

Minutes
Electrical Power Working Group
Friday, 20 November 2009
Rosen Plaza Hotel
9700 International Drive
Orlando, Florida

Chairmen:

Mitch Heffer; Entertainment Technology (Royal Philips Electronics), representing USITT; P; U
Ken Vannice; Leviton Manufacturing; Leviton Manufacturing Co., Inc.; P; MP

Recording secretary: Karl G. Ruling; ESTA

Members attending:

George Long; Aggreko Event Services (Aggreko); P; DR
Wendy Holt; AMPTP/CSATF (Alliance of Motion Picture and Television Producers); P; G
Torsten Gruhn; Bender Inc. (Bender GmbH & Co. KG); P; MP
Steve Terry; Electronic Theatre Controls; P; MP
Ian Foulds; IATSE Local 873, representing Entertainment Electrical Safety Committee of Ontario; P; G
Art Wanuch; Entertainment Electrical Safety Committee of Ontario; O; G
Roger Lattin; I.A.T.S.E .Local 728; P; U
Alan M. Rowe; IATSE Local 728; A; U
Keith S. Woods; Lakhri Impressions Ltd., representing IATSE Local 891; P; U
Tyrone Mellon Jr.; Lex Products Corp.; A; CP
Sean Sloat; Lex Products Corp.; A; CP
Louis Bradfield; I; U
Jeff deRecat; Marinco/ADI (Marinco); O; MP
Vincent J. Cannavale; Motion Laboratories; P; CP
Natti Pierce-Thomson; North American Theatre Technology; O; U
Ron Bonner; PLASA; P; U
Stephen Vanciel; O; U [arrived at 19:34]
Jerry Gorrell; Theatre Safety Programs; P; U
William L. Maiman; O; U [arrived at 19:34]

Visitors:

Steve Brock; Bender ET
Tim Poff; Actuant Electric (Marinco)
Steve Scharff; Actuant Electric (Marinco)

1 Opening remarks

The meeting was called to order by Mitch Heffer at 19:07. Ken Vannice welcomed all to the meeting.

2 Attendance and membership

2.1 Introduction of those present and taking attendance

A hot pink attendance sign-in sheet was circulated while those present introduced themselves.

2.2 Determination of quorum

Ken Vannice asked for a show of hands of the voting members present. He counted them and then announced that a quorum was present and business could be conducted.

2.3 Recognition of alternate voting members

Alternate voting members were recognized. People were reminded that only one vote per company or organization could be cast on a question.

2.4 Requirements for membership

Ken Vannice reminded those present that membership in the working group is open to all who are affected by the work of the group. Companies that would be in the dealer/rental company interest category in particular are encouraged to become members. Voting members are required to attend meetings and to vote on letter ballots. Voting members and their alternates may not miss three consecutive meetings without a loss of voting status.

2.5 Changes to observer status

Members who have missed the previous two meetings and who will not have met the minimum attendance requirement for voters if this meeting is missed:

- Keith Woods and Simon Hunt; IATSE Local 891

Keith Woods was present, so there was no status change.

2.6 Processing of new membership requests

Three applications had been received:

- André Broucke, representing himself; Observer; General interest
- Natti Pierce-Thomson; North American Theatre Technology, Inc.; observer; general interest
- Sean Sloat; Lex Products; alternate, CP

Steve Terry moved that their applications be accepted. The motion was seconded and then approved with a show of hands.

