If
20 they step out and take, let's just say, a ten-minute
21 break, they get water and then they're going to keep
22 that production level up. So in my experience, I did

1 not see them lose productivity at all. So that's how
2 I'm judging that, just because, you know, I can keep
3 them working, they were more proficient, they were more
4 productive instead of just out there suffering and
5 slowing down because of the heat.

6 MR. SCHAYER: Thank you, Mr. Seal. And could you
7 just give an estimate of how often folks may have been
8 taking breaks, if possible?

9 MR. SEAL: Yeah, so on an eight-hour shift, we
10 usually allow a 15-minute break after the two hours.
11 That's a usual type of break that we allow and then
12 there's a lunch break. They were probably taking three
13 extra breaks probably a day, that ten-minute break.
14 But, you know, and having that water right by them, it
15 really wasn't a detriment to the production that I was
16 doing.

17 MR. SCHAYER: Okay, thank you.

18 MS. CAIN: I was hoping that we could ask Gavin or
19 Cora to respond to that as well, because there's some
20 recent literature on that, I believe. Gavin?

21 MR. WEST: Yes, thank you. This is Gavin West,
22 NABTU. So as Chris mentioned, there is research on

1 this topic and I would put that into three buckets.

2 So there are studies showing the effect of rest
3 breaks on workers' physiological ability to recover and
4 how that affects physical work capacity, so just the
5 ability to do physical tasks. So I think that's part
6 of the productivity picture.

7 And then there's also research looking at more
8 direct measures of productivity in terms of work
9 outputs that are objectively measured.

10 And then the third, I think Ken referenced this,
11 is there's also a body of research that's kind of more
12 organizational psychology that shows for, you know,
13 generally when you have workplaces where safety and
14 health is prioritized, employees are empowered, they
15 feel valued, and that their employer is looking out for
16 their health and safety, that that has positive effects
17 on employee morale, their productivity, organizational
18 measures of success financially, and things like
19 employee retention as well and reduced injury costs.

20 And we would be happy to follow up in our post-
21 hearing comments providing more detailed information on
22 those studies.

1 MS. CAIN: Cora, did you have anything to add?

2 MS. ROELOFS: No, I didn't.

3 MR. SCHAYER: Okay. Thank you very much. Thank
4 you, Mr. West. And yeah, anything that you could
5 provide in your post-hearing comments would be very
6 helpful. We appreciate it.

7 Now I would like to turn to Zoe Petropoulos, who
8 has some questions for the panel.

9 MS. PETROPOULOS: Hi, this is Zoe Petropoulos with
10 the Directorate of Standards and Guidance. So I'm just
11 going to ask a few questions about monitoring of heat
12 hazards. In your written comment on the NPRM you
13 recommended that OSHA not allow employers to use heat
14 index forecasts to comply with the monitoring
15 requirements under paragraph (d), and encouraged on-
16 site monitoring instead. My follow-up question is, do
17 you support the use of cell phone-based apps such as
18 the OSHA NIOSH Heat Safety Tool app, or would you
19 support any similar forecast data sources that rely on
20 more than just nearest airport monitoring data?

21 MS. CAIN: I think we can respond to that in post-
22 hearing. Thank you.

1 MS. PETROPOULOS: Got it. And then my next
2 question, in your experience, how often and with what
3 equipment do employers in the construction industry
4 currently monitor heat conditions at the work site?

5 MS. CAIN: I think we'll also respond to that in
6 post-hearing.

7 MS. PETROPOULOS: That's fair. And I'll just ask
8 a follow-up. If you do know of any construction,
9 employers in the construction industry who currently
10 use on-site wet bulb globe thermometers, if you have
11 any details or examples about their experience with
12 that, we would appreciate it. Thank you.

13 MS. CAIN: Will do.

14 MR. SCHAYER: Thank you, Zoe. And now I'd like to
15 turn to Patti Downs.

16 MS. DOWNS: Hello, everyone. Patti Downs with the
17 Directorate of Standards and Guidance, and I just have
18 a few questions on the use of controls in PPE. I know
19 a few members already discussed this today in
20 testimony, but would any others be willing to describe
21 their experience with the use of personal cooling
22 devices or body cooling accessories in the field that

1 would include things like vests, neck bands, headbands,
2 cooling towels, et cetera? And which of these have
3 been found to be particularly effective?

4 MS. CAIN: I would ask if Tarn or Dave has a
5 response to that to go ahead and unmute and provide a
6 response on that.

7 MS. GOELLING: Yes, hi, this is Tarn Goelling,
8 IBEW. The comments that I made were reflecting what
9 one of our employers had chosen for emergency
10 situations in terms of utilizing the ice vests. Those
11 are for when there's a clear need that the core body
12 temperature needs to be reduced, and so that is seen
13 more as like a first aid type implementation. It is
14 not a personal protective equipment. It is an
15 emergency situation context. As far as the evaporative
16 cooling, I personally believe that although it may
17 bring a certain degree of comfort to the wearer, it is
18 not and cannot be relied upon as a control for heat
19 hazards.

20 I think that it's great when an employer does
21 supply that for their workers because it brings a
22 little bit of coolness to the worker for a short period

1 of time, but that also is highly dependent on the
2 environment that you're in. If you are in a dry heat
3 situation, the evaporative cooling works very well. If
4 you are in a hot, humid situation, the cooling -- the
5 evaporative part does not work as effectively. So
6 again, I don't think that it can be utilized as an
7 effective control for this hazard.

8 MR. WYSOCKI: Hi, Dave Wysocki with the
9 International Union of Bricklayers and Allied
10 Craftworkers. Speaking with our members, one, they do
11 use the cooling vests for emergency procedures only.
12 They did try the moisture wicking shirts, but it was
13 not effective in the high heat area.

14 MS. CAIN: Just -- Ken Seal had something to add
15 as well.

16 MR. SEAL: Yeah, thank you, Chris. So during our
17 blasting operations where we blast the paint off of
18 steel, we wear a full helmet and that's supplied
19 breathing air. It's a type C, so it's continuous
20 airflow. We have air conditioners that actually
21 attaches to that air hose that cools the air that's
22 going inside that hood. So we use that when it's really

1 hot out there. So there is air conditioners.
2 Actually, it can be either an air conditioner or
3 heater, actually, but we use that when it's really hot
4 out.

5 MS. CAIN: That's it for now. Thanks.

6 MS. DOWNS: Okay, thank you. And then Patti Downs
7 with DSG again. Do your members supply electrolytes in
8 drinking water? And do you have any success stories to
9 share regarding supplying drinking water containing
10 electrolytes and have there been any downsides to doing
11 so?

12 MS. CAIN: I think we'd like to do that in post-
13 hearing comments.

14 MS. DOWNS: Okay, great. Thank you. That's all
15 for me, Steve.

16 MR. SCHAYER: Thank you. And Your Honor, I'd like
17 to turn to Dalton Moore on the panel here for
18 questions.

19 MR. MOORE: Hi, this is Dalton Moore. I'm with the
20 Directorate of Enforcement Programs. And my question is
21 about PPE and is specific to vapor impermeable PPE.
22 And so I'm just wondering if there's any experience

1 working in conditions with where impermeable clothing
2 PPE is required?

3 MS. CAIN: Well, I think, you know, one of the
4 things that Ken was talking about was in blasting
5 operations and the use of cooling devices and that. I
6 don't know if we have anybody else who wants to speak
7 on that. If you guys could let me know. Is that Tarn?

8 MS. GOELLING: Yes, I can attest that in
9 situations where electrical workers are working on hot
10 electrical, and we are required to wear protective
11 equipment to mitigate the hazard -- the electrical
12 hazards that are involved in the work. Those are
13 impermeable, in a sense, depending on the type of PPE
14 that we are wearing. A lot of times when we're wearing
15 them, it is head to toe, not very breathable.

16 As you can imagine, the insulative qualities of a
17 rubber glove that keeps us safe from the electrical
18 hazard also introduces additional heat hazards while
19 wearing the PPE, which is required in that specific
20 instance. So that does contribute to the condition of
21 the person while they're in those specific garbs.

22 MR. MOORE: My next two points may be better for

1 post-hearing comment, but I would like your opinion on
2 should workers wearing PPE, impermeable type clothing,
3 should they have biomonitors devices on as well? And
4 also, two, your thoughts about how employers address
5 privacy concerns when biometrics are collected. What
6 privacy safeguards would be needed? Thanks.

7 MS. CAIN: Thanks. We'll respond in post-hearing.
8 Thank you.

9 MR. SCHAYER: And now a few questions from our
10 folks in Directorate of Construction. Brian, are you
11 taking this? Brian Rizzo.

12 MR. RIZZO: Yes. Hello, this is Brian Rizzo with
13 the Directorate of Construction, and thanks for being
14 here today and coordinating your responses.

15 So the NPRM comment recommended that OSHA require
16 employers to implement observation protocols at the
17 initial heat trigger. What specific observation
18 protocols do you recommend that OSHA establish at the
19 initial heat trigger?

20 MS. CAIN: I think we'll go ahead and respond to
21 that one in post-hearing. Thanks, Brian.

22 MR. RIZZO: Sure. Another question is, your

1 comments also mention OSHA should not allow assigning
2 large groups of employees to a single supervisor or
3 heat safety coordinator for observation. And you
4 recommended and mentioned the buddy system today.

5 In workplaces where a one-to-one buddy system
6 ratio is not possible, what would be a feasible ratio
7 of heat safety coordinators to employees to observe for
8 those signs and systems of heat illness?

9 MS. CAIN: I think we'll respond to that one as
10 well. I understand some of the conflict that's arisen
11 in other people's testimony, so it's something we'll
12 think about with what we would think would be
13 appropriate. Thanks.

14 MR. RIZZO: Understood. And the last question,
15 actually, there's two more, but this one is sort of
16 related to the last one. And we're talking about
17 having those buddy systems and observers. You
18 discussed close enough proximity in your comments.
19 What would be an appropriate distance for employees to
20 be in proximity to their buddies?

21 MS. CAIN: Thanks. We'll respond to that post-
22 hearing.

1 MR. RIZZO: All right. The final question has to
2 do with the hazard alerts. And the comments mentioned
3 anti-retaliation information being provided in hazard
4 alerts. Are there reasons why you feel including that
5 information in the hazard alert versus training?

6 MS. CAIN: Well, off the cuff, I think it should
7 be in both places. Is there someone else on the panel
8 who wanted to weigh in on that? That's it then. All
9 right.

10 MR. SCHAYER: Thank you. And finally, for the OSHA
11 panel, I'd like to turn to Rachel -- Rachel Carse, one
12 of our economists.

13 MS. CARSE: Hi, this is Rachel Carse from OSHA.
14 I'm just following up on the previous question that
15 mentioned the buddy system. We would appreciate any
16 information that you can provide in post-hearing
17 comments from your members on how much time they would
18 expect to spend observing their buddy for signs and
19 symptoms of a heat illness. And we're also interested
20 in information on the current use of the buddy system
21 for other non-heat-related reasons within the industry.
22 So if there's a buddy system being used for other

1 purposes already, we'd like to hear about that. Thank
2 you.

3 MS. CAIN: Did you -- hold on. Yeah, we'll deal
4 with that in post-hearing because there's a lot of
5 situations that come up regarding lone workers that we
6 have a lot of concerns about and it's just another
7 layer to it with heat. Thank you.

8 MR. SCHAYER: Thank you so much to this panel for
9 your testimony. We appreciate it. And Your Honor, that
10 completes OSHA's questions.

11 JUDGE LARSEN: Thank you. All right, I think we
12 have Ms. Naughton here this afternoon for the
13 Solicitor. Any questions from the Solicitor's office?

14 MS. NAUGHTON: No, Your Honor. No questions from
15 the Solicitor. Thank you so much.

16 JUDGE LARSEN: All right. Do we have participant
17 questions?

18 MS. CARLON: Yes, Your Honor. We have three. The
19 first is from Mr. Schneider. Please state your name
20 for the record.

21 MR. SCHNEIDER: Hi, my name is Scott Schneider,
22 and I have two questions for you. Why are construction

1 workers at disproportionate risk of work-related heat
2 illness and injury?

3 MS. CAIN: I think there are a lot of reasons, but
4 I'm going to turn this one over to Gavin to respond.

5 MR. WEST: Thank you. Gavin West, NABTU. So
6 Chris mentioned earlier that construction workers only
7 account for roughly seven percent of the workforce, but
8 suffer roughly 36 percent of all occupational heat-
9 related deaths in this country. And so I think that's
10 due to the fact that there are many aspects of the work
11 environment and job duties in construction that can
12 increase the risk of heat illness and injury among
13 construction workers. Among them are frequent exposure
14 to heat and humidity while working outdoors, as well as
15 working close to indoor sources of radiant heat,
16 examples of which were provided during this panel's
17 testimony. And I hear a lot of focus on some of the
18 environmental factors, but I think physically demanding
19 work that's very characteristic of construction is a
20 critical factor that sometimes seems to be overlooked.
21 And I think the one fact that speaks to the importance
22 is that the majority of worker deaths are from

1 exertional heat stroke versus classic heat stroke that
2 you might see during a heat wave where it's elderly
3 people sometimes succumbing to heat while sitting in
4 their homes.

5 For workers, it's much more often a factor where
6 that overexertion is a very important element of the
7 risk of heat illness, and you see that in construction.
8 There's research showing that construction workers burn
9 on average, a review of studies that have been done on
10 this topic, on average expend five calories per minute,
11 which translates to 300 calories per hour or over 2,400
12 calories per day on average. So workers who are doing
13 more intense tasks for longer durations could be above
14 that. And the recommended daily consumption is about
15 2,000 calories for most adults. And that's a similar
16 level of energy expenditure to professional athletes.
17 And I don't think there would be many people who would
18 argue that athletes don't deserve rest breaks as well
19 as access to water.

