

Minutes
Electrical Power Working Group
Wyndham Anaheim, Anaheim, CA

Chairpersons:

Mitch Hefter; USITT; P; U (presiding)
Justin Bennett; University of the Incarnate Word; P; U

Recording Secretary:

Richard Nix (ESTA)

Attendees:

Kevin Amick; IATSE Local 479; P; G
Rodger Dean; R. Dean Lighting Limited; P; DR
Don Earl; Earl Girls, Inc.; P; DR
Nehad El-Sherif; Nehad El-Sherif; I; G
Ian Foulds; Entertainment Electrical Safety Association; A; G
Todd Fouyer; Musson Theatrical; O; DR
Jerry Gorrell; Theatre Safety Programs; P; U
Robert Haycock; Robert Haycock; I; U
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U
Hans Lau; I.A.T.S.E. Local 728; A; U
George Long; Aggreko; P; DR
Jason Potterf; Cisco; P; MP
Alan M. Rowe; I.A.T.S.E. Local 728; A; U
Wendy Russell; Electronic Theatre Controls, Inc; A; MP
Mike Skinner; Contract Services Administration Trust Fund; P; U
Daniel Swalec; Daniel Swalec; I; U
Steve Terry; Electronic Theatre Controls, Inc.; P; MP
Stephen Vanciel; Stephen Vanciel; I; U
Mike Webb; Motion Laboratories, Inc.; P; MP

1 Opening remarks

Mitch Hefter called the meeting to order at 15:03, welcoming everyone to the meeting, and thanking everyone for taking time to attend. He introduced The co-chairperson, Justin Bennett, attending online. He thanked everyone for their consideration for the last-minute meeting time and date change. He also reminded those attending online to mute their microphones when not speaking.

2 Patent and anti-trust statements

2.1 Reading of the anti-trust statement

Mitch Hefter read the following statement aloud to the assembly:

ESTA and its members take seriously their obligation to comply with all applicable antitrust laws. Therefore, during this meeting and during all ESTA events, all discussions will be limited to those subjects that are permitted by the antitrust laws. All members should refrain from any discussion or mention of competitively sensitive subjects such as the current or future prices charged for any member product or services, current or future marketing plans or strategies, and current or future costs, including employee salaries. There also must be no agreement on the suppliers or customers that members will or will not do business with or the markets in which members will conduct business.

Violations of the antitrust laws can have serious consequences. If you have any questions or concerns about anything that is discussed at an ESTA meeting, please bring your concern to ESTA management. An easy to read pamphlet describing the antitrust laws is available from the ESTA staff.

Richard Nix held up the pamphlet for all to see.

2.2 Reading of the call for patents

Mitch Hefter read the following statement aloud to the assembly:

ESTA intends not to publish any standard that contains protected intellectual property, unless that information can be licensed by anyone for a reasonable fee. ESTA uses a process of open patent and

copyright disclosures to implement its intent. ESTA does not conduct patent or copyright searches and does not warrant that its standards contain no protected intellectual property.

In keeping with the open disclosures policy, I ask if anyone present wishes to notify this working group of the existence of a patent, patent application, copyright, or other protected intellectual property that might protect material in a standard being developed by this working group. You need not be the holder of the patent or copyright to notify this working group of its existence.

Nothing was revealed.

3 Attendance and Membership

3.1 Requirements for membership

Mitch Hefter read the following statement aloud to the assembly:

Membership is open to all parties who are affected by the work of the group; membership in ESTA is not a requirement, but there is a \$100/person/year participation fee to help fund the costs of running the Technical Standards Program. Voting members are required to attend meetings and vote on letter ballots. Any principal member and alternate that both miss three consecutive meetings or letter ballots will have their membership status changed to observer. This action will be taken at the beginning of the first meeting after such inaction and will be recorded in the minutes of that meeting.

Richard Nix reminded everyone that the TSP participation fee renewal emails had gone out. If anyone has not yet seen or received the email, please contact him.

3.2 Introduction of attendees and taking attendance

Everyone introduced themselves.

3.3 Determination of quorum

As of 11 April 2023 the consensus body has 22 voters. A quorum would be eight. Supermajority is 12.