2.7 Consensus body

The consensus body during this meeting, including those not present, was:

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.
James Davey	AC Power Distribution Inc.	AC Power Distribution Inc.	P	CP
Greg Mayberry	AC Power Distribution Inc.	AC Power Distribution Inc.	A	CP
George Long	Aggreko Event Services	Aggreko	P	DR
Wendy Holt	AMPTP/CSATF	Alliance of Motion Picture and Television Producers	P	G
Torsten Gruhn	Bender Inc.	Bender GmbH & Co. KG	P	MP
Joe Boardman	Bender Inc.	Bender GmbH & Co. KG	A	MP
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	P	MP
Elizabeth E. (Lizz) Pittsley	Elizabeth Pittsley	Elizabeth Pittsley	I	U
Ian Foulds	IATSE Local 873	Entertainment Electrical Safety Committee of Ontario	P	G
Jody Williquette	Harting Inc., North America	Harting KGAA	P	G
Ed Garstkiewicz	Harting Inc., North America	Harting KGAA	A	G
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U
R. Bruce Prochal	IATSE Local 728	I.A.T.S.E. Local 728	A	U
Patric J. Abaravich	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	A	U
Alan M. Rowe	IATSE Local 728	I.A.T.S.E. Local 728	A	U
Keith S. Woods	Lakhri Impressions Ltd.	IATSE Local 891	P	U

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.
Simon Hunt	IATSE Local 891	IATSE Local 891	A	U
Ken Vannice	Leviton Manufacturing	Leviton Manufacturing Co., Inc.	P	MP
Bill Grande	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	A	MP
Bob Luther	Lex Products Corp.	Lex Products Corp.	P	CP
Tyrone Mellon Jr.	Lex Products Corp.	Lex Products Corp.	A	CP
Sean Sloat	Lex Products Corp.	Lex Products Corp.	A	CP
Louis Bradfield	Louis Bradfield	Louis Bradfield	I	U
W. G. Krokaugger, P. E.	Mole-Richardson Co.	Mole-Richardson Co.	P	CP
Alex Yoon	Mole-Richardson Co.	Mole-Richardson Co.	A	CP
Vincent J. Cannavale	Motion Laboratories	Motion Laboratories	P	CP
Peter Herrmann	Motion Laboratories	Motion Laboratories	A	CP
David Herrmann	Motion Laboratories	Motion Laboratories	A	CP
Ron Bonner	PLASA	PLASA	P	U
Michael Lay	Philips Strand Lighting	Royal Philips Electronics	P	MP
Michael Scudday	SSRC, Inc.	SSRC, Inc.	P	CP
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
Phillip M. Gallo	TMB	TMB	P	DR
Mitch Hefter	Entertainment Technology (Royal Philips Electronics)	USITT	P	U
		Total	22	
		Totals by interest categories	5	CP
			4	MP
			2	DR
			8	U
			3	G

3 Approval of the minutes from the previous meeting

Keith Woods moved that the draft minutes of the July 2009 meeting, EPmin07-2009.pdf, be accepted as written. The motion was seconded. The motion was approved with a show of hands.

4 Reading of the call for patents

The following statement was read aloud to the assembly by Ken Vannice:

"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 or copyright or other 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 reported.

5 Reading of the anti-trust statement

The following statement was read aloud to the assembly by Ken Vannice:

"The ESTA Board of Directors, the Technical Standards Committee, and the leadership of this working group will reject or nullify any actions that unlawfully restrain trade. Anyone who feels that such an action is being or has been taken is requested to bring that matter to the attention of the chair immediately. Anyone who feels that actions in restraint of trade have been taken and not properly annulled is requested to notify the TSC chair or ESTA president immediately.

"ESTA legal counsel has informed us that violations of the anti-trust laws can have serious consequences. Individuals engaged in certain unlawful conduct can be found criminally liable. An individual convicted of a criminal violation of the Sherman Act may be fined as much as \$1,000,000 and imprisoned for up to ten years. An easy to read pamphlet describing restraint of trade issues is available from the Technical Standards Manager."

The TSM held up one of the easy-to-read pamphlets. No restraint of trade issues were reported.

6 Approval of agenda

Steve Terry moved that the agenda be approved. The motion was seconded. The motion was approved with a show of hands.

7 Old business - task group reports

7.1 EMC task group

(See item M.6 in 2009-09-11csa_c577minutes.doc, which is a Word document with additional Word documents embedded in it.)