20 It's also important to note that heat strain
21 experienced by construction workers is shown to be
22 cumulative with effects that carry over from one work

1 day to the next. And importantly, there are many
2 things that employers can do to modify the work
3 environment and work processes to protect workers,
4 including eliminating sources of humidity, engineering
5 controls like fans and AC. There's also reducing task
6 demands through better tools, using the right tools,
7 maintaining of equipment, scheduling, rotating workers.

8 And it's also possible for employers to reduce the
9 effects of exposure on employees through cooling
10 measures, rest breaks, hydration practices, and other
11 heat safety practices.

12 MR. SCHNEIDER: Yeah, thanks very much, Gavin.

13 MS. CAIN: Thanks, Gavin. And I just heard from
14 one of our panelists who had some more comments on the
15 types of jobs or activities related to buddy system and
16 would that be okay if she described it?

17 JUDGE LARSEN: Sure.

18 MS. CAIN: Okay, Tarn.

19 MS. GOELLING: Thank you. Thank you, Your Honor.
20 This is in regards to the question that was asked about
21 the buddy systems. Within the electrical industry,
22 there are a number of hazards that we mitigate by using

1 a buddy system.

2 Just off the top of my head, I was able to think
3 of one of our industries is tree trimming for the
4 lines. Line clearance tree trimming is what it's
5 called. And in that type of work, we have hazards that
6 deal with falls, high distance falls, gravity, tools,
7 heavy machinery. And none of that work can be done
8 alone. The inherent hazards that are there can create
9 a life or death situation and it's imperative that a
10 buddy system is used within visible distance. And
11 depending on the task at hand, that distance can be
12 shorter or longer. However, that's one example.

13 Another example is in high voltage line workers,
14 both in construction and existing utilities. Line
15 workers will always use a buddy system for the same
16 reason. High voltage shocks can become a life or death
17 situation. Many times it is on the buddy to make sure
18 that the worker is working safely as well; but in an
19 emergency situation, may have to actually conduct a
20 what's called a dead man lift. And so they have to
21 take the person off of their restraints and bring them
22 down safely. And then another example is confined

1 spaces. Electrical workers work in a variety of
2 confined spaces and when you're in that situation, you
3 could be exposed to chemical hazards. If there's like
4 a gas leak or something like that, you could be exposed
5 to electrical hazards if there is a leaking current.
6 So you have to have someone else there in case of that
7 emergency for a rescue situation. And I would -- I
8 would go so far as to say in certain extreme heat
9 situations, it is also a life or death situation and
10 the buddy system would help to mitigate fatalities from
11 that when they do occur on the job.

12 MS. CAIN: Thanks, Tarn.

13 MR. SCHNEIDER: Okay. This is Scott Schneider.
14 I -- I had another question, which is, you know, we
15 focused a lot on -- on deaths from heat exposure, but I
16 think much more common are heat illnesses, and also,
17 traumatic injuries related to heat exposure. And I'm
18 wondering if you could comment on the increased risk
19 of -- of heat illness and it's underreporting, and
20 also, the -- their increased risk for traumatic
21 injuries of people that are exposed to heat.

22 MS. CAIN: Thanks, Scott. I mean, I think Cora

1 is really -- probably best versed at this.

2 Dr. Roelofs, can you answer that one?

3 MS. ROELOFS: Yes. So we know that a -- a huge
4 amount of heat illnesses are underreported, but where
5 there have been investigations of -- of serious heat
6 injuries, including deaths across the country, they --
7 they have found that there is just a tremendous amount
8 of factors that -- that are contributing to those,
9 including looking at the way that employers did not
10 have comprehensive Heat Illness and Injury Prevention
11 Programs, lone workers, and other -- other factors that
12 are addressed by the proposed standard.

13 I'd also say that we know that it's well
14 documented. We've submitted in our testimony that heat
15 exposures increased the -- the risk of injuries, and
16 for example, the -- they're the -- the Workers
17 Compensation Research Institute has a recent report on
18 the impact of excessive heat on the frequency of work-
19 related injuries, and their analysis showed that the
20 probability of work-related accidents increased five to
21 six percent when the maximum daily temperature rose
22 above 90 degrees in -- relative to a day at a lower

1 temperature, and that this was stronger in the south
2 and for construction workers.

3 And so -- the -- these injuries included traumatic
4 injuries, increase of fractures, dislocations,
5 contusions, lacerations. We know that heat alters the
6 ability of a worker to respond physically and mentally
7 to a hazardous situation; that high temperatures are
8 going to impair decision-making, response time, and
9 concentration; and that heat illness symptoms like
10 dizziness, and confusion, and fatigue, are going to
11 lead to misjudgments.

12 And so if you're working at heights or with tools,
13 this can lead to serious accidents, over-exertion,
14 falls. We know that sweaty hands or fogged up eyewear
15 can reduce visibility and grip, and that can lead to
16 increased likelihood of injuries and falls, especially
17 from ladders or scaffolding, and that this is in
18 particular why it's important for pre-task planning to
19 figure out what hazards may be present in addition to
20 heat that need to be mitigated and paid attention to.

21 And that engineering and administrative controls,
22 and the hierarchy of controls, needs to be embedded in

1 a strong standard because workers may be less able to
2 take action to protect themselves in -- in the heat and
3 they may remove personal protective equipment to wipe
4 off sweat or to get some relief from the heat.

5 MR. SCHNEIDER: Okay. Thank you very much.

6 JUDGE LARSEN: All right, Mr. Schneider. Do we
7 have a next participant?

8 MS. CARLON: Yes, the participant is Ms. Arberry.
9 Please state your name for the record.

10 MS. ARBERRY: Hi, there. My name is Chenay
11 Arberry with the AFL-CIO.

12 I have a question for, perhaps, the scientists or
13 other union affiliates. Are any of you aware of
14 construction -- construction contractors who have a
15 high standard of worker protections for -- for heat?
16 And do you know if they are willing to sacrifice their
17 bottom lines to protect workers from heat? Thanks.

18 And I have another one as well.

19 MS. CAIN: Thanks, Chenay.

20 Gavin, do you want to start that one?

21 MR. WEST: Yes, happy to speak on this. Gavin
22 West, NABTU.

1 So the -- the question is that -- or the answer is
2 yes. As with any OSHA standard, this panel is aware of
3 employers who treat OSHA compliance as the bare
4 minimum, and implement more protective, and more
5 comprehensive health and safety programs, and that
6 extends to Heat Illness and Injury Prevention Programs
7 and Plans.

8 And so I think that there's many smart companies
9 that believe in working smarter and not harder. So
10 they treat their employees as their most valuable
11 asset, not as expendable resources. And so beyond
12 ethical reasons and respect for human dignity, why do
13 some employers go above and beyond to prioritize the
14 health, safety, and well-being of their employees?

15 I've looked at a lot of plans and mission
16 statements, and according to the own words of these
17 companies is that part of the answer is because they
18 recognize that it is good for business. So as I
19 mentioned earlier, research has show -- research shows
20 that businesses thrive and productivity increases when
21 employees feel valued, empowered, and that their
22 employers care about their safety, health, and well-

1 being.

2 There's also evidence that strong health and
3 safety programs reduce injury costs and
4 inclease [sic] -- increase employee retention. And
5 heat, in particular, affects physical work capacity,
6 and research shows how rest breaks can benefit workers
7 physiologically, and can lead to increased production.
8 And some of this came up earlier. So I -- but
9 companies with strong safety records also improve their
10 chances of winning new contracts.

11 And so I think the bottom line is really that
12 there is a business case to be made for planning ahead
13 to work safely in the heat, and to ensure employees'
14 well-being, and that there are companies out there who
15 are ahead of the game, and recognizing that this is
16 becoming increasingly important. Thank you.

17 MS. CAIN: Thanks. And I'd just -- I know we
18 have -- some of the members have health and -- health
19 and heat injury and prevention programs from various
20 employers of their members who will -- we can submit in
21 our post-hearing comments as well.

22 MS. ARBERRY: Great.

1 Thank you, Gavin and Chris. My favorite -- or my
2 last question is also towards the NABTU scientists.
3 Since NABTU represents workers all across the country,
4 do you believe that workers in different geographic
5 regions require different protections and -- from heat
6 stress?

7 MS. CAIN: I'll throw that one to Gavin, too.

8 MR. WEST: Gavin West, NABTU. So no, the way that
9 heat exposure is measured and the way we protect
10 workers doesn't differ from state to state, despite
11 some of the arguments to that effect that we've heard
12 today. You know, we are talking about standard units
13 of measurement, in terms of degrees and humidity
14 levels, which, like inches, are measured the same way
15 regardless of location.

16 So 90 degrees where I am here in Maryland is the
17 same as 90 degrees when I go back home to Virginia.
18 Similarly, how and when protective measures are
19 implemented does not differ from state to state. These
20 are practices rooted in evidence, in terms of how heat
21 affects the human body, how we respond physiologically,
22 and how you can limit the adverse effects of that

1 through workplace interventions.

2 What might differ is how accustomed people are to
3 different climates. And in construction, it's very
4 common that you have people who travel for work, and I
5 think that just speaks to the importance of
6 acclimatization, which -- which is included in the
7 proposed rule. And on that point, I've also heard that
8 it's a -- a one-size-fits-all and that acclimatization
9 isn't feasible, but nobody's pointed out that in the
10 standard there are actually -- there is flexibility in
11 terms of acclimatization.

12 There -- employers are not required to implement
13 the work rest schedules recommended by NIOSH and -- and
14 by other scientific bodies. There is option to,
15 instead, just implement these sensible protections for
16 workers in lieu of -- of those acclimatization
17 procedures. So there is the -- that built-in
18 flexibility that I would point out.

19 And the same protections may be implemented more
20 frequently in hotter states where the climate tends to
21 be more extreme, but I think this is completely logical
22 and not different than any other hazard where the

1 protective measures must, and should be based, on the
2 frequency, duration, and severity of the hazard. And
3 really, what it comes down to is that all workers in
4 this country deserve, and have a right, to a safe and
5 healthy workplace, regardless of who they're employed
6 by or where they live.

7 MS. CAIN: Thanks, Gavin.

8 MS. ARBERRY: Thank you.

9 MS. CAIN: Cora, did you have anything to add or?

10 MS. ROELOFS: Yes, this is Cora Roelofs from
11 NABTU.

12 I wanted to add that when scientists look at the
13 temperatures, including myself -- and I've written a --
14 a paper on this -- when they look at the temperatures
15 at which workers have died in the heat, the
16 temperatures are across a wide range, including 80 --
17 80 degrees. And this is because the contribution to
18 heat illness comes also from the heavy -- or very
19 physical -- you know, the very physical, heavy demands
20 of the work.

21 And the temperatures do -- the higher the
22 temperatures, they're more -- heat deaths and heat

1 illnesses there are, which is why, when we look at the
2 map of heat illnesses and heat deaths, we see them all
3 over the country, from everywhere in the country, but
4 they are higher in the south and in the -- in the west.
5 They are higher in Texas and in southern states, and
6 that is because there is higher temperatures there, and
7 there are -- working at heavy -- at heavy temperatures.

8 And so that -- that means that there has to be
9 a -- a single standard for the protection of human
10 beings from heat who do not vary in their natural
11 immunity or -- to heat based on where they are in the
12 country. And what this demonstrates is that
13 acclimatization is helpful, and that is in the context
14 of safe working conditions, and that construction
15 contractors in the south need a -- a -- a -- a set
16 trigger and -- and a strong standard to encourage
17 strong heat protections and -- and plans because right
18 now, there's a disproportionate death rate among
19 construction workers in the south that could be
20 addressed with this standard.

21 MS. CAIN: Thanks, Cora.

22 JUDGE LARSEN: Any other participant questions?

1 MS. CARLON: Yes, Your Honor. There is one more
2 from Jordan.

3 MR. BARAB: Yeah, thank you. I have a couple of
4 questions if we have time.

5 First of all, we've heard a lot of testimony from
6 the construction industry that the requirements to have
7 water placed in locations readily accessible to the
8 employee would present a, quote, unquote, "greater
9 hazard" because water might be a tripping hazard or
10 interfere with fall protection or a worker might drop a
11 bottle of water from a high building onto someone's
12 head. Can you comment on whether you think this
13 greater hazard argument is -- is accurate, and a reason
14 not to have a requirement that water be placed in
15 locations readily accessible to the employee?

16 MS. CAIN: Hey, Jordan. I can't think of one. I
17 wonder if our panel could come off mute and -- and let
18 us know if you can think of the greater hazards that
19 have been cited, if you were listening earlier today?

20 I -- I just heard Ken and Gavin don't have
21 anything because they're in the same room as me.

22 MR. BARAB: Okay. Thank you. There -- they've --

1 there has also been a request that even with the --
2 under the high-heat threshold, when that's been
3 exceeded, rest breaks should only be allowed quote,
4 unquote, "as needed". Do you know how that could be
5 interpreted by workers or employers in your workplaces,
6 and would -- would an as needed requirement provide
7 sufficient protection?

8 MS. CAIN: That's -- that's a tough question. I
9 think that in some cases it would. If you go back to
10 what Ken testified when he ran work, that was -- that
11 was the rule that he enforced, that his -- his workers
12 knew they had to take the rest breaks as needed, and it
13 was reinforced constantly. I think, in many cases, you
14 wouldn't have an employer or a foreman who would do
15 that kind of enforcement of following rest breaks. So
16 a schedule provides some bare minimum of guaranteed
17 rest breaks, so it's probably a good idea.

18 Anyone else from my panel?

19 MS. ROELOFS: Yeah, I wanted to add to that.

20 We know that workers who are new to the job,
21 whether or not they're acclimatized, that many heat
22 deaths occur for workers who are new on the job. The

1 factor is not only their physiologic acclimatization to
2 the heat, it's also do they know people on the job?
3 Are they afraid that they -- if they speak up about
4 heat or heat hazards they would not be welcomed back to
5 the job. They are trying to prove themselves on the
6 job and -- as new employees.

7 And so for that reason, it's really essential that
8 rest breaks are scheduled, and mandated, and that
9 everyone is entitled to one because those more
10 vulnerable workers may be less likely to speak up given
11 their -- their position on the job.