3.4 Processing of new and other membership requests

One as of 11 April 2023:

Daniel Swalec; Daniel Swalec; I; U

Robert Haycock moved to approve the application. The motion was seconded and carried without objection or abstention.

3.5 Changes to observer status due to lack of participation

3.5.1 Changes due to attendance

The following voting members have missed the last two meetings, and will have their voting status changed to Observer if not present today:

*George Long; Aggreko (present)
Bob Luther; Lex TM3
John Valus Jr; Lex TM3
Robert Haycock; Robert Haycock (present)*

Neither John Valus, Jr nor Bob Luther were present, so their status was changed.

3.5.2 Changes due to missed letter ballots

There are none.

3.6 Consensus body

Delegate	Representing	Voting status	Int. cat.
George Long	Aggreko	P	DR
Michael Lay	Candela Controls, Inc	P	G
Jason Potterf	Cisco	P	MP
Mike Skinner	Contract Services Administration Trust Fund	P	U

Delegate	Representing	Voting status	Int. cat.
Matthew Antonucci	Contract Services Administration Trust Fund	A	U
Chris Moulton	Contract Services Administration Trust Fund	A	U
Don Earl	Earl Girls, Inc.	P	DR
Steve Terry	Electronic Theatre Controls, Inc.	P	MP
Wendy Russell	Electronic Theatre Controls, Inc	A	MP
Elizabeth E. (Lizz) Pittsley	Elizabeth Pittsley	P	U
Art Wanuch	Entertainment Electrical Safety Association	P	G
Ian Foulds	Entertainment Electrical Safety Association	A	G
Robert Haycock	Robert Haycock	I	U
Edwin S. Kramer	I.A.T.S.E. Local 1	P	U
Charles McIntyre	I.A.T.S.E. Local 728	P	U
Alan M. Rowe	I.A.T.S.E. Local 728	A	U
Hans Lau	I.A.T.S.E. Local 728	A	U
Kevin Amick	IATSE Local 479	P	G
Keith S. Woods	IATSE Local 891	P	U
Simon Hunt	IATSE Local 891	A	U
Mark Pollock	Littelfuse, Inc.	P	MP
Mike Webb	Motion Laboratories, Inc.	P	MP
Rick Montgomery	Motion Laboratories, Inc.	A	MP
Michael Shaw	Motion Laboratories, Inc.	A	MP
Roger Dean	R. Dean Lighting Limited	P	DR
Daniel Swalec	Daniel Swalec	I	U
Nehad El-Sherif	Nehad El-Sherif	I	G
Stephen Vanciel	Stephen Vanciel	I	U
Jerry Gorrell	Theatre Safety Programs	P	U
Justin Bennett	University of the Incarnate Word	P	U
Mitch Hefter	USITT	P	U
	Total votes possible	22	
Subtotals by interest categories	Custom producer (CP):	0	CP
	Designer (DE):	0	DE
	Dealer or rental company (DR):	3	DR
	General interest (G):	4	G
	Mass-market producer (MP):	4	MP
	User (U):	11	U

P = Principal voter; A = Alternate voter; I=Individual voter

4 Approval of the minutes from the previous meeting

See *EPmin09-2022_DRAFT.pdf*

Steve Terry moved to approve the minutes. The motion was seconded, and carried without objection or abstentions.

5 Approval of agenda

Mike Skinner moved to approve the agenda. The motion was seconded, and carried without objection or abstentions.

6 Old business

6.1 ANSI E1.16 – 2002 (R2021) Entertainment Technology – Configuration Standard for Metal Halide Ballast Power Cables

Reaffirmation, revision, or withdrawal by 28 October 2026.

6.2 ANSI E1.19 – 2021, Recommended Practice for the Use of Class A Ground-Fault Circuit Interrupters (GFCIs) Intended for Personnel Protection in the Entertainment Industry

Reaffirmation, revision, or withdrawal by 15 October 2026. Any news or action?

Task group report on consideration in light of "Do GFCIs Work with Dimmers", Winter 2021 Protocol.

Mitch Hefter said to remove this from the agenda, and we will address it when this standard comes up for action.