Ken Vannice noted the document that had been sent, and said that battling the adoption of excessively strict and expensive power line harmonics restrictions is an on-going process.

Vannice reported that NEMA's lighting controls group has formed an EMC task group. Ballasts are covered by FCC part 18, not FCC Part 15, and various manufacturers have asked the US government to allow them to conform to the European CISPR standard. The CISPR standard allows the ballast to be tested in the luminaire; the FCC Part 18 standard has the ballast tested outside the luminaire.

Testing in the luminaire has the advantage for ballast manufacturers that the luminaire can provide additional EMC shielding, but testing in the luminaire could increase testing costs for luminaire manufacturers, since each luminaire/ballast combination would have to be tested. The task group is planning to do a comparison test at the UL labs in Northbrook to show the differences between the two tests. That will help people decide if they want to go forward with this.

Vannice also reported NEMA projects to standardize LED ballasts and to characterize LED dimming performance.

7.2 ANSI E1.16-2002 (R2007)

No news or action.

7.3 BSR E1.18 portable feeder cable selection and use: E1.18-1 public review comment resolution

Jerry Gorrell reported and noted that the draft comment resolutions and revised document had been sent to the working group with enough time for people to read it.

Steve Terry said that he had read it and that the attempts to make it work for Canada and the US, with the different requirements in the different codes and the different terms, has made it very difficult to understand. There was discussion in which the consensus seemed to be that it should be a split document, part for US conditions and part for Canadian conditions. There was discussion of whether the Canadian part would be an addendum or a separate, complete document. Karl Ruling said the second would be easier to write and for the reader to understand. Jerry Gorrell said that the task group working on

the Canadian section must include Canadians. Art Wanuch of EESCO said that his committee meets regularly and would be able to work on the Canadian section.

Terry said that he had some issues with non-Canadian comments and that a technical discussion at the working group level needs to be conducted. There was discussion of whether this issues should be discussed now or done via a homework assignment.

Steve Terry moved that we extract all the Canadian-specific reference from the R14 version of the BSR E1.18 document, and that the working group provide written comments and proposed revised text on the comment resolutions and the R14 draft. (It is assumed that the working group will skip over the Canadian-specific parts of the document, since they will be extracted.) The motion was seconded and then approved with a show of hands.

7.4 ANSI E1.19 – 2009, Recommended Practice for the Use of Class A Ground-Fault Circuit Interrupters (GFCIs) Intended for Personnel Protection in the Entertainment Industry

Keith Woods moved that the changes suggested in ModificationsToClarifyCodeCompliance.pdf be made to ANSI E1.19 – 2009. The motion was seconded. There was discussion. By a show of hands the motion failed, with one voting yes and all others opposed.

Steve Terry argued that making the changes would require a revision project, and he questioned whether the improvement would be worth the effort.

Keith Woods moved that the changes to clause 1.1 suggesting in ModificationsToClarifyCodeCompliance.pdf be added as a final paragraph to the notice and disclaimer of the existing ANSI E1.19 – 2009, with the addition of the words, "The reader is reminded that this recommended practice does not list all the requirements for compliance with local electrical codes. It is intended to supplement local codes, and not to replace or to nullify them. Users of this practice are advised to consult their local electrical codes in addition to this document." The motion was seconded. The working group accepted it by a show of hands.

Steve Terry moved that the revised document be sent to the working group with a letter ballot for approval of the change. Seconded. The argument was that this is a significant change and this minimal level of review would be the minimal due diligence. The motion to approve the changes with a letter ballot was accepted with a unanimous show of hands.

7.5 BSR E1.24 - 20xx, pin connectors

Steve Terry reported that the task group has a draft of the revised document. It's been reworked to be like NEMA WD-6. The task group has until December 1 to error-check the document.

Terry praised the support for this project from the UL staff and STP 498. We can't possible expect more.

