

**Minutes**  
**Electrical Power Working Group**  
Marriott Westlake and Webex

**Chairpersons:**

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

**Recording secretaries:**

Karl Ruling and Richard Nix (ESTA)

**Members attending:**

Justin Bennett; University of the Incarnate Word; P; U  
Rodger Dean; R. Dean Lighting Limited; P; DR  
Don Earl; Earl Girls Inc.; P; DR  
Nehad El-Sherif; Nehad El-Sherif; I; G  
Todd Fouyer; Musson Theatrical; O; DR  
Mitch Hefter; USITT; P; U  
Simon Hunt; IATSE Local 891; A; U  
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U  
Hans Lau; I.A.T.S.E. Local 728; A; U  
Michael Lay; Candela Controls, Inc; P; G  
Robert Peterson; Shur-Rig LLC; O; G  
Elizabeth E. (Lizz) Pittsley; Elizabeth Pittsley; P; U  
Mark Pollock; Littelfuse, Inc.; P; MP  
Jason Potterf; Cisco; P; MP  
Steve Terry; Electronic Theatre Controls, Inc.; P; MP  
Stephen Vanciel; Stephen Vanciel; I; U  
Ken Wagner; Ken Wagner; O; U  
Art Wanuch; Entertainment Electrical Safety Association; P; G  
Mike Webb; Motion Laboratories, Inc.; P; MP

**Visitor:** Sandy Gilzow; Shur-Rig LLC

**1 Opening remarks**

Justin Bennett called the meeting to order at 19:05. He introduced himself, and introduced Mitch Hefter, his co-chair. He thanked everyone for taking time to attend, then reminded everyone to silence cell phones, and reminded the online participants to keep their microphones muted when not speaking. He described the voting method to be used during this hybrid meeting.

**2 Patent and anti-trust statements**

**2.1 Reading of the anti-trust statement**

Justin Bennett 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.*

Karl Ruling held up the pamphlet for all to see. No antitrust concerns were raised.

## **2.2 Reading of the call for patents**

Justin Bennett 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**

Justin Bennett 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.*

### 3.2 Introduction of attendees and taking attendance

### 3.3 Determination of quorum

*As of 29 August the consensus body has 21 voters. A quorum would be seven.*

Richard Nix said that more than 50% of the voting body was present, which is more than enough for a quorum and enough to pass a motion needing a supermajority.

### 3.4 Processing of new and other membership requests

*One as of 29 August 2022:*

*Robert Peterson; Shur-Rig LLC; Observer; General interest*

Rodger Dean (status change request, O to P)

Steve Terry moved to approve the application and status change request.. The motion was seconded, and carried without objection or abstention.

### 3.5 Changes to observer status due to lack of participation

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
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
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

Delegate	Representing	Voting status	Int. cat.
Kevin Amick	IATSE Local 479	P	G
Keith S. Woods	IATSE Local 891	P	U
Simon Hunt	IATSE Local 891	A	U
Bob Luther	Lex TM3	P	MP
John Valus Jr.	Lex TM3	A	MP
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
Nehad El-Sherif	Nehad El-Sherif	I	G
Roger Dean	R. Dean Lighting Limited	P	DR
Stephen Vanciel	Stephen Vanciel	I	U
Jerry Gorrell	Theatre Safety Programs	P	U
Robert Haycock	UC Berkeley	I	U
Justin Bennett	University of the Incarnate Word	P	U
Mitch Hefter	USITT	P	U
	<b>Total votes possible</b>	<b>22</b>	
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):	5	MP
	User (U):	10	U

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

#### **4 Approval of the minutes from the previous meeting**

See [EPmin06-2022\\_DRAFT.pdf](#)

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

#### **5 Approval of agenda**

Steve Vanciel moved to approve the agenda. The motion was seconded, and carried without objection or abstention.

## 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.*

No news or action.

### 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. Task Group: Steve Terry (leader), Richard Cadena, Mike Skinner, Justin Bennett, someone from Lex Products, and Mark Pollock.*

Steve Terry said there's been no activity, therefore nothing to report.

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

*Reaffirmation, revision, or withdrawal by 28 October 2026.*

No news or action.

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

It was approved by ANSI and has been published. No further news or action.

### 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.*

No news or action.

### 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.*

No news or action.

### 6.7 ANSI E1.58 – 2022, Indoor equipment outdoors

It was approved by ANSI and has been published. No further news or action.

## 7 New business

### 7.1 Proposal to make ESA Spec-003 an American National Standard.

*See [ESA\\_Spec-003\\_R7.pdf](#) and [Canadian\\_SPEC-003\\_ProjectRequest.pdf](#)*

There was a long discussion of the possibility of making a US-Canadian standard based on ESA Spec 003. ESTA has no formal process for drafting a bi-national standard. The

consensus of those who had worked on CANENA projects was that it was difficult. Furthermore, the differences between the NEC and CEC would have complicated any standard fitting both with different rules or recommendations for different locations.