12 MR. BARAB: Thanks. And as a -- I guess, a
13 related question is, can -- can all of your -- your
14 members, can -- can they just take a break anytime they
15 feel they need it to go find -- to go get some rest or
16 find some water without any fear of discipline and
17 retaliation from their employer?

18 MS. CAIN: Well, I would feel -- I would refer
19 back to the examples that Cora just provided. New
20 employer -- new employees would be really concerned
21 about doing so. And I think that, you know, there's
22 cases that have occurred that we could probably

1 elaborate on in post-hearing comments where it
2 actually, you know, was -- was determined later that
3 the person was new and trying to prove themselves so
4 didn't take water breaks or rest breaks.

5 MR. BARAB: Okay. Thank you.

6 MS. CAIN: Thank you.

7 MS. NAUGHTON: Your Honor, this is Sheila Naughton
8 with the Solicitor.

9 JUDGE LARSEN: Yes, ma'am?

10 MS. NAUGHTON: The -- could the participant that
11 just asked questions identify his first and last name
12 for the record just so we have --

13 MS. CAIN: That was Jordan Barab, B-A-R-A-B.

14 MS. NAUGHTON: Excellent. Thank you.

15 JUDGE LARSEN: Thank you, Chris. Yeah, I think
16 that's correct.

17 MS. CAIN: I remember how to spell your name,
18 Jordan.

19 MR. BARAB: And pronounce it.

20 MS. CAIN: Barab.

21 JUDGE LARSEN: Do we have other participant
22 questioners? Hearing nothing, I'll take that as --

1 MS. CARLON: I -- I was on mute, Judge Larsen.

2 JUDGE LARSEN: Oh, okay.

3 MS. CARLON: No, we do not. We do not at this
4 time.

5 JUDGE LARSEN: Yes. We've all done it, Ms.
6 Carlon. I won't -- I won't point any fingers, but it
7 has happened in the hearing today.

8 Mr. Schayer, anything further from OSHA?

9 MR. SCHAYER: No, Your Honor.

10 And -- and thank you again to this panel for your
11 testimony.

12 JUDGE LARSEN: Ms. Naughton, anything further?

13 MS. NAUGHTON: No, nothing further. Thank you,
14 Your Honor.

15 JUDGE LARSEN: All right.

16 Then, Ms. Cain, thank you very much to you and
17 your panel, and we appreciate your being here today.

18 MS. CAIN: Thank you for giving us this
19 opportunity. It's a little hard to manage remotely, so
20 maybe we should think about in person hearings options
21 in the future, but I appreciate the opportunity to
22 bring these great people to -- for you to listen to.

1 Thank you.

2 JUDGE LARSEN: Well, thank you -- thank you very
3 much.

4 All right. Let's have our next witness.

5 MS. CARLON: The next speaker is Cheryl Ambrose.
6 Please state your name and affiliation for the
7 record.

8 MS. AMBROSE: Cheryl Ambrose, National Roofing
9 Contractors Association.

10 JUDGE LARSEN: All right. Ms. Ambrose, good
11 afternoon and go ahead.

12 MS. AMBROSE: Good afternoon, Your Honor.

13 And thank you and OSHA for this opportunity to
14 testify.

15 As I stated for the record, my name is Cheryl
16 Ambrose, Vice President of Enterprise Risk Management
17 for the National Roofing Contractors Association. I'll
18 be joined today by Beeta Lashkari of Conn Maciel Carey
19 for the Employers Heat Illness Prevention Coalition.
20 She will not be providing a statement but is available
21 to answer questions later.

22 NRCA appreciates the opportunity to provide input

1 regarding OSHA's proposed heat rule. Established in
2 1886, NRCA is one of the oldest trade associations and
3 our nearly 4,000 member companies, both union and non-
4 union, are typically small businesses employing about
5 45 people on average, and represent all segments of the
6 industry in all 50 states.

7 The roofing industry is an essential \$100 billion
8 dollar sector with nearly 1,000,000 employees who
9 provide critical materials and services to ensure home
10 and business safety. Promoting workplace safety within
11 the roofing industry is a core function of NRCA. In
12 furtherance of our mission, NRCA has developed
13 countless safety and health resources on a variety of
14 topics specific to the roofing industry, in addition to
15 heat, to include fall protection, ladder safety,
16 silica, asbestos, and mental health to name a few.

17 NRCA's view is that a federal standard designed to
18 guard against heat hazards must address the unique
19 characteristics of workplaces within the construction
20 industry, and any required protective measures must be
21 practical so that they protect employees while not
22 overwhelming employers by burdensome regulatory

1 complexity.

2 While we share OSHA's goal of protecting employees
3 from heat illness, the proposed rule does contain
4 numerous overly prescriptive compliance requirements,
5 severe -- some severely underestimates --
6 underestimates of regulatory costs, and fails to
7 provide the flexibility that small employers need to
8 effectively comply with the -- with the standard. And
9 critically, it does not contain a separate regulatory
10 approach for the construction industry that we feel is
11 essential to making the rule effective for our work
12 sites and the unique nature of construction and roofing
13 work.

14 Based on our members' collective experience, no
15 one set of policies or procedures fits all. And
16 accordingly, if OSHA moves forward with a final rule,
17 NRCA urges the agency to revise the proposed rule and
18 adopt a reasonably tailored, flexible, performance-
19 oriented standard for managing heat hazards in the
20 construction industry.

21 And with that, I'd like to share some of our key
22 concerns. One, the final rule, of course, as we have

1 stated, which should provide maximum flexibility for
2 employers and be performance-based. We would like to
3 stress that OSHA should not promulgate just a one-size-
4 fits-all standard to regulate the potential hazards
5 associated with heat exposure because the hazard itself
6 varies, as do the mitigation measures that can be used
7 to prevent and protect against the hazard.

8 There are many effective approaches to address
9 heat hazards. NRCA's members' existing heat illness
10 prevention programs, for example, tend to already
11 include elements like water, rest, shade, and training,
12 which NRCA has advocated for throughout this rulemaking
13 process, and promoted long before that.

14 However, we recognize that even for those
15 employers in the same industry, the details of these
16 programs may be much different by necessity. Crafting
17 the standard as performance-based makes sense, at least
18 in part, because of the diverse sets of -- set of
19 employers and industries OSHA intends to regulate.

20 While employers have similar goals, their -- their
21 approaches, by necessity, may vary. A performance-
22 based approach, where the outcome is the regulatory

1 obligation and not the method by which the outcome is
2 achieved, will enhance worker safety. Performance-
3 based standards provide employers with the necessary
4 flexibility to most effectively protect their
5 employees.

6 Employers will still be required to make
7 reasonable decisions, and of course, we understand
8 that. However, they should not be tied to something
9 that they cannot tailor, or forces an unreasonable or
10 inefficient decision, does not work for their business
11 or their employees. Flexibility will allow for -- in
12 our opinion -- not less, but more effective programs.

13 Secondly, certain provisions in the proposed rule
14 are technically and economically infeasible, and OSHA's
15 time and cost estimates are, in our opinion, too low.
16 NRCA believes that OSHA's time and cost estimates
17 grossly underestimate the burden on employers, and we
18 encourage OSHA to review those in its economic analysis
19 and revise as appropriate.

20 OSHA's current estimates may not accurately
21 represent the technical and economic infeasibility of
22 various provisions in the proposed rule. By way of one

1 example, the estimates for how long it will take to
2 modify or create a written Heat Illness and Injury
3 Prevention Program are exponentially low. Per the
4 NPRM, OSHA estimates it will take two-and-a-half to --
5 hours to modify existing programs and 6 to 30 hours to
6 create a program, depending on whether a model template
7 is used or the program is created from scratch. These
8 numbers are simplistic and not necessarily realistic in
9 practice. As we understand, program development is an
10 iterative process in that it is not one and done.

11 There --

12 JUDGE LARSEN: I'm sorry. I've lost the audio.
13 Is anyone else having that problem?

14 MS. AMBROSE: -- in their existing effective
15 programs --

16 JUDGE LARSEN: Oh, there we go.

17 MS. AMBROSE: -- and avoid these unnecessary
18 costs.

19 JUDGE LARSEN: I'm sorry. Ms. Ambrose --

20 MS. AMBROSE: Are we back?

21 JUDGE LARSEN: -- this is Judge Larsen speaking.
22 You -- you dropped out for a minute.

1 MS. AMBROSE: Okay.

2 JUDGE LARSEN: We may not have heard everything
3 you had to say.

4 MS. AMBROSE: Did you hear the part about the --
5 the injury -- Heat Injury Illness Prevention Program?

6 JUDGE LARSEN: Yes.

7 MS. AMBROSE: You did? Okay. I'll do the -- I'll
8 continue on. That's fine. Thank you.

9 JUDGE LARSEN: Okay.

10 MS. AMBROSE: Program development, as I said, is
11 an iterative process and is not one and done.
12 Therefore, we would urge OSHA to do everything possible
13 to allow employers to maintain their existing effective
14 programs and avoid these unnecessary costs that may
15 actually take resources away from other important
16 safety initiatives.

17 Frankly, simply put, if their program is working,
18 they should be permitted to continue with it, as it
19 meets the needs and keeps -- is -- puts protective
20 measures in place. Additionally, NRCA has made
21 available to our members a sample written Heat Illness
22 Prevention Program, and that program also served as the

1 basis for the model program included in the ANSI/ASSP
2 A10.50 heat standard, but it is only a starting point.

3 Employee involvement, leadership commitment and --
4 and review are all part of this process and take time.
5 Thirdly, any heat temperature triggers should be higher
6 and account for local environmental conditions. Again,
7 stressing flexibility, we urge OSHA to adopt the
8 approach taken by Nevada -- and not include
9 necessarily specific heat triggers, but rather OSHA
10 would allow employers to make decisions about
11 implementing mitigation measures on the basis of more
12 flexible, reasonable factors such as an employer's job
13 hazard analysis.

14 Nonetheless, to the extent that heat triggers are
15 maintained, both the initial heat trigger and high-heat
16 trigger should be higher for those -- than those in the
17 current proposed rule and account for local
18 environmental conditions. Moreover, the hazard of heat
19 is very dependent on the environment. NRCA members
20 have employees located in every state and know that
21 effective protocols in the arid southwest, as have been
22 stated here today, are different and approaches -- than

1 approaches used in the high humidity Gulf Coast region.

2 What this means, essentially, is that a federal
3 standard must provide employers the ability to
4 establish programs based on their particular
5 environments. And this comes back to our message that
6 there is simply not a one-size-fits-all approach to
7 regulating heat exposure.

8 I'd like to speak a moment on mandatory rest break
9 requirements, and although well-intentioned, the -- the
10 implementation of additional mandatory rest breaks at
11 the proposed frequency beyond the as-needed breaks it's
12 already provided to employees will require constant
13 scaling and -- scheduling adjustments and create
14 significant potential safety challenges.

15 Concerns about mandatory frequent rest breaks
16 applied to employers in all industries, but are
17 essentially -- are especially concerning in industries
18 where such breaks can cause greater hazards, such as
19 the roofing industry. For example, our roofing workers
20 face significant risk, as already been identified, due
21 to fall hazards, especially during the climb up and
22 down.

1 And other than working at heights, this is one of
2 the highest risk activities for our workers, one that
3 exacerbates, also, the physiological burden of heat
4 stress. Causing greater hazards is also true with
5 certain weather conditions, such as when it is raining
6 or storming. Then, when faced with impending storms,
7 roofers need flexibility to try to get work done before
8 a storm hits to avoid the multitude of hazards
9 associated with working on wet, slippery surfaces
10 while, for example, being exposed to high winds or
11 potential lightning strikes.

12 So we would also like to say that OSHA should add
13 flexibility to the proposed requirements for outdoor
14 heat monitoring. Again, those proposed requirements
15 are economically -- in our view -- and technically
16 infeasible. To the extent that they're maintained, we
17 would urge greater flexibility.

18 And based on the proposed requirement, it seems to
19 us that in most cases, employers will not only need to
20 monitor the weather during the day, but they will also
21 need to monitor, quite frequently, and make similarly
22 frequent adjustments to the controls that they've put

1 in place to respond to changes in the weather as
2 revealed by their monitoring efforts.

3 So OSHA's economic analysis significantly
4 downplays, we feel, the cost and time burden of these
5 requirements. The extent of the monitoring proposed
6 would effectively require employers to almost function
7 as meteorologists, so most employers, particularly
8 small businesses, certainly lack the capacity and
9 expertise to often assign personnel solely to that
10 responsibility.

11 So again, we would look for flexibility as well in
12 acclimatization requirements and include an option for
13 self-managed acclimatization. We would encourage OSHA
14 to adopt the approach taken similar to Nevada -- and
15 not include specific requirements, but rather allow
16 employers to make decisions about implementing
17 mitigation measures on the basis of a more flexible --
18 of more flexible, reasonable factors, such as an
19 employer's job hazard analysis.

20 Nonetheless, to the extents that any
21 acclimatization requirements are maintained, they need
22 to be flexible and include an option for self-managed

1 acclimatization. Although NRCA appreciates OSHAs
2 offering of a couple options in the proposed rule, we
3 would like to see something more flexible if -- if at
4 all possible. And these protocols could require as --
5 as currently proposed, significant administrative
6 oversight and resources to ensure compliance.

7 Beyond those costs, there are significant costs
8 with time when employees are acclimatizing under
9 gradual exposure schedules. So during -- or at least
10 in part, because during these times, they're not
11 performing their regular duties. And although OSHA
12 makes clear that employees can perform other duties and
13 tasks, so long as they are not exposed to temperatures
14 at or above the initial heat trigger, the reality is
15 that many employers do not have other tasks for them to
16 perform.

17 So sometimes those employers would very likely be
18 required to send those employees home with pay as
19 set (audio interference) -- potentially additional
20 staff, or even shut the job down. So if
21 acclimatization requirements are maintained, OSHA
22 should therefore provide more flexible requirements and

1 allow for self-managed acclimatization because, by its
2 nature, it is unique and individualized and depends on
3 an employee's personal health and his or her
4 background, experience, and exposure to hot
5 environments.

