

**BSR ES1.17, Event Safety - Electrical Lighting & Electrical Safety
ESWG letter ballot to accept as an ANS
Resolutions to objections**

[Resolutions are in green text]

Ballot document number: ES/2024-20002r1

Ballot period: 22 February 2024 through 14 April 2024 - extended until 28 April 2024

Statement: BSR ES1.17, *Event Safety - Electrical Lighting & Electrical Safety* was sent out to its first public review from 17 February through 03 April 2023. Comments were received and resulted in substantive document revisions. The revised draft was sent to its second public review from 27 October through 11 December 2023. No comments were received. At its 27 January meeting the CPWG moved and seconded the motion to approve it as an American National Standard. The motion comes before the working group in this letter ballot. As of the ballot closing date, one "No with reasons" vote was received, so the ballot has been extended for fourteen days to allow voters an opportunity to reconsider their votes, in light of the objections.

Question: Do you approve of the motion to accept BSR ES1.17, *Event Safety - Electrical Lighting & Electrical Safety* (DCN ES/2018-20001r1b) as an American National Standard? Please vote Yes, Yes with comments, No with reasons, or Abstain with reasons. Reasons must be supplied with a No vote.

Reference documents:

- BSR_ES1-17_ES2018-20001r1b.pdf
- Pages from ESmin01-2024_DRAFT_ES17.pdf
- BSR ES1.17_PR2_CmmntSmmry.pdf

Results: At the end of the extended ballot period, the motion failed to meet the required supermajority—the affirmative vote of at least two-thirds of those who voted, excluding abstentions, and more than 50% of the total voting body, including abstentions. Eight “Yes” votes, one “Yes with comments” vote, and twenty-one “No with reasons” votes were received. There were two abstentions, and one ballot not returned.

Vote	Count
Yes	8
Yes with comments	1
No with reasons	21
Abstain with reasons	2

Votes by interest category:

	Yes	Yes with comments	No with reasons	Abstain	Not voted	Totals
Designer (DE):	2	0	6	0	0	8
Dealer or rental company (DR)	2	0	1	0	0	3
General interest (G):	0	0	9	0	1	10
Event Worker (EW):	0	1	0	1	0	2
Equipment provider (EQP):	0	0	0	0	0	0
Performing artist (PA):	1	0	0	0	0	1
Insurance company (INS):	0	0	1	1	0	2
Event producer (EVP):	3	0	4	0	0	7
Totals	8	1	21	2	1	33

Individual votes (ONLY OBJECTIONS SHOWN IN THIS SUMMARY):

Name: Steven A. Adelman - Adelman Law Group, PLLC (G)

Vote: No with reasons

Time: 2024-03-28 18:40:25 PT

Comments:

I am knowledgeable about neither Electrical Lighting or Electrical Safety. That said, people who appear to be knowledgeable on these subjects obviously have concerns, so I am changing my vote from Yes to No With Reasons so they can be addressed.

The magnitude of edits for clarity does point to a consistent challenge within ESWG - draft standards presented to the working group that have not been carefully edited by the task group first. The fact that we keep facing this issue, and here have come to the brink of approving a document with flaws evident to careful readers with subject matter expertise, points to the need for someone to assume the role of editor of first resort on behalf of the working group. If the working group's response is that no one has time for that and there's no budget to hire someone, then we should institute minimum competency requirements before a new task group is approved. One of those competencies is writing experience of documents not dissimilar to ANSI standards. That's a high bar. Trying to edit other people's work belatedly and by committee does not seem to be working, so why not try erecting guardrails in the first instance so we don't get to this point?

Accepted in principle, thank you document updated

Name: Janine Oblak - CITT/ICTS (G) ****SUPERSEDED VOTE****

Vote: No with reasons

Time: 2024-03-09 13:02:08 PT

Comments:

I think this draft standard looks great so far. Please see below for my suggestions on how we can add some finishing touches to this draft standard.

The words that I have made 'bold' in the paragraph below, are in the document in a very light grey colour. It is almost invisible.

1.3 Equivalency The provisions of this standard are not intended to prevent the use of any materials or to prohibit any design, method of fabrication, or services not specifically prescribed by this standard, provided that any such alternative they comply with applicable regulation and with the intent of this standard with the goal of improving safety. The

Accepted, thank you document updated

'earth' should have a lowercase **E**

2.3 Bonding (electrical): The practice of intentionally electrically connecting all exposed metal items not designed to carry electricity as protection from electric shock. This provides a low impedance pathway to the Earth in the event of an electrical fault.

Accepted, thank you document updated

'Event' should be lowercase in 'See also Live Event'. Remove 'also'

2.10 Event: Any assembly, public or private, indoor or outdoor, including the planning for, preparation for and dismantling of (load in, load out) the event. See also Live Event.