There was discussion of how the CEC does not address the needs of the live entertainment and motion picture industry. It is difficult to follow, with some people saying that motion picture work can't be done if it is followed exactly, but changing the CEC also is difficult and slow. Spec 003 was written by industry members at the request of the Electrical Safety Authority of Ontario to give safe work guidance outside the CEC.

The differences in working practices between the different Canadian provinces was noted. However, there was consensus that electricians in Eastern and Western Canada could work together to create a common recommended practice, reasonably covering all of Canada, and that it would be useful.

Art Wanuch moved that we create a project based on Spec-003, with the scope limited to electrical work in Canada. The motion was seconded. There was one opposed, Eddie Kramer, and one abstention, Ken Wagner. Justin Bennett said that the rest are in favor, and that's enough for a supermajority.

Richard Nix said that this project needs the TSC's approval, but it has been queued for their meeting on Sunday, two days from this meeting. Steve Terry suggested that this project needs a mandate to establish that there is no overlap with the ESWG's task group work, well in advance of the work's commencement.

Justin Bennett appointed Art Wanuch as task group leader, Keith Woods, Simon Hunt, Mark Pollock, Rodger Dean, and Steve Vanciel, with Vanciel to serve as a bridge to the ESWG's electrical safety task group.

## **7.2 Other new business**

None.

## **8 Other business and announcements**

### **8.1 Above & Beyond Awards**

Attendees were reminded that nominations can be made on the website at [http://tsp.esta.org/tsp/news/award\\_recipients.html](http://tsp.esta.org/tsp/news/award_recipients.html).

### **8.2 IES report**

Mitch Hefter reported that he is now the chair of the IES Lighting Control Systems Committee.

IES LP-16 Lighting Practice – Documenting Control Intent Narratives and Sequence of Operation has been published as an ANSI standard.

The IES Lighting Control Systems Committee is working on updating LP-6-2020 – Lighting Control Systems – Properties, Selection, and Specification.

The Commissioning Committee is working on an update to LP-8-2020 – The Commissioning Process Applied to Lighting and Control Systems

### **8.3 NEC report**

Mitch Hefter reported the 2023 NEC went live on-line on September 7, 2022. The printed version will be available in October.

Steve Terry said that moving the definitions to Article 100 will make using the NEC more difficult.

Eddie Kramer reported that preliminary meetings have been scheduled to happen soon for the 2026 NEC.

### **8.4 USITT report**

Mitch Hefter reported that the Executive Director Search Committee is proceeding and selected Isaacson, Miller (IM) to partner with USITT in the search for a new Executive Director. It's a long process.

### **8.5 Event Safety WG – Electrical Task Group**

*Robert Haycock to report on BSR ES1.17, Event Safety - Electrical Installations and Lighting, progress.*

Haycock was not present. Steve Vanciel reported. He said the document has gone through extensive changes. He said that some ESWG members want it to be offered for public review, but there are people who do not feel it is ready.

Steve Terry asked when the EPWG might see the revisions. Steve Vanciel said he wasn't sure.

### **9 Schedule for future meetings**

The meeting schedule may be found at <http://www.esta.org/ESTA/meetings.php>.  
The January 2023 TSP meetings will be via WebEx.week of 16 January.

The following meetings will be at NAMM during the week of April 10, reported Richard Nix.

### **10 Adjournment**

The agenda's business being complete, there being no further business brought forth, Justin Bennett declared the meeting adjourned at 20:32 CDT (21:32 EDT).

Electrical Power Working Group Members as of 12 October 2022

Delegate	Representing	Voting 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
Marsha DuBois	Pintech Stage Connectors, Inc.	O	CP
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



Electrical Power Working Group Members as of 12 October 2022

<b>Delegate</b>	<b>Representing</b>	<b>Voting status</b>	<b>Int. cat.</b>
Simon Hunt	IATSE Local 891	A	U
Quinten James	QtoCue Lighting Design	O	U
John Valus Jr.	Lex TM3	A	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	P	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
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
Steve Terry	Electronic Theatre Controls, Inc.	P	MP

Electrical Power Working Group Members as of 12 October 2022

Delegate	Representing	Voting status	Int. cat.
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

**Key to codes:**

CP = Custom producer  
 DE = Designer  
 DR = Dealer or rental company  
 G = General interest  
 MP = Mass-market producer  
 U = User

P = Principal voter  
 A = Alternate voter  
 I = Individual voter  
 O = Observer non-voter