6 And finally, NRCA respectfully requests that OSHA
7 revisit the SBAR Panel report and further incorporate
8 the SBAR panel's recommendations. We would also
9 incorporate, by reference, the comments submitted by
10 the Employers Heat Illness Prevention Coalition in
11 earlier phases of the rulemaking. And while NRCA does
12 not necessarily support the promulgation of the heat
13 rule as drafted, we are supportive of this
14 administration promulgating a tailored performance-
15 oriented rule that is in accordance with the rule from
16 which we have advocated here and in previous comments.
17 I thank you again for the opportunity to testify and
18 will be happy to answer questions.

19 JUDGE LARSEN: Thank you, Ms. Ambrose.

20 Questions, Mr. Schayer, from the OSHA -- OSHA
21 panel?

22 MR. SCHAYER: Yes, Your Honor. We do have some

1 questions.

2 And thank you, Ms. Ambrose, for your testimony
3 today. I wanted to ask about performance-oriented
4 standards. So if you could provide now, or in your
5 post-hearing comment, any specific recommendations on
6 how OSHA should structure a performance-oriented
7 standard, that would be very helpful. Particularly,
8 which elements do you think perhaps should be
9 prescriptive to provide enough clarity to employers to
10 know that they're in compliance and which should be
11 more performance-oriented, that would be helpful?

12 MS. AMBROSE: Yes, thank you, Mr. Schayer. Cheryl
13 Ambrose, and yes, I'd be happy to follow up in post-
14 hearing comments with the answers to that question.

15 MR. SCHAYER: Great. Thank you. And one other
16 question I had was on -- you mentioned self-managed
17 acclimatization, and just wondering if you had any
18 thoughts on how employers would be able to ensure that
19 a self-managed acclimatization process was actually
20 protective for the employee, or employees, and that
21 they, as the employer, would also be in compliance with
22 the standard?

1 MS. AMBROSE: Yes, thank you again. That's a
2 great question. And we have -- we have some thoughts
3 on that and I would like to have an opportunity to
4 provide that in post-hearing comments. Thank you --

5 MR. SCHAYER: Okay.

6 MS. AMBROSE: -- very much.

7 MR. SCHAYER: Great. Thank you -- thank you very
8 much.

9 I would now like to turn to Patti Downs who has
10 some questions.

11 MS. DOWNS: Hello, everyone. Patti Downs with
12 OSHA and the Directorate of Standards and Guidance.
13 OSHA is interested in learning more about shade use in
14 the roofing industry. So with regards to commercial
15 roofing jobs and larger industrial projects, can shade
16 be provided on the rooftop? If so, what kind of shade
17 is typically provided? For those circumstances where
18 it might not be feasible, how close are any shaded rest
19 areas and water access to the working area?

20 MS. AMBROSE: Yes, thank you. This is Cheryl
21 Ambrose again. Thank you, Ms. Downs. That's a great
22 question and I would say that the answer is that

1 depends. I would certainly give you some more details
2 in post-hearing comments, but I would just generally
3 add here that the -- the shade offered, particularly in
4 the commercial -- so when you speak of commercial,
5 we're -- we're speaking low slope because it's,
6 obviously, not feasible in a steep slope configuration.

7 There are opportunities, depending on the roof
8 system, and the application, and how the work is being
9 done, whether or not they can provide shade on the
10 roof. And I know that many of our members and the
11 general contractors for which they work have done that
12 very successfully. There, obviously, are some things
13 that have to be taken into consideration, like wind,
14 location, the progression of the work, et cetera.

15 When that's not possible, then there are other
16 options which would generally require the workers to
17 leave the roof. And so we could get into that more in
18 detail in terms of, you know, where the location of
19 those would be, how that could be achieved on various
20 different job sites, and we're happy to do that.

21 MS. DOWNS: Okay. Great. Thank you. Do
22 employers use fans or other types of air movement for

1 cooling in the work areas or -- or break areas?

2 MS. AMBROSE: Yeah. In our experience -- so as I
3 mentioned -- just one in particular. So one of our
4 small entity representatives who participated in the
5 SBREFA process -- is based in the Colorado area --
6 they were working, for example, for a general
7 contractor who set up a cooling station on the roof,
8 you know, with their assistance. And that included
9 fans and of course, access to power and so forth.

10 There are also contractors who bring misting --
11 misting fans onto the job site and install them on the
12 roof, where they're able to do that as well. So I
13 would say the short answer is yes, they do use them. I
14 can't honestly speak to whether every single roofing
15 contractor is using them, certainly; but yes, they are
16 implementing any of those types of protective measures
17 that they can whenever they're able to.

18 MS. DOWNS: Okay. Great. Patti Downs again. So
19 with regard to residential roofing then, how close are
20 shaded rest areas and water access to the -- the
21 project?

22 MS. AMBROSE: Again, I think it's going to depend

1 on the application. I mean, generally, residential is
2 going to be not all the -- the shade and it's going to
3 be not on the roof. So it's going to be in the
4 vicinity of the property in which they're working. If
5 it's a large development, then it may be they have an
6 opportunity to have shade and rest, or it may simply be
7 an air-conditioned vehicle. So that's -- that's
8 usually the case, and because that's a much more
9 mobile -- and of course, the shade cannot be erected on
10 the steep slope roof.

11 MS. DOWNS: Okay. Thank you.

12 That's all for me.

13 MS. AMBROSE: Thank you.

14 MR. SCHAYER: Thank you.

15 I'd now like to turn to Rachel Carse.

16 MS. CARSE: Hi, this is Rachel Carse from DSG. I
17 have two questions. The first one is, if you are able
18 to share any HIIPPs that your members have? And with
19 those, any information that you can provide about how
20 long it took to develop those HIIPPs, we would
21 appreciate that information.

22 MS. AMBROSE: Yes, Ms. Carse. Cheryl Ambrose.

1 I'd be happy to -- to do that. We'd be happy to put
2 that together for you in post -- post-hearing comments.

3 MS. CARSE: Okay. Great. The other question was,
4 you mentioned that taking weather measurements would be
5 technologically infeasible? So the standard requires
6 that for outdoor temperatures that you take the heat
7 index measure, and that can be done using, like, the
8 NIOSH heat app or another weather app. Can you
9 elaborate a little bit more on why that's infeasible
10 and -- and to what extent in your industry
11 temperature -- outdoor temperature monitoring is
12 already part of your process for other reasons, like,
13 scheduling work and things like that?

14 MS. AMBROSE: Yeah, thank you, Ms. Carse. Cheryl
15 Ambrose. This is a -- it's a great question. First of
16 all, I'd like to -- from the detailed technological
17 piece of the question, I would like to be able to
18 respond to that in our post-hearing comments. I can
19 just say that, you know, our -- our members rely on
20 temperature just for -- from a general planning
21 perspective. I mean, it's a daily thing.

22 I mentioned the job hazard analysis. So many of

1 the protective measures, they're already implementing
2 as part of their job hazard analysis, their pre-job
3 huddles. The contractor I mentioned, who's our -- our
4 ones who are in Colorado, they are currently, you know,
5 in the -- in the high, hot season. They will be
6 getting out on the roof and working as soon as there's
7 enough daylight for them to safely do so.

8 And many of our contractors are doing that in the
9 areas of the country where they're experiencing high
10 heat. So we've been -- you know, the industry has been
11 managing heat through work processes, and through
12 timing, and scheduling wherever they possibly can. And
13 in -- I think someone mentioned earlier today in
14 testimony that that may even include breaking as you
15 get to that high, hot -- the high, hot part of the day,
16 and then, coming back later and doing so.

17 I mean, we had -- just anecdotally, we had our
18 roof replaced. It happened to be in the month of July,
19 a couple of years ago, and it was one of our members.
20 And they worked through the morning when it was cooler,
21 came in early, got started. We didn't mind and --
22 because we knew what they were up against. And then,

1 in the heat of the day, they broke, and they came back
2 around 3, 4 o'clock as the sun was dropping down, and
3 things were cooling off, and continued to work.

4 So there are ways for -- for members and for our
5 contractors to do that, and they have been employing
6 those, you know, and keeping their members hydrated and
7 extending those breaks as well. So thank you for the
8 question.

9 MR. SCHAYER: Thank you.

10 And finally, Your Honor, our final questioner will
11 be Zoe Petropoulos.

12 MS. PETROPOULOS: Hi. Thanks so much. There's
13 going to be -- oh, this is Zoe Petropoulos with the
14 Directorate of Standards and Guidance. There's going
15 to be a little overlap between my question and the one
16 you just heard. And if you'd like to -- to answer this
17 in post-hearing comments, that's fine. How do your
18 members currently consider and account for radiant
19 heat, or just specifically, the effects of the sun when
20 assessing heat hazards on job sites? And I'm looking
21 for any specifics that you're willing to share, how you
22 measure radiant heat or predict it? Anything like that

1 would be really helpful.

2 MS. AMBROSE: Yeah, thank you. Cheryl Ambrose. I
3 would -- would like to be able to respond to that in
4 our post-hearing comments.

5 MR. SCHAYER: Okay. Your Honor, thank you very
6 much. That concludes OSHA's questions.

7 JUDGE LARSEN: Okay. Thank you.

8 Ms. Naughton, anything from the solicitor?

9 MS. NAUGHTON: No, Your Honor. Thank you.
10 Thank you, Ms. Ambrose, for your testimony.

11 JUDGE LARSEN: All right.

12 Participant questioners?

13 MS. CARLON: Yes, Your Honor. We have a few. We
14 have three.

15 The first one is Mr. Schneider. Please state your
16 name for the record.

17 MR. SCHNEIDER: My name is Scott Schneider.

18 Hi, Cheryl. This is the roof --

19 MS. AMBROSE: Hi, Scott.

20 MR. SCHNEIDER: -- thank you for joining us today.

21 You -- you were talking about -- you were promoting

22 a -- a construction specific standard, and I know you

1 were involved in the A10.50, and -- and that NRCA voted
2 in support of it. So I'm wondering if you see that as
3 a model for OSHA to look at for you -- to -- to
4 creating a -- a construction specific standard?

5 MS. AMBROSE: Yeah. I mean, certainly, Scott, you
6 and I spent a lot of time together working on that
7 standard, and it's good to see you. Again, Cheryl
8 Ambrose. Yeah. So the A10.50 standard, while we
9 realize it's a voluntary consensus standard, so
10 we're -- this becomes a little bit more interesting and
11 we feel like it's -- it's their -- I think, as the ASSP
12 group so eloquently stated on Tuesday was that this was
13 guidance.

14 This was something that was to help provide
15 guidance in the industry where there essentially hadn't
16 been much in the -- in the past. And that's not to
17 discount anything OSHA's certainly put out there
18 because we send -- you know, we have promoted OSHA's
19 guidance on -- on heat, water, rest, shade and training
20 for as long as I can remember, and I've been doing this
21 for 30 years, so as long as it's been available.

22 So I would say I -- and I can follow up in more

1 detail in post-hearing comments. So I would say that
2 yes, but -- but with some caveats. And then, I would
3 include that in our -- in our follow up comments.

4 MR. SCHNEIDER: Okay. Thanks. Second question I
5 had is, you talk about geographic variations and how
6 it's more humid in -- in -- in Texas, et cetera. And
7 you know, the OSHA standards using the heat index,
8 which includes temperature and humidity. What other
9 factors vary geographically that they should consider
10 if they were trying to come up with geographic triggers
11 that are -- are not standardized that would vary from,
12 you know -- from part of the country -- one part of the
13 country to another?

14 MS. AMBROSE: Yeah, it's a great question, Scott.
15 Cheryl Ambrose. I would like to be able to follow up
16 with that in post-hearing comments, but I would say
17 that acclimatization and generally, adaptation of
18 people to their own climate. So as several have
19 mentioned in their testimony over the last day or so is
20 that, you know, the guys in Texas, while they know it's
21 hot, you know, they're -- they're -- they're not as
22 bothered by -- maybe on an 80 degree day as someone in

1 the Northeast may be. Or the cool Pacific Northwest.
2 So we -- we will happily follow up with some additional
3 information on that for you.

4 MR. SCHNEIDER: Okay. So you're really talking
5 about acclimatization primarily, not the triggers,
6 right?

7 MS. AMBROSE: Well, I think it's both. I think
8 it's actually both. I mean there's -- there's
9 geographic relevance to both. And so we can -- we can
10 certainly address that.

11 MR. SCHNEIDER: Okay. Well I -- I guess the
12 question I have is -- I mean, we just heard from --
13 from the testimony from NABTU that -- that there are
14 much higher death rates from heat exposure among
15 construction workers in the south. So I'm wondering if
16 their physiologically adapted to -- to working in that
17 kind of -- those kind of conditions, why are there
18 higher heat rates -- heat death rates in the southern
19 states?

20 MS. AMBROSE: Well, I would say that -- you know,
21 again, we'll follow up in our post-hearing comments. I
22 don't know that -- you know, I'm not -- I'm not the --

1 the scientist here. I did -- and I appreciate CPWR's
2 testimony certainly, and love all the work that they're
3 doing. So I would -- yeah. So I would just ask if we
4 could follow up on that for you?

5 MR. SCHNEIDER: Okay. Thanks very much.

6 MS. AMBROSE: Thank you, Scott.

7 MS. CARLON: The next speaker is Jake Jordan
8 [sic].

9 MR. BARAB: Yeah, thank you. I just have one
10 question.

11 JUDGE LARSEN: Excuse me. Let me interrupt. I --
12 I let you --

13 MR. BARAB: I'm Jordan Barab.

14 JUDGE LARSEN: -- go last time without -- there we
15 go.

16 MR. BARAB: Okay. I'll -- I'll -- I'm learning,
17 I'm learning.

18 Okay. My name is Jordan Barab and I just have one
19 question. You mentioned that you want a performance-
20 oriented standard, and as -- I guess, as kind of a
21 definition of that, you -- you said two things. One is
22 you said that outcome should be the regulatory

1 obligation. You also said if the program is working,
2 then employers should be allowed to continue with it.
3 So my question is, what kind of outcome -- how would
4 you define outcome or how would you define working, as
5 in, if the program is working?