6.3 ANSI E1.24 – 2012 (R2021), pin connectors

Reaffirmation, revision, or withdrawal by 28 October 2026.

6.4 ANSI E1.32 – 2012 (R2022), Guide for the Inspection of Entertainment Industry Incandescent Lamp Luminaires

Reaffirmation, revision, or withdrawal by 11 August 2027.

6.5 ANSI E1.51 – 2018, The Selection, Installation, and Use of Single-Conductor Portable Power Feeder Cable Systems for Use At 600 Volts Nominal or Less for the Distribution of Electrical Energy in the Television, Film, Live Performance and Event Industries in Canada

Revision, reaffirmation, or withdrawal by 7 November 2023.

6.6 ANSI E1.53 – 2019, Overhead mounting of luminaires, lighting accessories, and other portable devices: specification and practice

Revision, reaffirmation, or withdrawal by 3 June 2024.

6.7 ANSI E1.58 – 2022, Indoor equipment outdoors

Revision, reaffirmation, or withdrawal by 10 August 2027.

6.8 BSR E1.79 – 202x, Television, Film, Live Performance, and Event Electrical Guidelines for Canada

Task group: Art Wanuch (task group leader), Keith Woods, Simon Hunt, Mark Pollock, Rodger Dean, and Steve Vanciel (ESWG liaison)

Rodger Dean reported that it has taken quite some time and effort to get it restructured so it is usable outside of Toronto. They have had several meetings, primarily for removal of the Ontario-specific language. He reminded everyone that the basis for this standard goes back many years. He said that although the document has been distributed all over Canada, it was originally written specifically for Toronto. Its basis is the Canadian Electrical Code, which is then adopted by the individual provinces, either in whole or in part, or with amendments. This results in disparity between each jurisdiction's adoption. He then said he thinks that they have made significant progress towards a draft document that unifies these jurisdictional discrepancies, and will now be able to include the full Task Group for development. They hope to have a document ready to distribute to the working group soon.

7 New business

Hans Lau said there are now more and more 19-pin connectors being used on 208 VAC particularly for LED walls. He asked if there was any interest in pursuing a standard for this type of use.

Steve Terry said that since the NEC now recognizes these connectors it would be a good idea to address this.

Hans Lau said that these connectors are also being used with different pin-outs across the country. Steve replied this is all the more reason to address it.

Rodger Dean added that there are also different uses in the audio world. Ian Foulds said he had photographs of major faults due to unidentified mis-matched connector pin-outs.

Steve Terry moved to initiate a new project request for this. A New Project Request form was completed and will be submitted to the TSC. The appointed task group members are Hans Lau (leader), Steve Terry, Rodger Dean, Mike Webb, Eddie Kramer, and Ian Foulds.

Mitch Hefter will reach out to USITT regarding sharing or transferring *USITT RP-1 - CONTACT FUNCTION ASSIGNMENTS FOR MULTI-CIRCUIT CIRCULAR PIN CONNECTORS USED FOR THE DISTRIBUTION OF MULTIPLE LIGHTING CIRCUITS*, which was published in 1997. It covers 19-Pin and 37-Pin connectors (and only covers 1-phase, 2-wire w/ Ground circuits).

8 Other business and announcements

8.1 Above & Beyond Awards

Nominations can be made on the website at http://tsp.esta.org/tsp/news/award_recipients.html.

8.2 IES report

Nothing to report.

8.3 NEC report

Mitch Hefter reminded everyone that Public Inputs for updates to the 2023 edition for 2026 are being accepted thru September 07, 2023 @ 5:00pm EDT. For more details go to nfpa.org/70.

8.4 USITT report

Mitch Hefter reported. The USITT Conference & Stage Expo last month in St. Louis had well over 4500 registrants, about 1/3 were first-time attendees. USITT's new Executive Director – Laura Lee Everett – started shortly after the conference. Our colleague Mike Wood received the Engineering Commission Distinguished Achievement Award, and the ceremony was small, but very nicely presented.

8.5 Event Safety WG – Electrical Task Group

The current draft revision of BSR ES1.17 is out for public review until 04 April 2023

Robert Haycock reported that they had received over 40 comments from the last public review. He thanked everyone who submitted comments for, what he thought were, very thoughtful and useful comments.