7.6 BSR E1.32 luminaire inspection guidance progress report

7.6.1 Report on further work on comment resolutions.

Steve Terry asked how many had read the draft resolution document and the revised guide. Few had. In view of this, Steve Terry objected to any votes being taken on the document at this meeting. Therefore any votes were deferred to the next meeting.

7.6.2 The Production Arts protective grounding conductor test.

Terry said that the drawing had been sent to Jerry Gorrell on Monday, November 16. Gorrell said he'd add it as an appendix and would send it to the working group.

8 New business

None.

9 Other business

Mitch Heffer reported that we'd revised the P&P and it is before ANSI for approval. He noted some of the changes. Karl Ruling said he'd send a copy to the working group.

10 Schedule for future meetings

Ken Vannice reported that the next working group meeting is scheduled for Friday, 22 January 2010, from 08:00 to noon at the Dallas/Ft. Worth Marriott Solana in Westlake, Texas. The following meeting will be Tuesday 30 March or Wednesday 31 March in Kansas City, Missouri (not Kansas City, Kansas).

11 Adjournment

Steve Terry moved that the meeting adjourn. The motion was seconded and then approved with a unanimous show of hands. Mitch Heffer declared the meeting adjourned at 20:40.

Working Group Membership and Contact Information as of 15 December 2009

Name	Company	Representing (Primary sort field)	Voting status	Int. cat.
James Davey	AC Power Distribution Inc.	AC Power Distribution Inc.	P	CP
Greg Mayberry	AC Power Distribution Inc.	AC Power Distribution Inc.	A	CP
George Long	Aggreko Event Services	Aggreko	P	DR
Kenny Delahoussaye	Aggreko	Aggreko	O	DR
Richard L. Eberth Jr.	North Shore Safety	Airpax Corporation	O	MP
Wendy Holt	AMPTP/CSATF	Alliance of Motion Picture and Television Producers	P	G
Mike Skinner	CBS Studio Center	Alliance of Motion Picture and Television Producers	O	U
André Broucke	André Broucke	André Broucke	O	G
Arnold Tang	Arnold Tang Productions	Arnold Tang Productions	O	G
Jiantong Wu	Beijing Special Engineering Design & Research Institute	Beijing Special Engineering Design & Research Institute	O	G
Torsten Gruhn	Bender Inc.	Bender GmbH & Co. KG	P	MP
Joe Boardman	Bender Inc.	Bender GmbH & Co. KG	A	MP
Lee J. Bloch	Bloch Design Group, Inc.	Bloch Design Group, Inc.	O	G
Marty Lazarus	Chicago Spotlight, Inc.	Chicago Spotlight, Inc.	O	DR
Eric Bouchard	Cirque du Soliel	Cirque du Soliel	O	CP
Wayne Kowalski	Coleman Cable Inc.	Coleman Cable Inc.	O	MP
Ford Sellers	Cornell University	Cornell University	O	U
Don Earl	Earl Girls, Inc.	Earl Girls, Inc.	O	DR
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	P	MP
Elizabeth E. (Lizz) Pittsley	Elizabeth Pittsley	Elizabeth Pittsley	I	U
Ian Foulds	IATSE Local 873	Entertainment Electrical Safety Committee of Ontario	P	G