6 MS. AMBROSE: Yes. Cheryl Ambrose, and thank you,
7 Mr. Barab, for the question. I'd be happy to follow up
8 with that in post-hearing comments and elaborate on
9 that further. And I believe, you know, in previous
10 comments -- public comments submitted, we have
11 discussed that in more detail. But of -- I don't have
12 that right at my fingertips in terms of that, but we
13 know that performance-based standards have worked well
14 in other parts of the industry, and particularly
15 construction-specific standards.

16 MR. BARAB: Okay. Thank you.

17 MS. AMBROSE: Thank you.

18 MS. CARLON: And the last speaker is Mr.
19 Lundegren.

20 MR. LUNDEGREN: Thank you.

21 Good afternoon. This is Bruce Lundegren with the
22 Office of Advocacy at the U.S. Small Business

1 Administration. Thank you to Cheryl and Beeta.

2 And -- and Cheryl, thank you for getting several
3 of your members to participate in our Small Business
4 Advocacy Review Panel. That was really helpful. I --
5 I wanted to ask this question I've been asking this of
6 some of the construction folks. When -- funny, when we
7 think about roofing you -- there's a tendency -- and
8 I -- I think, kind of, throughout this -- this rule --
9 proposed rule, there's kind of this one-size approach,
10 like, that everything looks the same.

11 But actually, in roofing, every -- all these roofs
12 are all really different work environments. And some
13 of the things that were just asked about, like,
14 engineering controls, like, fans and you know, shade --
15 artificial shade up on roofs, and coolers, things like
16 that. I wonder if you could speak to this issue of
17 impracticality and feasibility in creating a -- a -- a
18 greater danger and how -- how these types of concerns
19 would be benefited -- would benefit from a more
20 performance-based standard where each workplace could
21 be treated as a unique place and not as a, kind of,
22 one-size view of all -- all roofing venues? Thank you.

1 MS. AMBROSE: Yes, thank you. Thank you, Bruce.
2 Cheryl Ambrose. I think it's been stated here, and I
3 think it was stated very well by Mr. Tessier from the
4 roofers union in terms of the varying differences, as
5 you've just mentioned, about the different types of
6 roofing systems. So those can bring their own set of
7 specific hazards, particularly related to heat, in
8 terms of the type of material or other hazards.

9 It also can preclude, just by virtue of the work,
10 the ability to -- while it would be ideal to have shade
11 on every roof, and ideal to have coolers, and ideal to
12 have fans, that may not already be feasible. Sometimes
13 simply getting those things to the roof can be
14 challenging just -- not to mention the up and down of
15 the actual workers to and from with ladders and so
16 forth.

17 So I do appreciate that question and -- but I
18 would like an opportunity -- unless Beeta has something
19 she'd like to add, I think we can -- we can provide
20 some post-hearing comments to address that more
21 thoroughly.

22 MS. LASHKARI: No. I just want to echo -- this is

1 Beeta Lashkari. I just want to echo what -- what
2 Cheryl just said. I think in answering many of OSHA's
3 questions, that became the -- the infeasibility aspects
4 became really apparent, right, because it is so site
5 specific. Again, what the contractors are allowed to
6 do on one site, they might not be able to do on
7 another.

8 So that is why we are -- you know, I think that,
9 sort of, is the essence of why we're -- we're
10 advocating for this performance-based standard. It's
11 not just that the hazard itself is so unique and --
12 and -- and it sort of varies from individual to
13 individual. But also, just that within each industry
14 itself, again, it can -- it really gets to a -- a site
15 specific -- it -- it needs a -- a site specific hazard
16 analysis. And that's why we are also advocating for
17 that Nevada-based approach.

18 Just to get back to Dr. Schayer's, I think, first
19 question. I think using the Nevada -- the Nevada OSHA
20 rule as a model, that's obviously very performance-
21 based. It would be helpful, and sort of -- sort of
22 the -- the core elements there, some of those in -- in

1 the Nevada rule I -- I think are, you know, water,
2 rest, shade, training -- certainly, emergency response
3 procedures.

4 MR. LUNDEGREN: Okay. Thank you very much.

5 JUDGE LARSEN: Any other questioners?

6 MS. CARLON: No, Your Honor.

7 JUDGE LARSEN: All right.

8 Mr. Schayer, anything further from the panel?

9 MR. SCHAYER: No, we have no further questions.

10 Thank you, Ms. Ambrose, for your testimony.

11 JUDGE LARSEN: Ms. Naughton?

12 MS. NAUGHTON: No, nothing further. Thank you,
13 again.

14 JUDGE LARSEN: All right. Ms. Ambrose, thank you
15 very much for testifying today and being with us.

16 MS. AMBROSE: Thank you.

17 JUDGE LARSEN: Let's hear from our next speaker.

18 MS. CARLON: The -- the next speaker is Kathy
19 Stieler. Please state your name and affiliation for
20 the record.

21 JUDGE LARSEN: Ms. Stieler, I show you as muted
22 and I haven't heard anything you've said if you've

1 spoken yet.

2 MS. STIELER: Can you hear me now?

3 JUDGE LARSEN: Yes, I can.

4 MS. STIELER: Oh, good. Some things are going
5 right.

6 My name is Kathy Stieler. I'm with NATE: The
7 Communications Infrastructure Contractors Association.

8 JUDGE LARSEN: Thank you. Go ahead.

9 MS. STIELER: Hi. Just as an introductory slide,
10 NATE represents over 1,010 member companies who employ
11 thousands of elevated tower technicians. The vast
12 majority of our contractor members are small
13 businesses. These companies build, maintain, and
14 service the towers and broadband infrastructure that
15 keep America connected from emergency services and
16 broadcast signals to next generation wireless networks.

17 Safety is, and always has been, NATE's highest
18 priority. This is why we take OSHA's proposed rule on
19 Heat Injury and Illness Prevention in Outdoor and
20 Indoor Work Settings very seriously. In response to
21 the proposal, we surveyed a representative group of
22 contractor company employers and employees. Their

1 feedback helped us understand the practical impacts of
2 this rule on our workforce and the challenges of
3 applying it to our unique work environment.

4 I would like to walk you through some of the
5 concerns that are raised. The mandatory break area set
6 height. It's an unworkable burden. Many of our
7 members' employees work hundreds or even a thousand
8 feet in the air on towers that do not and cannot
9 support shaded or sheltered rest areas. The proposed
10 requirement for mandatory breaks away from the work
11 area every two hours would effectively require a
12 technician to climb down, sometimes from over a
13 thousand feet, remove PPE, enter a shaded area, rest,
14 and then, climb back up and redon on all gear.

15 Could you show slide 2?

16 Just as a point of reference, I've added this to
17 show you a KVLV TV tower. That's a 2,000 foot tower,
18 so you see how it -- how high it is compared to other
19 structures. According to our survey, descending and
20 reascending a 200-foot tower alone takes an average of
21 65 minutes. That does not include the rest time for
22 jobs at higher elevations, like a thousand or 2,000

1 feet. It's simply not feasible.

2 And more importantly, it's not safe. Climbing
3 multiple times a day, in extreme heat, increases fall
4 risks, increases fatigue, and repetitive stress
5 injuries. It adds exposure and not protection. Our
6 members uniformly reported that crews typically make
7 one climb and one descent per day for safety reasons.
8 Two, high-heat triggers based on ground temperatures
9 don't reflect reality at elevation. The proposed rule
10 also includes a high-heat trigger based on ground level
11 temperatures.

12 That may work for other industries, but it doesn't
13 work for ours. Our tower technicians often work,
14 again, a -- hundreds of feet above ground, where wind
15 speeds are higher and temperatures are often cooler.
16 Yet, the heat index they are being evaluated under is
17 from ground level. Our survey showed that crews rely
18 on mobile phone apps to monitor heat, but these apps
19 don't account for elevation.

20 And the wet bulb globe thermometer, which OSHA may
21 expect us to use, is impractical for work at height.
22 It requires 20 to 30 minutes to acclimate and provide a

1 reading, time our climbers don't have while moving
2 around the structure. So it's not just hard to comply,
3 it's impossible to measure the heat index accurately at
4 height with the tools that are currently available.

5 Three, our work scheduling already mitigates heat
6 risk in the tall tower industry. Tower crews already
7 adapt their schedules to avoid peak heat periods. They
8 often begin work at sunrise or shifting it into late
9 afternoon to reduce exposure. But for tall tower jobs,
10 which typically last more than two hours, a mandatory
11 break after two hours would prevent crews from even
12 reaching the point on the tower where work begins, let
13 alone completing the task.

14 Let me share feedback from one contractor working
15 on tall towers. He stated, imagine climbing a
16 skyscraper using stairs, with 20 to 30 pounds of safety
17 gear, and being told to turn around and come back down
18 just as you reach the top. Except our crews aren't
19 climbing stairs, they're climbing vertical ladders,
20 straight up. To have to climb multiple times in 90
21 degree heat, not only does this increase risk, but it
22 makes the job impossible.

1 And four, the rule introduces new hazards without
2 improving safety. We heard loud and clear from our
3 members that these provisions, while well-intentioned,
4 would introduce new risks.

5 Could you show Slide 3, please?

6 This slide shows typical cellular towers and
7 broadcast towers and their intricacies of climbing
8 them. More exhaustion and potential hazards from
9 muscle fatigue, undue risk to our workers. This
10 creates additional hazards just to mitigate another.
11 And remember that the act of climbing itself is the
12 highest risk activity our workers perform.

13 Once at heights, the level of exertion decreases,
14 reducing the impact on heat stress. Repeated ascent
15 and descent for rest breaks amplifies the physiological
16 burden of heat stress. This rule, as written,
17 increases how many our -- how often our climbers are
18 exposed to that risk.

19 Five, we already train for heat safety and it
20 works. NATE already provides member companies with a
21 comprehensive safety and health manual that includes a
22 heat-related illness chapter. Our member companies use

1 this resource, develop training specifically to their
2 teams. Workers are trained to monitor their own
3 hydration, rest when needed, and identify symptoms of
4 heat stress.

5 This isn't hypothetical. It's happening now and
6 it's working. Member companies told us this rule, as
7 written, would likely increase the risk of injury, and
8 the proposed approach makes our job sites more
9 dangerous. Break areas are not readily accessible at
10 height. OSHA defines readily accessible as something
11 that can be reached quickly without climbing over
12 obstacles or using portable ladders.

13 A tower technician a thousand feet in the air
14 cannot readily access a shaded break area on the
15 ground, period. One member put it plainly. No one
16 will follow it. It provides zero benefits and it opens
17 the door for citations. Our final thoughts.

18 Can you show us slide 4, please?

19 We understand -- and absolutely support OSHA's
20 mission to protect workers from heat illnesses. We do
21 not dispute the importance of the issue, but a one-
22 size-fits-all rule designed with ground-based

1 workforces in mind doesn't fit the tower industry. The
2 net effect of this rule, as currently written, would
3 increase risk, reduce job completion, and strain an
4 essential workforce that already performs some of the
5 most dangerous jobs in America with extreme care.

6 We urge OSHA to reconsider the application of
7 these provisions to the tower sector. We're committed
8 to working with OSHA on a practical, effective
9 approach, one that protects our workers without
10 introducing new, unavoidable hazards. Thank you for
11 the opportunity.

12 JUDGE LARSEN: All right. Thank you, Ms. Stieler.

13 Mr. Schayer, any questions from the OSHA panel?

14 MR. SCHAYER: Yes, your Honor. We do have some
15 questions.

16 Thank you, Ms. Stieler, for your testimony. I
17 will start with two quick questions, and then, pass it
18 to some of my colleagues here. In your testimony, you
19 mentioned that members sometimes rely on phone apps to
20 monitor the heat index? And just wondering if they've
21 ever had issues with cellular service and how that sort
22 of works in those types of situations?

1 MS. STIELER: I will answer that yes, they do rely
2 on some cellular phone apps, and you are absolutely
3 correct that there are some issues in certain
4 locations. I'd be glad to talk to other member
5 contractors and find what they do or they do not have
6 the cellular service and answer that in post-hearing
7 comments.

8 MR. SCHAYER: Okay.

9 MS. STIELER: It's a --

10 MR. SCHAYER: Thank you.

11 MS. STIELER: -- great question.

12 MR. SCHAYER: Thank you. That would be great.
13 And the second one was just a request. If you're able
14 to provide -- you mentioned some of the training
15 materials that you use for heat. If you're able to
16 provide any of those in post-hearing comments, those
17 could be very helpful to us as well.

18 MS. STIELER: Yes, it -- that was -- it was
19 submitted with the original comment, but I would
20 be happy to just submit it once again.

21 Okay. We probably already have it then. Thank
22 you. Thank you.

1 MR. SCHAYER: Now, I'd like to turn to Patti
2 Downs.

3 MS. DOWNS: Hi. Patti Downs with the Directorate
4 of Standards and Guidance. You expressed concern about
5 requiring employers to climb down the tower for cooling
6 breaks. You mentioned that some employers shift work
7 to cooler parts of the day as a way to reduce
8 exposures. But can you discuss any other actions that
9 are currently being taken by employers to ensure
10 employees stay cool and to prevent heat illness when
11 working from these heights?

12 MS. STIELER: Hi. Yes, this is Kathy Stieler with
13 NATE. Yes, ma'am. There are some PPE or cooling vests
14 that can be added. There are some items that can be
15 worn around the neck. Again, every item that we add to
16 an employee adds additional weight for them climbing.
17 So we have to be very careful what we are asking them
18 to put on or put off. I will say that when we
19 submitted our response originally, we had some
20 information listed about the temperature changes. As
21 you climb, it is cooler at height. There was almost a
22 13 degree difference in temperature at 300 feet versus

1 the ground level. So they obviously, don't always have
2 to wear the cooling garments when they hit elevation.
3 I'd be happy to ask others what they do and be glad to
4 give that in post-hearing comments.