Accepted, thank you document updated

'Cord' should be lowercase after 'Flexible' in both places.

Replace 'extensions' with 'extension'

Accepted, thank you document updated

2.18 Flexible Cord: Flexible Cord - A stranded wire cable manufactured with the ability to bend and coil repeatedly often called extensions cords. Flexible cords may be vulnerable to environmental damage and wear.

Accepted, thank you document updated

'Laws' should be lowercase

Add acronym OSH for Occupational Safety and Health.

Reject with reasons, definition removed due to other comments

2.25 Health and Safety: Regulations, Laws, rules, principles, guidelines, policies and procedures that are intended to keep people safe from injury or disease at work or in public places. Sometimes referred to as Occupational Safety and Health or Life Safety.

_ Reject with reasons, definition removed due to other comments

'Live' should be lowercase

". Or" should be ", or"

Accepted, thank you document updated

2.26 Hot/Live: A wire that conducts electricity from the source to the point of use (e.g., motor, tool, light, etc.). Or a piece of equipment that is electrically energized.

'Event' should be lowercase

'event' should be uppercase

2.27 Live Event: See also "event"

Reject with reasons, definition removed due to other comments

'State' and 'Regional' should be lowercase

2.34 OSHA (Occupational Safety and Health Administration): A government body in the U.S. responsible for setting minimum regulatory requirements at the federal (national) level that employers shall follow to protect the safety and health of their employees. These minimum requirements are adopted and additional requirements are implemented at the State (Regional) level.

Accepted, thank you document updated

Capitalize all of 'Personal protective equipment' because we are including the acronym PPE

2.36 Personal protective equipment (PPE): Personal protective equipment is the safety equipment worn by a user to prevent bodily harm. It is only to be used to mitigate the remaining risk of injury after all technical and organizational means have been implemented. (E.g., safety shoes or boots, hi visibility vests, hard hats and safety (fall arrest) harnesses.

Accepted, thank you document updated

I don't see 'Event Electrical Risk Assessment' in the 'Definitions'.

2.40 Risk assessment: See Event Electrical Risk Assessment

The risk assessment is described in section 5 so no definition was needed, thank you

Replace '&' with 'and' throughout the document with the exception of official titles

3.4 All equipment, devices & materials shall be used in accordance with the manufacturer's instructions and where required display all necessary labels and limitations.

___ Accepted, thank you document updated

'event Organizer' should be lowercase

3.8 All portable event electrical systems shall be installed, maintained and operated by competent persons who have been authorized by the event Organizer.

Accepted, thank you document updated

Use 'United States, Europe and the United Kingdom.' or ' U.S., Europe and the U.K.' for consistency
'Listed' should be lowercase

Add the acronym NRTL for Nationally Recognized Testing Laboratory

E3.8 In the United States, Europe and the U.K., all electrical equipment is required to be "Acceptable" to the AHJ which usually means Listed by a Nationally Recognized Testing Laboratory for the purpose for which it is being used.

___ Reject with reasons, UK is better understood internationally compared to the United Kingdom where as U.S. is not

'Shock' should be lowercase

5.3.3 Audience

Electric Shock

___ Accepted, thank you document updated

'Routes' should be lowercase

5.3.4 Site and Venue

Cable Routes and protection

___ Accepted, thank you document updated

Capitalize 'structure', 'civil', 'protests', 'civil', 'crushing', 'explosion', 'fire' and 'chemical'.

5.3.5 Major Incidents

- Electrical risks associated with potential major incident hazards associated with the event
- structure collapse
- civil unrest
 - protests
 - civil disorder
 - crushing
- explosion
 - fire
 - chemical release

___ Reject with reasons it was felt that the lower case letter better indicated visually that this was a sub category of the heading above it and is indented to enhance that effect.

Capitalize 'vehicular' and 'foot'

5.3.7 EMS

- EMS response for electrical injury
- EMS response times
- EMS response capacity & capability in relation to electrical hazard rescue
- EMS Access to patients
 - vehicular access
 - foot patrols & or bike teams

___ Reject with reasons it was felt that the lower case letter better indicated visually that this was a sub category of the heading above it and is indented to enhance that effect

'Inspection' should be lowercase

5.3.14 Equipment

- Electrical safety of all electrical components within the electrical system
- Equipment Inspection

___ Accepted, thank you document updated

'illumination' should be capitalized

5.2.15 ADA (Assistive Services) & Vulnerable attendees

- Cabling & cable Ramps
 - Trip hazards considering restricted mobility
 - ADA cable ramps vs goal posts
 - 6ft minimum separation between ADA cable ramps for ease wheelchair access
 - illumination
 - Cable protection sufficient for assistive devices (e.g., battery-operated wheel chairs) |
 - Electrical failure of ADA evacuation equipment that slows or prevents egress
 - Charging for assistive devices © 202x ESTA Page 9 ES/2018-20001r1b BSR/ES1.17 - 202x DRAFT
- Electrical Safety & Lighting
- Oxygen cylinders and proximity to electrical equipment

_ Accepted, thank you document updated

Add a point about responsible disposal of damaged or used-up batteries (which are hazardous waste), or add it to section '12 Removal from Service and Repair'.