He said that they needed to get the draft out to the broader audience in order to move forward, and invited people to remain interested in the project, and to perhaps join the task group if they have enough time and interest.

He added that there is overlap between task group participants working on this and other projects, so resolutions may be a couple of meeting cycles away.

9 Schedule for future meetings

The meeting schedule may be found at <http://www.esta.org/ESTA/meetings.php>.

Summer and Fall meetings will return the Westlake, TX, the week of 17 July, and 02 October, respectively.

The July meeting schedule will be finalized within a week or so.

10 Adjournment

The agenda business being completed, there being no further business brought forth, Mitch Hefter declared the meeting adjourned at 16:03.

Electrical Power Working Group Members as of 11 April 2023

Name	Representing	Status	Int cat
Kevin Amick	IATSE Local 479	P	G
Matthew Antonucci	Contract Services Administration Trust Fund	A	U
Robert Barbagallo	Solotech Inc.	O	DR
Alyxzander Bear	Insomniac	O	DE
Justin Bennett	University of the Incarnate Word	P	U
Steve Brock	Guardian Entertainment Inc	O	DR
John (JA) Byerly	IATSE Local 479	O	G
Richard Cadena	Academy of Production Technology	O	G
James Davey	A.C.T. Lighting, Inc.	O	CP
Jeremy Day	Lumenpulse Group	O	MP
Rodger Dean	R. Dean Lighting Limited	P	DR
Jim Digby	Event Safety Alliance	O	U
James Eade	ABTT	O	G
Don Earl	Earl Girls, Inc.	P	DR
Nehad El-Sherif	Nehad El-Sherif	I	G
Trevor Forrest	Helvar Lighting Control	O	MP
Ian Foulds	Entertainment Electrical Safety Association	A	G
Todd Fouyer	Musson Theatrical	O	DR
Jerry Gorrell	Theatre Safety Programs	P	U
Mike Harwood	William F. White International	O	DR
Robert Haycock	Robert Haycock	I	U
Mitch Hefter	USITT	P	U
Simon Hunt	IATSE Local 891	A	U
Quinten James	QtoCue Lighting Design	O	U
John Valus Jr.	Lex TM3	O	MP
Edwin S. Kramer	I.A.T.S.E. Local 1	P	U
Charles (Chuck) Kurten	Underwriters Laboratories, Inc.	O	G
Hans Lau	I.A.T.S.E. Local 728	A	U
Michael Lay	Candela Controls, Inc	P	G
George Long	Aggreko	P	DR
Bob Luther	Lex TM3	O	MP
Charles McIntyre	I.A.T.S.E. Local 728	P	U
Ty Mellon	Tyron J Mellon, Jr.	O	G
Rick Montgomery	Motion Laboratories, Inc.	A	MP
Chris Moulton	Contract Services Administration Trust Fund	A	U
Robert Peterson	Shur-Rig LLC	O	G
Elizabeth E. (Lizz) Pittsley	Elizabeth Pittsley	P	U

Electrical Power Working Group Members as of 11 April 2023

Name	Representing	Status	Int cat
Mark Pollock	Littelfuse, Inc.	P	MP
Jason Potterf	Cisco	P	MP
Alan M. Rowe	I.A.T.S.E. Local 728	A	U
Wendy Russell	Electronic Theatre Controls, Inc	A	MP
Ford Sellers	Chauvet Lighting	O	MP
Michael Shaw	Motion Laboratories, Inc.	A	MP
Mike Skinner	Contract Services Administration Trust Fund	P	U
Jonny Starr	TMB	O	MP
Daniel Swalec	Daniel Swalec	I	U
Steve Terry	Electronic Theatre Controls, Inc.	P	MP
Robert Timmerman	Signify	O	MP
Stephen Vanciel	Stephen Vanciel	I	U
Ken Wagner	Ken Wagner	O	U
Art Wanuch	Entertainment Electrical Safety Association	P	G
Colin Waters	TMB	O	DR
Mike Webb	Motion Laboratories, Inc.	P	MP
Keith S. Woods	IATSE Local 891	P	U
Jeong Sik Yoo	Ghost LX	O	DE