5 MS. DOWNS: That would be great. Thank you.

6 MS. STIELER: Thank you.

7 MS. DOWNS: And then just as kind of a follow-up
8 to that question, how do employers currently protect
9 employees when they're working in direct sunlight from
10 heights? Is it different? Do they do anything
11 additional or?

12 MS. STIELER: This is Kathy Stieler with NATE.
13 It's nearly impossible to keep somebody completely out
14 of direct sunlight. Again, as we have stated in our
15 testimony, the temperature is different at elevation.
16 The guys that I always talk to laugh and say, well,
17 heck, it's cooler, Kathy. We get a breeze up here.
18 They do sometimes get underneath antennas that, you
19 know, can provide them shade. Happy to give you other
20 ideas. But that's about all that we can do on a tower.

21 MS. DOWNS: That would be great, again. Thank
22 you. Anything additional that you can submit with your

1 post-hearing brief, we would appreciate it. Thank you.

2 MS. STIELER: Thank you.

3 MR. SCHAYER: Thank you. Now, I'd like to turn to
4 Tiffany DeFoe from OSHA.

5 MS. DEFOE: Hi. For the record, this is Tiffany
6 DeFoe, Directorate of Standards and Guidance, OSHA.
7 I'd like to ask -- so in light of the concerns that
8 you've raised with the proposed rules requirements for
9 mandatory scheduled breaks, are there any specific
10 suggestions that you would make, either now or in
11 follow-up comments to the record, for how you believe
12 OSHA could modify proposed rest break requirements to
13 add flexibility that's needed for cases that you
14 described, while still being protective broadly?

15 MS. STIELER: Kathy Stieler with NATE. I would
16 love to ask that or to talk about that in post-hearing
17 comments. Again, the way the standard is written for
18 some of the triggers that require the breaks, again, at
19 elevation they are at a different temperature. So it's
20 a confusing standard for us, you know. Are we
21 requiring a break when you're on the ground or
22 requiring us to know the temperature at elevation? And

1 if it's as much as 13 and 14 degrees difference in
2 temperature, 79 degrees on the ground, you know, it's
3 60 something on top of the tower. Or 93 on the ground,
4 it's only 79. So some of the issues that are involved
5 with knowing where the temperature is supposed to be
6 taken would give us some answers on how frequently we
7 need breaks.

8 MS. DEFOE: Thank you. And then, as kind of a
9 corollary to that question, I wanted to point out the
10 case of Oregon's rule for outdoor work, which has a
11 provision that allows for the use of PPE, such as
12 cooling vests or other similar effective measures in
13 the language of the rule. In lieu of shade, when the
14 employer can demonstrate that providing access to shade
15 isn't safe or interferes with the ability of employers
16 and employees to complete the necessary work in the
17 given situation, and it would be good to know if your
18 membership thinks that that kind of flexibility might
19 be beneficial for your case.

20 MS. STIELER: Kathy Stieler with NATE.
21 Absolutely, we are currently using that type of
22 equipment. We support the use of that as it can be

1 worn. And I will be happy to make that comment to you
2 in our post-hearing comments. But absolutely need that
3 flexibility.

4 MS. DEFOE: Thank you. Finally, I wanted to see
5 if you could speak to the idea of, you raised some
6 questions in the NPRM about the possibility of using
7 portable shade structures in situations where traveling
8 to a break area might compromise employee safety. But
9 you know, we're aware that there could be things like
10 wind conditions. There might be reasons that they're
11 not feasible to use in every situation. Do you or your
12 membership have any thoughts to offer about the use of
13 portable shade structures? Are they in use in any
14 situations that you're aware of or are there sort of
15 like issues or constraints that you would note about
16 them?

17 MS. STIELER: Kathy Stieler with NATE. To be
18 honest, I do not know of anybody that is using them
19 currently. There are situations when you put them on a
20 tower that affect the structure integrity and how much,
21 if there is wind, what it would do to the tower if the
22 tower is allowed to have it. How would you tie it down

1 to the tower? And so there are some considerations
2 that are more than just what I have knowledge in. But
3 I would be happy to talk to some of the tower owners to
4 ask them their considerations, if that's a possibility
5 and add that to post-hearing comments.

6 MS. DEFOE: That would be very much appreciated.
7 That's all I have. Thank you so much.

8 MR. SCHAYER: And finally, Your Honor, we'd like
9 to turn to Rachel Carse who will be our last questioner
10 for OSHA.

11 MS. CARSE: This is Rachel Carse from DSG.
12 Tagging onto Tiffany's question, in your written
13 comments you talked about structural analysis, which it
14 sounds like would be the type of analysis you just
15 mentioned. And you mentioned that it would increase
16 cost to have to perform this analysis. If possible,
17 maybe this makes sense in a written comment. Can you
18 provide an idea of what things need to be evaluated and
19 cost estimates for this type of analysis?

20 MS. STIELER: Hi, Kathy Stieler with NATE. I'd be
21 happy to provide that to you --

22 MS. CARSE: Okay.

1 MS. STIELER: -- in written comment.

2 MS. CARSE: Okay. And one other part of your
3 written comment talked about the responsibility for
4 maintaining broadcast transmission for national news
5 and radio infrastructure as mandated by the FCC. Which
6 percentage of work is performed by your members is
7 attributed to maintaining these systems?

8 MS. STIELER: Kathy Stieler with NATE. I would
9 like to say that all of it.

10 MS. CARSE: Okay.

11 MS. STIELER: We have a broad amount of tower
12 contractors that are broadcast tower contractors only.
13 That's a real specialty niche. I don't know of
14 broadcast contractors that are outside of our NATE
15 home. That's exactly why NATE was begun was in the
16 broadcast industry.

17 MS. CARSE: Okay. All right. Thank you.

18 MS. STIELER: Thank you.

19 JUDGE LARSEN: All right. Do we have questions
20 from the Solicitor?

21 MS. NAUGHTON: Yes, Your Honor. I'd like to mark
22 NATE's PowerPoint presentation as Exhibit No. 5 and

1 enter it into the record, with your permission.

2 JUDGE LARSEN: Sure.

3 MS. NAUGHTON: Thank you.

4 JUDGE LARSEN: All right. Do we have participant
5 questioners?

6 MS. CARLON: Yes, Your Honor. We have two. The
7 first one is Ms. Shrestha. Please state your name for
8 the record.

9 MS. SHRESTHA: Hello. My name is Ayusha Shrestha
10 from the AFL-CIO. I wanted to ask, since -- since NATE
11 at the very beginning mentioned that safety is their
12 utmost priority, I wanted to ask this following
13 question. NATE's website contains many safety
14 resources, including a comprehensive list of industry
15 standards, regulations, and safety resources, which has
16 updated in March 2025, with its latest update in March
17 2025. This list includes many of the ANSI and ASSP A10
18 standards, but, however, the ANSI and ASSP standard for
19 heat stress management in construction and demolition
20 operations is not included in the list. Also, the
21 ANSI/ASSP A10.48 criteria for safety and practices
22 within the construction demolition modification and

1 maintenance of communication structures in 2023, which
2 is a standard that NATE helped develop, does not
3 contain the term or any references to heat, heat
4 illness or temperature. So I have two questions
5 concerning this. Does NATE recognize exposure to heat
6 as a hazard, for example, for tower climbers exposed to
7 heat and direct sun? And if so, if yes, are there any
8 guidance documents regarding the prevention of heat-
9 related injuries and illnesses that NATE has developed
10 or disseminated to NATE's members involved in the
11 communication infrastructure industry?

12 MS. STIELER: Hi. Kathy Stieler with NATE. Two
13 parts to your question. The A10.48 is listed on our
14 website for inclusion in developing it. And I am the
15 chair of A10.48. We do offer it for sale for our
16 members, and it is sold and it is -- the money goes to
17 ASSP. The A10.50 was not developed by us but we always
18 reference people to go directly to the ASSP to
19 purchase. And I believe in the A10.48, the A10.50 was
20 not promulgated yet so we couldn't add it as a
21 reference within the standard, although I knew it was
22 being written at the time.

1 NATE does have a safety manual. It is a manual
2 that's available to our members. And it includes about
3 65 chapters of safety programs. And within it, we do
4 have a chapter on heat program and it aligns with --
5 let me see what the -- it's called heat illness
6 prevention program. It was written by our members.
7 And it does align with a lot of the requirements in
8 Nevada and in New Mexico. But it is available to our
9 members, and it was added in our original comments
10 period. And so it is in the record as it stands right
11 now.

12 MS. SHRESTHA: Thank you.

13 MS. STIELER: Thank you.

14 JUDGE LARSEN: Any other participants?

15 MS. CARLON: Yes. We actually have two more. The
16 next one is Mr. Lundegren. Please state your name for
17 the record.

18 MR. LUNDEGREN: Thank you. This is Bruce
19 Lundegren at the Office of Advocacy at the U.S. Small
20 Business Administration. Kathy, I just wanted to thank
21 you for getting some of your members to participate in
22 the SBREFA panel. That was really helpful. And also,

1 your predecessors set up a site visit to one of your
2 towers up in Maryland that we went to, and OSHA went to
3 a few years ago. And that was really interesting. So
4 thank you for that.

5 Boy, you really work in a truly -- everyone thinks
6 their work environment is unique, but I think yours is
7 really unique. And I'm just wondering, I know that the
8 association had a petition for rule making for
9 communication tower safety with OSHA. And I was
10 wondering if it might be more appropriate to include
11 heat given the unique nature of your industry in that
12 standard. And actually, what is the status of that
13 standard? Thank you.

14 MS. STIELER: Hi, Bruce. Thank you. This is
15 Kathy Stieler with NATE. I would love to respond to
16 this with a post-hearing comment because I'm not sure
17 where that status is right now, Bruce. But thank you
18 for the question. I'd be glad to answer it later.

19 MR. LUNDEGREN: Okay. Thank you, Kathy. Thank
20 you, Your Honor.

21 JUDGE LARSEN: Mr. Lundegren, thank you very much.

22 MS. CARLON: Ms. Cain?

1 MS. CAIN: Thanks. Hi, Kathy. How -- can you
2 explain how drinking water is transported up a
3 communications tower with a crew?

4 MS. STIELER: Kathy Stieler with NATE. It's a
5 wonderful question. The crews have to carry it. And
6 they carry what they believe is a necessity for the day
7 or for as long as they believe that they're up there.
8 Again, the heat temperature is different on top of the
9 tower. So they don't have a quart of water every hour.
10 That's a hinderance to them. But they also, at times,
11 have rigging equipment, cap stands, whatever that they
12 can take water to the top of the tower or send it up.
13 So on towers that are rigged, they can do that. They
14 can bring it to them when they need it. All of our
15 tower technicians are on a tower with another person.
16 We are not allowed to climb solo. So there is always a
17 two-person, at least a two-person on top of a tower.
18 So allowing them to be able to pull up water is a
19 possibility. And they do have communication, walkie
20 talkies to the ground level to tell them when they need
21 it. Thank you for the question.

22 MS. CAIN: Thank you. It was a great answer.

1 Have a good afternoon. Thank you, Judge.

2 MS. STIELER: Thank you.

3 JUDGE LARSEN: Thank you, Ms. Cain. Any other
4 participant questioners then?

5 MS. CARLON: No, there are not, Your Honor.

6 JUDGE LARSEN: All right. Mr. Schayer, anything
7 further from your panel?

8 MR. SCHAYER: No, Your Honor. Thank you, Ms.
9 Stieler, for being here today.

10 MS. STIELER: Thank you for giving me the
11 opportunity.

12 JUDGE LARSEN: Ms. Naughton, anything from you?

13 MS. NAUGHTON: Nothing further from the Solicitor.
14 Thank you, Ms. Stieler.

15 JUDGE LARSEN: All right. Ms. Stieler, thank you
16 very much.

17 MS. STIELER: Thank you.

18 JUDGE LARSEN: Let's hear from the next witness.

19 MS. CARLON: The next speaker is Brian Renfro.
20 Please state your name and affiliation for the record.

21 MR. RENFROE: Brian Renfro. I'm the president of
22 the National Association of Letter Carriers. Good

1 afternoon, everyone. As president of the National
2 Association of Letter Carriers, I represent over
3 200,000 active city letter carriers employed by the
4 United States Postal Service who deliver our nation's
5 mail. We work in every city and town, in all 50
6 states, and the U.S. territories of Guam, Puerto Rico,
7 and the Virgin Islands, including areas that experience
8 long seasons of stifling heat and humidity.

9 Our members are deeply familiar with the risks
10 that working outside in the elements can pose. Our
11 jobs are physical, strenuous, which makes letter
12 carriers among the workers most at risk of heat injury
13 and illness. Many hundreds of letter carriers get sick
14 from the heat each year, and tragically, some have lost
15 their lives. I appear before you today to express my
16 union's strong support for OSHA's heat injury and
17 illness prevention in outdoor and indoor work settings
18 proposed rule. We believe this rule will be a critical
19 protection for city letter carriers, as well as
20 millions of other workers whose work regularly exposes
21 them to the hazards of excessive heat.

22 This essential workplace safety measure, frankly,

1 is long overdue, and we applaud OSHA's efforts to
2 finally make it a reality. The heat poses a grave risk
3 to my members. We deliver mail and packages all year
4 long, including during the hottest weeks of the summer.
5 Typically, we work at minimum eight hours a day, though
6 often much more, through the peak heat of the
7 afternoon, and almost entirely alone. And unmitigated
8 exposure to the excessive heat, as we've seen over and
9 over and over, causes heat stress, which often results
10 in serious injury, illness, and unfortunately, even
11 death.