5.3.16 Special Circumstances and Risks

- Electrical failure for automated staging, scenery & rigging
 - Rapid deceleration or stopping of equipment
 - Release of stored potentially hazardous energy
 - Blackout (reduced visibility)
- Electrical isolation for electrical systems used for the detonation or operation of pyrotechnics and special effects
- Battery storage and charging

___ Accepted, thank you document updated

'standards' should be uppercase

8.3 Other standards

___ Accepted, thank you document updated

'525.20(G) of the NEC)' is in different font

E8.8.1 Cable ramps often fail to mitigate the hazards of cable running on a walking or working surface and in many circumstances may create additional hazards. Other methods of mitigation (e.g., redesigning the cable path or running the cable overhead) provide superior mitigation. Cable ramps can increase trip hazards, risks of physical damage, or may mask said damage. If cable ramps cannot be avoided ADA compliant cable ramps present less of a tripping hazard due to their shallow slope. (see also 525.20(G) of the NEC).

_ Accepted, thank you document updated

Be consistent with 'UK' and 'U.K.'

Please see section E10.1.2

___ Accepted, thank you document updated

'Grounding' should be lowercase

E10.1.2

"Bonding" is the physical process of ensuring that the Grounding path is unbroken and at a low impedance between all conductive surfaces and the ground point.

Replace 'More useful information can be about the use of GFCI devices can be found' with 'More useful information about the use of GFCI devices can be found'

E10.2 More useful information can be about the use of GFCI devices can be found in ANSI-E1.19, Recommended Practice for the Use of Class A Ground-Fault Circuit Interrupters in the Entertainment Industry, and ANSI E1.58, Electrical Safety Standard for Portable Stage and Studio Equipment Used Outdoors (current edition).

Replace 'Order The conductors used for the tie-in shall be connected in the following order. grounded conductor first, neutral conductor second and then any of the hot or live conductors.' with 'Order of the conductors used for the tie-in shall be connected in the following order: Grounded conductor first, neutral conductor second, and then any of the hot or live conductors.'

11.6 Order The conductors used for the tie-in shall be connected in the following order. grounded conductor first, neutral conductor second and then any of the hot or live conductors.

___ Accepted, thank you document updated

'Federal' should be lowercase Accepted, thank you document updated

There is an extra space before 'Health' in '(Health & Safety Executive)'

Accepted, thank you document updated

E 11.18.2 For more complete information and examples about working at height and fall protection please see 1926.501 in the US, in Canada CCOHS (Canadian Center for Occupational Safety & Health) has great information on Federal and provincial regulation. In the UK the HSE (Health & Safety Executive) has good information for "The Working at Height Regulations 2005"

'Source' should be lowercase

'Ozone' should be lowercase after 'produce' and 'sold as'

E11.19.1

The Source will produce Ozone unless specially coated (sold as Ozone free)

___ Accepted, thank you document updated

'Mercury' should be lowercase

11.19.3 Lamps containing any Mercury metals or compounds shall be disposed of in accordance with local safety and environmental regulation. The lamps shall only be handled by competent event personnel, wearing the proper PPE to protect against potential exposure.

___ Accepted, thank you document updated

Repeated word 'be'

14.2.1 Electrical metering and testing equipment used on event electrical equipment shall be be rated for the equipment they will be metering and testing (e.g., Category III or Category IV).

[_ Accepted, thank you document updated](#)

'Out' should be capitalized after 'Lock' and 'Tag'

15 Lock out Tag out

[_ Accepted, thank you document updated](#)

Replace 'tie ins' with 'tie-ins'

[Accepted, thank you document updated](#)

15.1 Evaluation The following list of sources of potentially hazardous energy should be evaluated at the event to determine when and how Lock out/Tag out procedures should be used to protect event personnel. Other sources of potentially hazardous energy may be present.

- Automation © 202x ESTA Page 21 ES/2018-20001r1b BSR/ES1.17 - 202x DRAFT Electrical Safety & Lighting
 - Electrical services
 - Acoustic energy
 - Main or "Company Switches"
 - Power drops or tie ins
 - Distribution panels
-

Replace 'its'" with 'its'

15.3 Assessment

Is it possible to energize a device or system without event personnel being aware of its' change to an energized state?