Art Wanuch	Entertainment Electrical Safety Committee of Ontario	Entertainment Electrical Safety Committee of Ontario	O	G
Jody Williquette	Harting Inc., North America	Harting KGAA	P	G
Ed Garstkiewicz	Harting Inc., North America	Harting KGAA	A	G
Trevor Forrest	Helvar Lighting Control	Helvar Lighting Control	O	MP
Kirk D. Keen	Hollywood Lighting Services, Inc.	Hollywood Lighting, Inc.	O	DR
Pat Miller	Hubbell Wiring Devices	Hubbell Inc.	O	MP
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U
R. Bruce Prochal	IATSE Local 728	I.A.T.S.E. Local 728	A	U
Patric J. Abaravich	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	A	U
Alan M. Rowe	IATSE Local 728	I.A.T.S.E. Local 728	A	U
Keith S. Woods	Lakhri Impressions Ltd.	IATSE Local 891	P	U
Simon Hunt	IATSE Local 891	IATSE Local 891	A	U
John (Javid) D. Butler	Integrated Theatre, Inc.	Integrated Theatre, Inc.	O	CP
David Murray	IPC Resistors Inc.	IPC Resistors Inc.	O	CP
Jose J. Flores	Kino Flo, Inc.	Kino Flo, Inc.	O	MP
Ken Vannice	Leviton Manufacturing	Leviton Manufacturing Co., Inc.	P	MP
Bill Grande	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	A	MP
Bob Luther	Lex Products Corp.	Lex Products Corp.	P	CP
Tyrone Mellon Jr.	Lex Products Corp.	Lex Products Corp.	A	CP
Sean Sloat	Lex Products Corp.	Lex Products Corp.	A	CP
Louis Bradfield	Louis Bradfield	Louis Bradfield	I	U
Jim Holladay	Luxence	Luxence	O	G
Phil Fram	Marinco	Marinco	O	MP
Jeff deRecat	Marinco/ADI	Marinco	O	MP
William Drake	Marinco	Marinco	O	MP

Hiroshi Kita	Marumo Electric Co., Ltd.	Marumo Electric Co., Ltd.	O	MP
Michael J. Carnaby	Mikan Theatricals	Mikan Theatricals	O	DR
W. G. Krokaugger, P. E.	Mole-Richardson Co.	Mole-Richardson Co.	P	CP
Alex Yoon	Mole-Richardson Co.	Mole-Richardson Co.	A	CP
Vincent J. Cannavale	Motion Laboratories	Motion Laboratories	P	CP
Peter Herrmann	Motion Laboratories	Motion Laboratories	A	CP
David Herrmann	Motion Laboratories	Motion Laboratories	A	CP
Natti Pierce-Thomson	North American Theatre Technology	North American Theatre Technology	O	U
Marsha DuBois	Pintech Stage Connectors, Inc.	Pintech Stage Connectors, Inc.	O	CP
Steve DuBois	Pintech Stage Connectors, Inc.	Pintech Stage Connectors, Inc.	O	CP
Ron Bonner	PLASA	PLASA	P	U
James Eade	PLASA	PLASA	O	G
Paul F. Mardon	Pulsar Ltd.	Pulsar Ltd.	O	MP
Douglas Franz	QVC Network	QVC Network	O	U
Eric Tishman	Rosco Laboratories	Rosco Laboratories	O	MP
Richard B. Glickman	Gliconen Corporation	Rosco Laboratories	O	MP
Michael Lay	Philips Strand Lighting	Royal Philips Electronics	P	MP
Robert Barbagallo	Solotech Inc.	Solotech Inc.	O	DR
Michael Scudday	SSRC, Inc.	SSRC, Inc.	P	CP
Stephen Vanciel	Stephen Vanciel	Stephen Vanciel	O	U
Reuben Goldberg	Technic Services	Technic Services	O	U
Dominic Vincenty	TPS	Television Production Service	O	DR
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
Phillip M. Gallo	TMB	TMB	P	DR
Colin Waters	TMB	TMB	O	DR
Charles (Chuck) Kurten	Underwriters Laboratories, Inc.	Underwriters Laboratories, Inc.	O	G
Richard Wolpert	Union Connector Company (MO)	Union Connector Company	O	CP

Mitch Heffer	Entertainment Technology (Royal Philips Electronics)	USITT	P	U
William L. Maiman	William L. Maiman	William L. Maiman	O	U

Key to codes:

P	principal voting member	MP	mass-market producer interest category
A	alternate voting member	CP	custom-market producer interest category
I	individual voting member	DR	dealer or rental company interest category
O	observer, non-voting	U	user interest category
		G	general-interest interest category