12 Some letter carriers, especially those in urban
13 areas, walk their entire routes. They carry a heavy
14 mail satchel or they push a cart full of mail, all day
15 long, on city streets. And on hot days, they are fully
16 exposed to the heat. Others use a postal vehicle.
17 While the postal service for years now has been working
18 on and has promised to provide a fully air-conditioned
19 fleet of vehicles, most delivery vehicles today remain
20 without air-conditioning, and they are poorly
21 ventilated. When they sit in the sun on hot days,
22 their interiors literally begin to bake, subjecting our

1 members to excessive temperatures inside those
2 vehicles.

3 Most often, we park our vehicles at a designated
4 park point, get out of the vehicle, and deliver mail by
5 foot. We walk up and down the streets, carry packages
6 on our arms. We carry heavy satchels. We walk up and
7 down steps. We walk through yards. And on hot days,
8 we can suffer the heat from both being outside in the
9 elements, as well as having to deal with the excessive
10 heat without air-conditioning inside our postal
11 vehicles.

12 I'm a letter carrier myself from Mississippi. So
13 I know this danger very well. When I first started
14 this job, I had to learn the warning signs of heat
15 illness and how to hydrate throughout the day. But the
16 fact is, it should not only be up to me, in my case,
17 and other workers to protect themselves. In the case
18 of our members, the postal service's lack of adequate
19 protection leads to heat-related sicknesses and
20 injuries all the time. Postal service records show
21 that letter carriers report hundreds of heat injuries
22 annually. However, the actual number, there's no

1 question that it's greater, as the postal services'
2 productivity focused culture discourages letter
3 carriers from reporting symptoms, discourages their
4 supervisors from further reporting issues that are
5 reported to them, and in some cases, we've even seen
6 letter carriers be disciplined by overzealous managers
7 just because they suffered a heat-related injury.

8 OSHA data on severe injuries indicates that letter
9 carriers suffer from heat disorders at an excessive
10 rate. The nature of the work we do pushes it to the
11 top of the charts of companies that have the highest
12 number of severe heat-related injuries, a category as
13 you all know that includes at least one night of
14 hospitalization. And sometimes, these injuries can
15 compound.

16 For example, in July of 2021, a letter carrier in
17 Jersey Shore, Pennsylvania suffered acute kidney damage
18 after delivering mail in high temperatures and was
19 hospitalized for two days. The first injury made him
20 more susceptible to another, and about a month-and-a-
21 half later, the carrier was again working in the heat
22 and experienced severe heat cramps, dizziness, fatigue,

1 and vomiting. He repeatedly notified his supervisor
2 over the course of about three hours. And the
3 supervisor eventually provided some assistance with
4 getting the mail delivered, but did not help the
5 carrier get to the hospital. Instead, when the carrier
6 clocked off and went to the hospital, he was admitted
7 due to heat exhaustion, acute kidney failure, and
8 atrial fibrillation.

9 Heat illness does not just sicken the members that
10 I represent. Unfortunately, on occasion, it kills
11 them. In July 2012, John Watzlawick from Independence,
12 Missouri had just returned to work following a six week
13 absence due to a medical condition and began delivering
14 without an opportunity to acclimate to the heat at its
15 worst. After he barely made it through his first day,
16 but continuing because of pressure from management, he
17 suffered again the next day and continued until he
18 could not continue anymore. He collapsed on his route
19 and he died the next day. Sadly, before John died, a
20 number of letter carriers in Independence had to go
21 undergo treatment. Some were hospitalized because of
22 the heat. But because there is no governing rule, the

1 employer, the Postal Service, took no preventative
2 action.

3 At least seven letter carriers have died as a
4 result of exposure to excessive heat since 2012. And
5 tragically, these injuries and deaths are completely
6 preventable. So the Postal Service has a heat illness
7 prevention program in place, but it is insufficient. It
8 does not include the necessary elements that heat
9 safety experts agree are critical to preventing serious
10 illness, injury, and death. The Postal Service
11 management has consistently resisted implementing more
12 meaningful heat safety measures, which has left letter
13 carriers unprotected. The Postal Service has
14 demonstrated they are not willing to put any sort of
15 preventative measures in place beyond what is required
16 by OSHA. That is where the importance of adoption of
17 this rule really lies.

18 Over the last decade, my union has fought fiercely
19 in a number of forums to protect letter carriers from
20 the dangers of heat exposure. We've participated in
21 extensive OSHA litigation against the Postal Service,
22 as well as engaged the Postal Service directly to first

1 initiate the HIIPP program that we have, but to
2 continue to try to make it a more robust program that
3 will protect letter carriers. However, as I just
4 mentioned, the Postal Service has repeatedly
5 demonstrated it is not going to go further than what
6 OSHA requires.

7 In litigation, the charge of the Postal Service
8 with multiple OSHA citations for exposing letter
9 carriers to extreme heat. The Postal Service witnesses
10 said that hundreds of heat injuries suffered by letter
11 carriers were, quote, "statistically meaningless," and
12 that reported heat-related injuries were, quote, "not a
13 major concern." The Postal Service also consistently
14 prioritizes not interrupting delivery over letter
15 carrier safety. Local managers that supervise the
16 members I represent are pressured and even incentivized
17 to ignore what few protections exist in their current
18 HIIPP to try to achieve their productivity targets.

19 Let me give you an example. In June 2016, a Des
20 Moines, Iowa letter carrier texts her supervisor that
21 she did not feel well, and the supervisor texts back
22 urging her to continue and to, quote, "Do the best you

1 can." She was unable to complete her route. She
2 returned to the post office, vomiting on the way. And
3 when she arrived, her supervisor told her she needed to
4 go back out and finished the route. The carrier was
5 later diagnosed with heat exhaustion.

6 And it's not just the union's opinion that the
7 Postal Service prioritizes productivity over safety.
8 In fact, several OSHA judges have noted the pressure
9 that postal management puts on letter carriers. One
10 remarked that carriers are, quote, "Under near constant
11 pressure to complete their routes faster and to
12 discourage them from taking breaks, reporting injuries
13 or illness or calling in sick." Another observed that
14 the message given to letter carriers by post
15 management, quote, "Was clear heat is not an excuse for
16 performance issues." So given management's
17 prioritization of not interrupting delivery, even in
18 the case of safety issues, many letter carriers fear
19 retaliation if they do what they need to do, such as
20 take an additional break to mitigate the damage of --
21 the possible damage of excessive heat.

22 The Postal Services' own medical expert testified

1 in an OSHA case against the agency that, quote, "When
2 workers either report symptoms or said they wanted
3 extra breaks, they were either disciplined or their
4 supervisor became angry." It's clear, once again, the
5 Postal Service will never implement or uphold adequate
6 protections on its own. And current legal protections
7 are grossly inadequate and they do not protect workers.

8 While the federal OSHA statute has a general duty
9 clause, it applies nationwide and requires employers to
10 provide workplaces free from recognizable hazards that
11 are likely to cause death or physical harm, it has not
12 been an effective tool for protecting workers from the
13 hazard of excessive heat across a variety of occasions.
14 A nationwide heat standard that sets clear requirements
15 for the Postal Service and other employers is the only
16 way to truly mitigate the danger that heat poses. A
17 handful of states have enacted their own standards.
18 But these set differing levels of protection and leave
19 the rest of the country without any protection.

20 Overall, my union believes that OSHA did an
21 exceptional job designing an effective heat safety
22 standard. We urge OSHA to implement its proposed heat

1 rule in full, and offer two minor suggestions to
2 further protect workers. I'd like to highlight three
3 sections that are of critical importance and must not
4 be scaled back. Lives depend on the full
5 implementation of these sections.

6 First, is a critical importance of the no cost to
7 employees principle in Section (j) and paid breaks in
8 Section (e)(3). NALC has always insisted that the
9 Postal Service pay for the additional breaks that
10 letter carriers take to stay safe, but the agency has
11 refused. Carriers should not have to bear the cost of
12 needed rest breaks any more than a worker in a factory
13 should have to pay for an air ventilation system to
14 keep them safe. Moreover, unless additional breaks are
15 paid, carriers will be reluctant to take them,
16 heightening the risk of heat illness and injury.

17 This was precisely the case with Eugene Gates
18 (phonetic), a letter carrier in Dallas, Texas who
19 collapsed and died in a customer's front yard on a
20 sweltering afternoon when the heat index reached 110
21 degrees in June 2022. Just one month before his death,
22 Brother Gates received a formal letter of warning from

1 his supervisor for, quote, "stationary time." He was
2 resting from the extreme heat. This letter reprimanded
3 Brother Gates for taking too long to deliver his route,
4 including for stopping several times on his way back to
5 his post office. We strongly support the requirement
6 that employers bear the full cost of the implementation
7 of heat safety measures and that employers allow and
8 encourage employees to take rest breaks, and that these
9 breaks be paid.

10 Second is a critical importance of a gradual
11 acclimatization protocol. As OSHA's discussion of the
12 medical evidence in the proposed rule makes clear,
13 proper acclimatization protocols are vital to
14 mitigating the risk of working in the heat. We know
15 this from bitter tragic experiences. The Postal
16 Service's HIIPP does not include acclimatization
17 provisions. Nearly all of the heat-related letter
18 carrier deaths have happened to carriers who were
19 returning to work after a period of absence or being
20 new to the job. For example, in July 2018, Peggy Frank
21 (phonetic) of Woodland Hills, California died of
22 hyperthermia inside her un-airconditioned mail truck

1 during a heat wave. She had recently completely a
2 three month medical absence and returned immediately to
3 carrying her normal route on a day when the temperature
4 outside hit 117 degrees. Sister Frank had not been
5 given an opportunity to acclimate to the heat.

6 Only a month earlier, a brand-new letter carrier
7 from Lexington, Kentucky, Daniel Rosenbach, had died of
8 a heart attack, later proven to be triggered by extreme
9 heat on his first day delivering a route by himself.
10 He also had no chance to acclimate to the heat.

11 While OSHA's proposed standard allows employers a
12 choice when implementing acclimatization measures for
13 new or returning employees, we urge OSHA to adopt only
14 the first option, the Gradual Exposure Protocol, as the
15 default protocol. We suggest OSHA amend Section (e)(7)
16 to require acclimatization through gradual exposure,
17 unless the employer can show that the option would not
18 be practical. Because gradual exposure likely poses
19 more logistical challenges for employers, we believe
20 that if they are given the freedom to choose, most
21 employers will opt for the other, the easier, but less
22 protective option.

1 As noted in the proposed standard, when it comes
2 to new employees, gradual exposure is the
3 recommendation of the National Institute for
4 Occupational Safety and Health. Third is the critical
5 importance of preserving employees' rights to
6 collectively bargain over heat safety provisions. Our
7 union applauds OSHA for promoting employee
8 participation in the formulation of employer heat
9 safety plans. The workers know best how to keep their
10 workplaces safe. Promoting the otherwise unheard
11 voices of workers is also particularly important at
12 non-union employers.

13 However, NALC is concerned that unionized
14 employers could misconstrue section (c)(6) as
15 authorizing them to disregard their responsibility to
16 address workplace safety and collective bargaining as
17 mandated by the National Labor Relations Act. We
18 suggest OSHA amend that section to clarify that nothing
19 in the proposed rule is intended to relieve an employer
20 of its obligation under any applicable collective
21 bargaining law or collective bargaining agreement. Our
22 concern about the proposed --

1 JUDGE LARSEN: Thank you, Mr. Renfroe. I'm sorry.
2 Your time has expired. Thank you for being with us
3 today. Let me ask the panel. Mr. Schayer, do you have
4 any questions for the witness?

5 MR. SCHAYER: Yes. Thank you, Mr. Renfroe, for
6 testifying. And I'd like to turn it to Rachel Carse
7 from OSHA for her set of questions.

8 MS. CARSE: Hi. I have a few questions. The
9 first one, in your written comments, you mentioned that
10 an increase in mail sorting automation has increased
11 the portion of the workday that the letter carriers are
12 spending outdoors. Has your organization looked into
13 any correlation with the increased time outdoors and an
14 increase in heat-related illness or injury? And if so,
15 can you provide any evidence of that?

16 MR. RENFROE: Sure. We would -- I believe the
17 statistics that we have actually come from OSHA. We'd
18 certainly be happy to provide those post-hearing.
19 Generally speaking, the balance of work that letter
20 carriers do preparing, sorting mail in the morning in a
21 climate-controlled environment, and then the portion of
22 the work they do actually out delivering mail has

1 continuously, over a period now of nearly 35 or so
2 years, shifted to a smaller portion in a climate-
3 controlled environment. In most cases, an hour at the
4 most, to the vast majority of that approaching about
5 seven hours a day, being in the heat. Over time, there
6 have been an increase in the number of heat injuries.
7 I think it's a very reasonable conclusion to draw that
8 that is part of the reason why. I think it's also
9 reasonable to the fact that it's simply hotter. I
10 mean, that's a scientific fact. So our exposure to the
11 heat has increased over the years based on the fact
12 that we are out in the elements longer. And that is a
13 trend that we have seen. As I said, it began with
14 automation, really in the early 1990s, and it continues
15 to this day, year after year after year.

16 MS. CARSE: Okay. My next question -- are you
17 able to provide, for the record and post-hearing
18 comments, Dr. Bernard's unpublished analysis or report?
19 That would be something we'd be interested in seeing.
20 I believe that was referenced in your submitted
21 comments.

22 MR. RENFROE: It was. That is, as you probably

1 are aware, has been a significant part of the OSHA
2 litigation that I mentioned over the years and that we
3 would easily be able to provide that. Yes.

4 MS. CARSE: Okay. So these questions are -- the
5 next ones are a little bit -- I'm not sure how much
6 you'll be able to help us, but -- or answer them. But
7 in their submitted comments, USPS talked about the
8 different provisions that they have in their HIIPP.
9 Are there any of the measures that -- such as training,
10 emergency procedures, provision of water, uniform
11 options, stand-up talks, posters, videos, postal
12 bulletins, screensavers, laminated cards, stickers and
13 vehicles, home mailings, and daily messaging
14 reminders -- that your members find to be the most
15 effective in their experience? If that's something you
16 want to address in a post-hearing comment, that's fine
17 as well too.