[_ Accepted, thank you document updated](#)

Remove brackets around '(safe)'

15.5.2 To comply with this standard any control measure shall use one or more of the following methods to isolate the energy source. Each potential hazardous energy source shall have an appropriate sufficiently rated control to change the source of potentially hazardous energy between a (safe) de-energized state and an energized state and isolate the potentially hazardous energy, (e.g., using a manually operated (valve), electronic (solid state), electro-mechanical (RCD) or mechanical (circuit breaker), etc.)

[_ Accepted, in principle document updated](#)

'Competent' should be lowercase

15.7.4 A Competent and qualified LOTO supervisor shall be designated.

[_ Accepted, thank you document updated](#)

All of the words after 'e.g.,' in brackets should be lowercase

15.8 Duty to Inform

(e.g., A lighting Cue, Rigging Cue, Show, rehearsal etc.) [Accepted, thank you document updated](#)

Replace 'tie in' with 'tie-in'

16.2.4 “Clamp” style connectors that leave live electrical components exposed shall not be used for portable event electrical distribution or “tie in”. Connectors must comply with all applicable local, regional and national regulation and approval by the AHJ.

___ [Accepted, thank you document updated](#)

Remove comma between ‘be, bonded’

16.3.1 The supporting structure for portable overhead cables shall be, bonded & grounded, sufficient for the anticipated loads, types of cable and prevailing conditions at the event site.

___ [Accepted, thank you document updated](#)

‘Portable Event Power’ should be lowercase

There is a missing [period](#) at the end of the paragraph.

16.6.1 All reasonable efforts should made to avoid direct burial of any portable event power cable not specifically rated for direct burial, using elimination, substitution, or engineering control measures to mitigate the hazards that would require the burial of Portable Event Power cable

[Accepted, thank you document updated](#)

Change ‘Disabled Access’ to ‘Americans with Disabilities Act’

Add space between ‘,(‘

[Accepted, thank you document updated](#)

16.8.1 The use of “ADA” (Disabled Access) compliant cable ramps shall be used in any areas where foot traffic will cross cable runs,(except emergency exit routes where no obstructions of any kind are allowed).

___ [Reject with reasons while the use of ADA in this context is synonymous with disable the Americans with Disabilities Act would add confusion especially outside the US w](#)

‘Cable Ramps’ should be lowercase

16.8.2 Where no alternative exists and cannot be avoided, Cable Ramps designed for use with wheelchairs and people with limited mobility shall be used in any area where foot traffic is reasonably foreseeable.

___ [Accepted, thank you document updated](#)

‘Access’ should be lowercase

16.9.2 Authorized Access to these switches shall be restricted by engineering or administrative controls to the event personnel designated as authorized to operate the switch for their own department and the switch shall be easily accessible to them.

___ [Accepted, thank you document updated](#)

Capitalize ‘[emergency action plan](#)’ because of the acronym ‘EAP’

E16.11 An emergency action plan (EAP) is a written document, required by regulation (e.g. OSHA in the USA, HSA in Canada), for an event, which describes the actions event organizers or their representatives should take to ensure the safety of everyone onsite during emergency situations.

___ [Accepted, thank you document updated](#)

‘Boom & Scissor’ should be lowercase [Accepted, thank you document updated](#)

Needs period at end of paragraph. [Accepted, thank you document updated](#)

E17.1.2 Specific training is required by many national & local AHJ's (e.g., OSHA) for working with cranes, scaffolding & MEWP's (Mobile Elevated Work Platforms (e.g. Boom & Scissor lifts etc.) in proximity to overhead power lines 29 CFR 1926.1408

Remove commas and a period from the ends of each bullet point **Reject with Reasons, received other feedback from multiple sources requiring periods**
'fail over' be 'failover' **Accepted in principle went with the neutral fail-over thank you document updated**

E18.3.1 Examples of generator selection considerations:

- Size for load (including power factor),
 - Ambient temperature,
 - Fuel capacity,
 - Size for transport and location,
 - Suitability for emergency and life safety power (if applicable),
 - Methods of starting & stopping (e.g., auto start, fail over, emergency shutdown etc.)
 - Computer controlled synchronization for paralleled generators,
 - Remote monitoring capability
 - Noise (sound attenuation),
 - Air quality (regional restrictions)
 - Fuel storage regulations
 - Type of fuel and fuel availability
 - Climate
 - Availability of dedicated testing points/ports,
 - Available connections (e.g., camlock).
-

Remove **colon** after 'approval'

18.5.2 AHJ approval: of any deviation from the applicable regulation shall be documented as part of the event electrical safety plan.
__ **Accepted, thank you document updated**

Remove periods at the ends of the bullet points **Reject with Reasons, received other feedback from multiple sources requiring periods**

E18.15 Examples of improper storage include but are not limited to:

- Storing fuel in improper containers.
 - Storing too much fuel in a location.
 - Storing fuel in poorly ventilated spaces.
 - Storing fuel along exit and egress paths.
 - Storing fuel with other incompatible and/or flammable chemicals.
 - Storing fuel near ignition sources.
 - Lack of easily accessible fire-fighting equipment appropriate for the type of fuel used.
-

Add hyphen between feet and inches for **'6'6"' and '3'3"'** **Accepted, thank you document updated**

Add a comma after 'applies' **Accepted, thank you document updated**

I am not as familiar with electrical safety as the members of the 'Electrical Safety & Lighting' working group are, and I think that may be why I am not fully understanding the last sentence in this paragraph. Please reword it.

19.1.1 Appropriate minimum clear working space shall be established and maintained around electrical equipment to allow access for operation, maintenance, and emergency access. Where no other more stringent local, regional, or national regulation applies the distance around main/primary electrical distribution equipment shall be no less than 3'-3" (1m) from the faces or sides of said equipment. The

clearance of 3'3" (1m) shall be maintained vertically from the floor to a minimum of 6'6" (2m) above the floor or 3'3" (1m) above the equipment (whichever is greater).

Reject with reasons the combination of verbiage and diagram provides sufficient context for the intent of the paragraph-Thank you

Remove periods at the end of bullet points.

19.1.3 Other equipment should also be evaluated for minimum safe clearances, including but is not limited to:

- Control switches and equipment.
- Amplification equipment.
- Special effects equipment.
- Follow spots.
- Dimmers.
- Ballasts and high-voltage discharge lighting.
- Incandescent light sources.
- Overhead power lines.
- Generators and fuel storage.

Reject with Reasons, received other feedback from multiple sources requiring periods

Remove space between 'and/ or'

19.2.2 The event electrical service, supply and associated electrical distribution equipment shall be protected from unauthorized access (including unauthorized event personnel and attendees) and may require fencing, warning signs and/ or other methods to restrict access.

Accepted, thank you document updated

'Outdoor' and 'Temporary Venues' should be lowercase

20.3.1 There can be many types of events where existing regulation for emergency lighting systems do not apply or is insufficient to meet the reasonably foreseeable hazards at the event, (e.g., Outdoor festivals, Temporary Venues etc.). In these circumstances emergency lighting systems for the event should meet the following requirements:

Accepted, thank you document updated

This heading should be capitalized for consistency

21 Lighting levels for means of egress during events

Accepted, thank you document updated

This should be E.21.4

There is two periods after 'one'.

Contrast: It takes time for a person's eyes to adjust from a very bright environment to a darker one.. Work to reduce high variations in illumination level where they could create visual perception problems.

Accepted, thank you document updated

'certification' should be capitalized

22.2 Field **certification**

Accepted, thank you document updated

Capitalize the whole heading

'Injury' and 'Death' should be lowercase
'Static' should be lowercase
replace 'below someone' with 'below by someone' in factor #4

A2.0 Additional Hazards of Electrical Shock when working at height

The risk of Injury or Death from the electricity itself is compounded at height by four main factors:

How personnel may be exposed to electrical hazards that otherwise would be out of reach. 2. The risk of additional injuries from a fall due to minor electric shocks (e.g., Static discharge) which under most circumstances is insufficient to cause a direct injury but may startle personnel sufficiently to cause them to fall and be injured because of the fall.

4. Risks to personnel below by someone working at height who is injured by an electric shock.

Add a comma between 'height' and 'one', and 'isolated' and 'and'
[Accepted in principle thank you document updated](#)
A2.0

Electrical Hazards

Examples of ways that event personnel working at height can become the path of least resistance to ground:

- Touching two or more conductive materials at height one of which has an electrical fault and is energized but isolated and one of which is connected physically or electrically to the ground (e.g., an energized lighting pipe and a ground supported truss with a gap between them that can be physically grasped by the personnel in question).
- An electrical fault with the access equipment which is electrically isolated (due to its wheels or materials it is operating on) and then contacts conductive materials that are bonded to the grounding system or touching the ground.

'Federal' and 'State' should be lowercase

Electrical equipment and the AHJ

“(2) With respect to an installation or equipment of a kind that no nationally recognized testing laboratory accepts, certifies, lists, labels, or determines to be safe, if it is inspected or tested by another Federal agency, or by a State, municipal, or other local authority responsible for enforcing occupational safety provisions of the National Electrical Code, and found in compliance with the provisions of the National Electrical Code or local equivalent as applied in this subpart; or

[Accepted, thank you document updated](#)

Name: Janine Oblak - CITT/ICTS (G)

Vote: No with reasons

Time: 2024-03-26 13:20:16 PT

Comments:

Clarification and rewording are needed in areas of this draft standard. 15.9.3 is a section that I find unclear.