18 MR. RENFROE: No, I can answer that now. I don't
19 think there's any of the measures that are in the
20 existing HIIPP, of which our union was very heavily --
21 I was personally very involved in the creation of. I
22 think it -- I don't think we could say that one

1 particular element of it is more important is proven to
2 be more effective than the other. I think when you
3 look at the proposed rule here, which is, of course
4 more comprehensive than their HIIPP, that the idea is
5 they are all, you know -- in one case of an individual
6 circumstance, I suppose one element may be more
7 important than the other. In a different circumstance,
8 a different element may be more important. But
9 generally, I -- it would be very difficult for me to
10 draw a conclusion as to which elements might be, you
11 know, to prioritize them, so to speak. I think it's
12 very fact specific.

13 MS. CARSE: Okay. I'm not sure if you're familiar
14 with a cost analysis performed by USPS in November
15 2024. If you are, we'd be interested in your thoughts
16 on that analysis. It's something they referenced in
17 their submitted comment, but if not, that's okay, too.
18 That might be something --

19 MR. RENFROE: So the Postal Service does a lot of
20 cost analysis. It's a very large organization. I
21 will -- so I'm not sure exactly which specific one you
22 might be referring to. We would be more than happy to

1 review it and comment on it in, you know, post-hearing
2 if that's something that you'd be interested in.

3 MS. CARSE: And typically, where do letter
4 carriers take breaks? Are they taking them in the
5 truck and going to a break area?

6 MR. RENFROE: That is one of the challenges we
7 face in mitigating the hazards of excessive heat.
8 Letter carriers have, as a standard, two breaks a day.
9 One in the morning, one in the afternoon. The one in
10 the afternoon is always taken while they are out
11 delivering mail, doing their street work. The break in
12 the morning, in most cases, is taken while they're out
13 doing their street work. In some cases, it's taken
14 before they leave the office, the post office in the
15 morning.

16 We do have forms where they designate their break
17 locations. Part of the existing HIIPP and the
18 discussion going back years surrounding it is, you
19 know, obviously identifying locations where they could
20 take breaks in climate-controlled locations where
21 available. We encourage that and have made an effort
22 to do that. But the fact is, you know, there are

1 almost 150,000 postal routes that my members carry.
2 Every one of them is different. Some of them have a
3 plethora of, you know, places where -- that are climate
4 controlled. Others have literally zero. So it really
5 all just depends. Of course, we are very, you know,
6 supportive and been very involved now for over ten
7 years. And the project of the Postal Service acquiring
8 new delivery vehicles and those vehicles being air-
9 conditioned would go a long way towards having a
10 climate-controlled break location.

11 MS. CARSE: Okay. And I have one last question.
12 They noted that in the HIIPP, it includes the provision
13 of water. How do letter carriers typically have access
14 to this water? Is it like coolers in the truck?

15 MR. RENFROE: Yeah. Most use their -- they have
16 some sort of cooler that they use. Usually, it's a
17 large sort of thermos type, at least for most. We do
18 require, in post offices, of course, they have water
19 that they can have before they leave in the morning.
20 That said, I can speak from personal experience,
21 regardless of how big that container is, you know, on a
22 hot day, you're going to fill it up many times

1 throughout the day. So similarly to identifying break
2 locations, it can be a challenge to identify locations
3 to refill water. So that's one of the pieces that we
4 have to deal with, with each different circumstance on
5 each route, too.

6 MS. CARSE: Okay. Thank you.

7 MR. RENFROE: Sure.

8 MR. SCHAYER: Thank you. I'd now like to turn to
9 Patti Downs.

10 MS. DOWNS: Thank you. Patti Downs with the
11 Directorate of Standards and Guidance. Just kind of
12 piggybacking on Rachel's questions. You mentioned that
13 most delivery vehicles are not equipped with air-
14 conditioning. I'm wondering what procedures are in
15 place for cooling mail carriers who work from their
16 vehicles along the route?

17 MR. RENFROE: There are zero procedures for
18 cooling inside vehicles that do not have air
19 conditioners. They are fitted with, I guess, what is
20 about a six-to-eight-inch fan that's mounted on the
21 dash that blows hot air but really doesn't do anything
22 to cool the vehicle. So in the old fleet of customized

1 vehicles that the ones that you've seen for 25 or 30
2 years that we are in the process of replacing, there is
3 no measure vehicles.

4 MS. DOWNS: Are there any limitations on when fans
5 in those vehicles can be used or when they should be
6 used? Any guidance on that?

7 MR. RENFROE: No. When it's hot, I can assure you
8 the fan stays on all the time. A fan even blowing hot
9 air in your face is better than no fan. When you are
10 in a vehicle that is, you know, excessively hot all day
11 long. I can speak from firsthand experience about
12 that.

13 MS. DOWNS: Okay. What about for those who
14 deliver mail on foot? You mentioned some of the urban
15 settings where they're carrying it. What controls are
16 in place for cooling those employees?

17 MR. RENFROE: Of course, they're not dealing with
18 a vehicle. For the most part, it is in, you know,
19 highly dense, populated urban areas where we have those
20 types of routes. And typically, it is much easier to
21 locate climate-controlled places -- building lobbies,
22 businesses, things like that -- where they can take

1 breaks. So I think, again, there's exceptions to this
2 because there's so many -- there's 100 and -- almost
3 150,000 routes, as I said. But typically, it's going
4 to be in some climate-controlled location they have
5 access to along their route.

6 MS. DOWNS: Okay. And Patti Downs again. My last
7 question is, what controls are you aware of, if any,
8 that have been tried and did not work? And why didn't
9 they work?

10 MR. RENFROE: I am not aware of any -- certainly
11 not at the national level of the Postal Service, as
12 part of a, you know, the HIIPP that have been -- that
13 have been tried and have not worked. Everything that
14 was put in place with their existing HIIPP, which dates
15 back to 2018, 2019, there has not been anything removed
16 because it did not work. We just need more.

17 MS. DOWNS: Okay. That's all I have. Thank you.

18 MR. RENFROE: Uh-huh (assent).

19 MR. SCHAYER: Thank you, Mr. Renfroe. And Your
20 Honor, that completes OSHA's questions.

21 JUDGE LARSEN: Thank you very much. Ms. Naughton,
22 do you have anything from the Solicitor's Office?

1 MS. NAUGHTON: Yes. Mr. Renfro, we were curious
2 when your members might be feeling -- experiencing heat
3 symptoms, how are they able to -- or are they able to
4 access any kind of assistance in the way of first aid?
5 Does the USPS have any kind of policy or procedures for
6 providing those services while they're on their routes?

7 MR. RENFROE: So in the HIIPP itself, in the
8 educational materials that we provide, what we advise
9 them to do is that if they are experiencing some sort
10 of, you know, physical impact, so to speak, to take no
11 chances, that they should call 911 first. And that
12 they should also notify their managers, and we try to
13 educate them on what the warning signs are and -- which
14 I'm sure you have the HIIPP. You'll see there's a
15 number of different educational pieces there. But we
16 encourage them to, you know, take no chances and seek
17 medical attention if they begin to feel something
18 that's out of the ordinary.

19 MS. NAUGHTON: Great. Thank you. And thank you
20 for your testimony, Mr. Renfro.

21 MR. RENFROE: Sure.

22 JUDGE LARSEN: All right. Do we have participant

1 questions?

2 MS. CARLON: Yes. The first one is from Ms. Cain.

3 MS. CAIN: Thank you. I have two questions. Hi,
4 President Renfro. My name is Chris Cain. I'm with
5 North America's Building Trades Unions. And one of the
6 questions I have for you is if you could explain what
7 is included in the Postal Service's HIIPP, and why is
8 that not sufficient, in your view?

9 MR. RENFROE: Sure. So the general pieces that
10 are included, there is an oversight component that lays
11 out a structure of how it would be administered. There
12 is a training component that covers the information
13 that would be distributed to both employers and
14 managers. It goes into some detail about that. Part
15 of the training is a messaging piece, using the device
16 that you all see letter carriers carry around all the
17 time. And that is essentially -- then there's a few
18 other things as far as requirements for, you know,
19 having water and things like that and administrative
20 controls that, that type of stuff.

21 What it is missing that are very, very important
22 pieces here, as I refer to in my testimony, number one,

1 is an acclimatization protocol. And number two,
2 establishing a work rest regimen that employees that
3 were working, you know, once the temperature heat index
4 reaches a certain threshold, would have the opportunity
5 to take breaks that were -- beyond their normal breaks
6 that were necessary to mitigate the impact of excessive
7 heat. Those are the two things that are completely
8 absent from the existing HIIPP.

9 MS. CAIN: Thank you. And so given that, what do
10 you think the experience of letter carriers will be if
11 the proposed rule is thrown out or drastically altered?

12 MR. RENFROE: I think there's a couple of impacts.
13 You know, first, unfortunately, the stories, some of
14 which I referenced in my testimony about individuals
15 that, you know, lost their lives where measures like
16 this could have prevented those deaths. Unfortunately,
17 we will continue to see those happen. That's one
18 thing. Secondly, I think the continued absence of a
19 rule or, you know, this rule not being adopted after --
20 for well over a decade of us now fighting to, you know,
21 simply protect our members from getting sick and dying
22 I think in some ways would potentially embolden some of

1 the issues that I mentioned culturally within the
2 Postal Service and their management culture that it
3 would -- what we've seen is problematic in terms of
4 responding to employees, you know, their kind of the --
5 let's call it productivity goals that have been
6 prioritized over employee safety. I think the
7 withdrawal or this rule not being adopted, having gone
8 through the process in many ways could throw a little
9 fuel on that fire, which, you know, would be -- I
10 think, really potentially devastating is, you know, we
11 continue to see this hazard grow year after year.

12 MS. CAIN: Thank you very much. Thank you, Your
13 Honor.

14 JUDGE LARSEN: Thank you. Do we have any other
15 participants?

16 MS. CARLON: Yes. Your Honor, the last question
17 is from Ms. Arberry.

18 MS. ARBERRY: Hi, Your Honor. Chenay Arberry with
19 the AFL-CIO. President Renfro, thank you for your
20 testimony. I'm just wondering why USPS has refused to
21 implement guidelines that will fully protect the letter
22 carriers. And then I have a second question after.

1 MR. RENFROE: Sure. Answer to the first question
2 is very simple. They will -- the Postal Service will
3 do what the law, what the Department of Labor and what
4 OSHA requires them to do and nothing more. And that
5 is, you know -- I think underscores the importance of
6 this rule for the hundreds of thousands of people that
7 work at the Postal Service, you know, more than
8 anything else.

9 MS. ARBERRY: Chenay Arberry with the AFL-CIO
10 again. President Renfroe, secondly, can you describe a
11 typical delivery route and the risk of -- posed by heat
12 for letter carriers?

13 MR. RENFROE: Sure. Good question. The letter
14 carriers normally will, you know, report to work. They
15 normally work inside preparing mail, sorting mail,
16 getting ready for delivery in a climate-controlled
17 environment for around an hour. Some might be a little
18 less, some may be a little more. And then they go out
19 on the street, sometimes on foot, as I mentioned.
20 Sometimes, they're in a vehicle, the vast, vast
21 majority of which today do not have air-conditioning.
22 And they are out making deliveries for, at minimum,

1 seven hours. And in many cases, longer than that. In
2 many cases, working ten, up to 12 hours per day. And
3 it is a job that moves very quickly. You know, we
4 often see our letter carrier, and they smile and say
5 hello. And you know, it's hard to sometimes even just
6 think about they are doing that hundreds of times every
7 single day. They never stop moving, with the exception
8 of, you know, the breaks and with a 30-minute lunch
9 break.

10 But it's a very sort of busy job that's
11 continuous, often results in carrying weight. And you
12 know, it results in extended exposure to the elements,
13 whatever they may be -- in this case, we're talking
14 about heat -- without the opportunity to -- currently,
15 without the opportunity to take breaks or get out of
16 the heat, get out of the cold, whatever, you know, the
17 challenge of the day may be. And once they finish
18 delivering all their mail, they go back, you know, to
19 their office for a few minutes and come back and do it
20 again the next day.

21 MS. ARBERRY: That's all. Thank you.

22 MR. RENFROE: Thank you.

1 JUDGE LARSEN: All right. Thank you, Ms. Arberry.
2 Anything further from the OSHA panel?

3 MR. SCHAYER: No, Your Honor. Thank you.

4 JUDGE LARSEN: From the Solicitor's Office?

5 MS. NAUGHTON: No, Your Honor. Thank you.

6 JUDGE LARSEN: All right. Thank you. Then let's
7 hear our next witness. Mr. Renfro, thank you very
8 much for being here today.

9 MR. RENFROE: Thank you, Your Honor.

10 MS. CARLON: Your Honor, that is our final witness
11 for today.

12 JUDGE LARSEN: Oh. I must be looking at an old
13 schedule.

14 MS. CARLON: Yes, it looks like those last two are
15 rescheduled for another session.

16 JUDGE LARSEN: That was the one on the schedule.
17 All right. Well, that brings us to the end of our
18 scheduled hearing today. I appreciate everyone's
19 participation in this hearing. I feel like I learned a
20 lot that I didn't know. It's been interesting to be
21 here today. I know that earlier, Ms. Cain made a
22 suggestion about extending the post-hearing comment

1 period. That's not up to me to decide. So I won't
2 make any comment on that one way or the other, other
3 than to say that if OSHA adopts that suggestion, I'm
4 sure they'll let you know. As of right now, the post-
5 hearing comment period ends on September 30th. So
6 please plan on having your post-hearing comments in by
7 then.

8 Thank you to everyone for your interest in this
9 rule. And we are adjourned. I think to reconvene on
10 Friday, aren't we? Friday at 9:30 a.m. Eastern Time?

11 MS. CARLON: Correct.

12 JUDGE LARSEN: Okay. Very good. I'll wish
13 everyone a pleasant evening. Thank you for being here
14 today. We are adjourned and off the record.

15 (Whereupon, at 3:55 p.m., the hearing was
16 adjourned.)

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