Please see my suggestions for grammar in my previous votes for this ballot.

[Accepted, thank you See individual responses](#)

Name: Doug Bruce - Doug Bruce Productions, LLC (DE)

Vote: No with reasons

Time: 2024-03-16 02:34:59 PT

Comments:

Further editing required

[Accepted, thank you document updated](#)

Name: Don Earl - Earl Girls, Inc. (DR)

Vote: No with reasons

Time: 2024-03-14 15:04:12 PT

Comments:

I agree with most of the comments provided in this voting period, specifically by Janine and Janet, and believe that they are substantial enough to warrant one more look at the document before approving it. Most of the comments are merely simple grammar corrections, however there are enough actual substantive changes suggested that I believe they need to be considered. I am a member of the task group.

Accepted, thank you document updated

Name: Janine A. Jordan - Electronic Music Alliance (G)

Vote: No with reasons

Time: 2024-03-20 23:55:49 PT

Comments:

Name: Mike Weston - Encore Global (EVP)

Vote: No with reasons

Time: 2024-03-22 15:32:58 PT

Comments: Due to the number of substantial changes proposed, I am voting No so the draft can be revised before resubmitting.

Accepted, thank you document updated

Name: Allen Winzler - Entertainment and Rigging Engineering (DE)

Vote: No with reasons

Time: 2024-03-16 14:10:36 PT

Comments:

There are enough detailed comments describing substantive changes needed that I'm convinced this is not ready to be accepted and published.

Accepted, thank you document updated

Name: Ethan W Gilson - Entertainment Rigging Services, LLC (DE)

Vote: No with reasons

Time: 2024-03-21 21:25:02 PT

Comments:

It's clear that there are some considerable concerns with this document in its current state. And although I am disappointed that a document had advanced to this stage of the process with so many outstanding concerns and additional comments that were not submitted in the public review process, it is the responsibility of each voting member to ensure that this document be presented to the TSC only after the ESWG has done its due diligence in the creation of the document.

Accepted, thank you document updated

Name: Donald Cooper - Event Safety Alliance (G)

Vote: No with reasons

Time: 2024-03-16 08:59:07 PT

Comments: there are conflicting requirements, and erroneous internal section references that must be fixed; doing so results in a substantive change, requiring another public review. We can't send this version forward to the TSC in good conscience.

Accepted, thank you document updated

Name: Janet Sellery - Event Safety Alliance Canada (G)

Vote: No with reasons

Time: 2024-03-16 09:50:11 PT

Comments:

Throughout - replace "&" with "and"

Introduction - The amount...means... (add "s)

2 Definitions - Check definitions against other standards ensure common ones are the same.

2.10 - Delete reference to Live Event

2.27 - Delete Live Event definition

2.25 - Delete Health and Safety definition and move the relevant info to 2.33 Occupational Health and Safety. The reference to Life Safety isn't needed.

2.40 - Delete Risk assessment definition as it refers to an Event Electrical Risk Assessment that isn't included. Alternatively, add a definition for Risk Assessment.

2.45 - Delete Venue definition, as 2.16 refers to venues.

3.8 - Change event "Organizer" to "organizer".

5.3.5 - Major Incidents - Capitalize words at the beginning of each bullet point to be consistent.

5.3.7 - Expand EMS to Emergency Medical Services as it isn't defined.

6 - Event Electrical Safety Plan - This section is problematic, as it consists of numerous "shall" statements that will not reasonably apply to small events. Here is a suggestion for revision:

6 - Event Electrical Safety Plan

Every event should have a written electrical safety plan containing reasonable documentation, including checklists and inspection reports.

Written copies should be available in a designated location easily accessible to event personnel and made available to affected parties upon request.

Training should be provided for affected event personnel and relevant parts of the plan should be communicated to all affected event personnel.

6.1 Plan contents

The event electrical safety plan should include:

information on the electrical risks at the event.

Procedures to mitigate the risk of electric shock to event personnel and attendees.

identify and mitigate ways that event personnel could be exposed to an electric shock while working at height, and mitigate the additional hazards of working at height and experiencing an electric shock, (e.g. falls etc.)

Emergency shut down procedures including the location of electrical system disconnect(s).

A list of the competent event personnel (including their current contact information) who will perform an emergency shut down or a partial shut-down of the event electrical system if required.

Required safety equipment (e.g., GFCI's and appropriate PPE)

The implementation of an AEGCP when required by applicable regulation or the reasonably foreseeable hazards.

11.18.1 (second sentence) - Change Event "Personnel" to "personnel".

E16.11 - Delete the reference to "HSA in Canada", as there is no legislated requirement for a plan by this name. (Also OHS refers to the Occupational Health and Safety Act in Ontario some jurisdictions have different names for this law.)

E17.2 - Delete "811 in Canada". In Ontario, that number is for health information.

A2.0 - Change - The risk of "Injury or Death" to "injury or death".

Accepted in principal thank you document updated

Name: Danielle Hernandez - Furman University (G)

Vote: No with reasons

Time: 2024-03-17 18:52:44 PT

Comments:

Name: Joe Golden - Gallagher Staging & Productions (DE)

Vote: Yes

Time: 2024-03-14 08:55:14 PT

Comments:

Name: Bryan Huneycutt - Halo Solutions (EVP)

Vote: No with reasons

Time: 2024-03-16 08:11:41 PT

Comments: Conflicting requirements

Name: Alyxzander Bear - Insomniac (EVP)

Vote: No with reasons

Time: 2024-03-16 17:01:53 PT

Comments:

Although I agree with the content of ES1.17, I change my yes vote to no due the the number of internal errors which need to be corrected before submittal to the TSC.

Accepted, thank you document updated

Name: Jochen Habsch - Jochen Habsch (EW)

Vote: Abstain with reasons

Time: 2024-03-22 17:34:04 PT

Comments: I think the changes others in this group suggested, should be considered. I do not have the technical background to evaluate specific aspects of this standard. So I abstain.

Name: Manny Marquez - Nightlife Security Consultants, LLC (G)

Vote: No with reasons

Time: 2024-03-22 01:14:52 PT

Comments:

Conflicting Requirements

Accepted, thank you document updated

Name: Richard J. Nix - Richard J. Nix (G)

Vote: No with reasons

Time: 2024-03-16 02:03:00 PT

Comments:

Aside from the many editorial comments already made by other voters, I find that this draft has missing normative references, lacks clarity in certain areas while being confusingly redundant in other areas, and it contains directly conflicting requirements. I encourage voters who have already voted "yes" to reconsider their vote. Here is a sample of areas that concern me:

ANSI E1.66-2020, Safety Standard for Followspot Positions Erected for Short-Term Use in Entertainment Venues should be included in the list of normative references. It already specifically addresses many aspects of electrical safety covered in this document. Accepted, thank you document updated

The Title of NFPA 70, Article 530 is incorrect. Reject with reasons lack of specificity ;Please point out what is wrong multiple checks return the title in this standard help needed if it is still wrong

The definition (2.38) for Portable event electrical systems must be reworded. As written, if there is a power supply and equipment, but no procedures or documentation, that system is still a system of two elements (instead of four), and could be used for an event, but would neither meet the definition, nor need to conform with any requirements specifically relating to the term as defined - e.g. 3.6, 3.7, 3.8, and 4.1.

Accept in principle however, task group could not understand the intent of this comment as written, however believe this may have been addressed specifically in the working group session on this document. Thank you

6.1.2 contains an erroneous reference to section 6 - the reference should be section 5. Making this change is necessary, and is substantive. Accepted, thank you document updated

There appears to be a disconnect between 8.4.2 (in the section covering overcurrent protection devices), and 8.8 (cable ramps/cable protection, 16.7 (cable protection), and 19.41/19.42 (Egress paths). it would seem as though cable ramps are discouraged, but are permitted. 19.41/19.42 prohibits any electrical equipment including cable ramps from being located in egress pathways.

Reject with reasons the document has been updated to improve clarity on this subject. In essence the intent is that non- ADA cable ramps are discouraged but not prohibited except in egress paths where they are prohibited in this standard and by federal regulation

Section 15.9 Removal (of LOTO) contains confusing and redundant requirements. LOTO should be used to eliminate or prevent a hazard. LOTO should then be removed only after the hazard is mitigated, or eliminated. The section appears more concerned with who removes the tag, and not why. 15.9.3 confuses the reader by referring to changing the energized state (an energized state is energized - I believe the reference should be the "power state changing from energized to de-energized", or the equipment being energized again after being de-energized due to LOTO. 15.9.3 requires clearing event personnel "from the area of the hazard" - the hazard will have been mitigated or eliminated in order for the LOTO to be removed in the first place.

Accept in principle-thank you- the sentence referenced has been changed to improve clarity however the task group kept the principle of removing people but added the word potential to hazard. OSHA requires that hazards should be mitigated (the most effective method being elimination). However, it still in LOTO situations requires that affected workers (specific definition in OSHA regs), be removed from the potential hazard as a belt and suspenders approach. This is to address the complexity of these situations where despite numerous mitigations a hazard may still exist that has not been identified.

Section 16.7 combines an explanatory note with a requirement, that would seem to prohibit any use of cable ramps. Some cable ramps advertize a load capacity range of 7-13 tons. Accepted in principle language updated thank you

18.9 (Generator) Startup: most if not all of the requirements in this section can be condensed down to "shall only be operated in accordance with the manufacturer's instructions." Inspections, circuit breaker state, setting or changing voltage/frequency, idle time before load, PPE, and CO hazards are all addressed in manufacturer's instructions. Reject with reasons, while much of the comment is accurate the SME on the task group, George Long, felt that there were so many instances of people not knowing, reading or following the manufacturers instruction that spelling a lot of these things out in the standard was an opportunity of increasing awareness in people (like event organizers) who will unlikely to be operating the generator to understand what is required.

20.3.1 is in direct conflict with 3.6. All recommendations in 20.3.1 pertaining to emergency egress and exit lighting must be replaced with mandatory requirements (change "should" to "shall"). 3.6 requires all emergency power systems, used for egress, evacuation or for delivery of emergency management services to be redundant.

These items, along with other less critical or editorial revisions, must be changed in order to gain my unqualified "yes" for approval of this draft.

Accepted, thank you document updated

Name: Robert Haycock - Robert Haycock (EW)

Vote: Yes with comments

Time: 2024-03-14 17:40:43 PT

Comments:

This document includes non-substantive typographical errors and inconsistencies which if corrected would enhance usability. For example: missing punctuation, inconsistent line spacing, inconsistent clause header formatting, and inconsistent hyperlink formatting.

Additionally, a future revision of this document could improve readability by reordering sections for a more logical flow.

Accepted, thank you document updated

Name: Daniel Ayers - StageRight Services LLC (DE)

Vote: No with reasons

Time: 2024-03-16 12:16:43 PT

Comments: Please revise and resubmit per the errors others have identified.

Accepted, thank you document updated

Name: Stephen Vanciel - Stephen Vanciel (DE)

Vote: No with reasons

Time: 2024-03-16 16:35:30 PT

Comments:

Document needs more editorial revisions and corrections as noted by others.

Accepted, thank you document updated

Name: Tami Richter - SXSU, LLC (EVP)

Vote: No with reasons

Time: 2024-03-21 22:03:32 PT

Comments:

I'm submitting my vote now as I would prefer to not lose my voting status, but believed I had until March 28th per the email and this ballot. However, in a nutshell, "due to reported conflicting requirements" would be my generic reason and this is aside from the editing needs. I was a bit slowed down by flow and the injects of other standards.

Accepted, thank you document updated

Name: Neil Huff - Taylor & Taylor Insurance Brokers (INS)

Vote: Abstain with reasons

Time: 2024-03-17 10:00:29 PT

Comments:

Name: Jane Harrington - The Hartford Group (INS)

Vote: No with reasons

Time: 2024-03-20 22:06:10 PT

Comments:

- Many revisions suggested.

- Suggested revisions submitted to Committee.

Accepted, thank you document updated

Name: Jerry Gorrell - Theatre Safety Programs (G)

Vote: No with reasons

Time: 2024-03-22 23:20:20 PT

Comments:

There are substantial errors in spelling, punctuation, and formatting that result in a poor quality document and do not meet the standards of a document of this type.

Accepted, thank you document updated

Name: Tyler Wise - Visional (EVP)

Vote: Yes

Time: 2024-03-22 08:51:40 PT

Comments:

Name: Erin Grabe - Yvonne's Dance Academy (DE)

Vote: No with reasons

Time: 2024-03-27 10:22:36 PT

Comments:

Section 5.2, fourth bullet point: "It should be a written document..." Accepted, thank you document updated

E6.1: remove erroneous parentheses at the end of clause. Accepted, thank you document updated

6.3, penultimate bullet point: Remove the space at the beginning of the sentence. Accepted, thank you document updated

7.1.2: Should that say "for the user" instead of "of the user"? Reject with reasons the language of the user may be different from the language of the event organizer (e.g. English vs Spanish) hence this usage is appropriate.

E.8.2.2: The comma goes before but, not after. Accepted, thank you document updated

8.3: Each word in the title of the standard, I think, should be capitalized and without quotes around it. Also, I think it needs slight reword for clarity. Suggest: All on site electrical equipment or materials within the scope of ANSI/ESTA E1.58 Electrical Safety Standard for Portable Stage and Studio Equipment Used Outdoors, shall comply with that standard. Accepted, thank you document updated

8.4.2: Is this reference correct? I would agree that use of cable ramps can create additional hazards to be mitigated, but should that reference be in a section about overcurrent protection devices? Accepted, thank you document updated

Did not vote:

Randell Greenlee; VPLT; G