

Minutes
Electrical Power Working Group
Saturday, 18 January 2014
D/FW Marriott Solana
Westlake, TX

Presiding chairperson: Mitch Hefter; USITT; P; U

Recording secretaries: Karl Ruling and Erin Grabe; PLASA North America

Members attending:

Richard Cadena; Academy of Production Technology; O; G
Nathan Leonard; Bender Group; Bender GmbH & Co. KG; P; MP
Matthew Antonucci; Contract Services Administration Trust Fund; P; U
Larry Schoeneman; DesignLab Chicago, Inc.; P; DR
Don Earl; Earl Girls, Inc.; P; DR
Steve Terry; Electronic Theatre Controls; Electronic Theatre Controls, Inc.; P; MP
Art Wanuch; Entertainment Electrical Safety Committee of Ontario; P; G
Ed Garstkiewicz; Harting Inc., North America; Harting KGAA; P; G
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U
Roger Lattin; I.A.T.S.E. Local 728; P; U
Alan M. Rowe; IATSE Local 728; A; U
Tyrone Mellon_Jr.; Lex Products Corp.; P; CP
Michael Lay; Philips Color Kinetics; Royal Philips; P; MP
Jerry Gorrell; Theatre Safety Programs; P; U

Visitors:

Eric Johnson
Richard Dale; Bender GmbH & Co. KG

1 Opening remarks

Mitch Hefter called to order at 9:03. He explained why Ken Vannice was not present, but said that he will be arriving later, after this meeting, due to scheduling. There was some discussion of the weather.

2 Attendance and membership

2.1 Introduction of those present and taking attendance

Self-introductions took place counter-clockwise while a hot pink sign-in sheet followed.

2.2 Determination of quorum

A voting body of 12 was counted by a show of hands, and a quorum was announced present by Mitch Hefter.

2.3 Recognition of alternate voting members

2.4 Requirements for membership

The following statement was read aloud to the assembly by Mitch Hefter:

Membership is open to all who are affected by the work of the group. Voters who would be in the designer or 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 or three consecutive letter ballots without a loss of voting status.

2.5 Changes to observer status

The following voting members have missed the previous two meetings. In accordance with the Policies and Procedures, they will be moved to observer status by the working group if this meeting is also missed:

James Davey; AC Power Distribution; P; CP
 Greg Mayberry; AC Power Distribution; A; CP
 Jeff deRecat; Actuant Corporation; P; MP
 William Drake; Actuant Corporation; A; MP
 Bill Grande; Leviton Manufacturing; P; MP

Mtch Hefter announced that these members have been moved to Observer status. Voting status may be requested by these members at the next meeting they attend.

2.6 Processing of new and other membership requests

As of 2 January 2014 the following applications have been received and logged:

Jonny Starr; TMB; O; MP

Don Earl asked to be moved to Principal status from Observer.

Eddie Kramer moved to accept the membership requests. The motion was seconded and passed by a unanimous show of hands.

2.7 Consensus body

The consensus body at the time of this meeting, including those not present, was:

Name	Representing	Voting Status	Interest Category
George Long	Aggreko	P	DR
Nathan Leonard	Bender GmbH & Co. KG	P	MP
Joe Boardman	Bender GmbH & Co. KG	A	MP
Torsten Gruhn	Bender GmbH & Co. KG	A	MP
Stephen (Steve) Brock	Bender GmbH & Co. KG	A	MP
Matthew Antonucci	Contract Services Administration Trust Fund	P	U
Larry Schoeneman	DesignLab Chicago, Inc.	P	DR
Don Earl	Earl Girls, Inc.	P	DR
Steve Terry	Electronic Theatre Controls, Inc.	P	MP
Art Wanuch	Entertainment Electrical Safety Committee of Ontario	P	G
Ian Foulds	Entertainment Electrical Safety Committee of Ontario	A	G
Rodger Dean	Entertainment Electrical Safety Committee of Ontario	A	G
Ed Garstkiewicz	Harting KGAA	P	G
Howard Forryan	Harting KGAA	A	G
Edwin S. Kramer	I.A.T.S.E. Local 1	P	U
Roger Lattin	I.A.T.S.E. Local 728	P	U
R. Bruce Prochal	I.A.T.S.E. Local 728	A	U
Patric J. Abaravich	I.A.T.S.E. Local 728	A	U
Alan M. Rowe	I.A.T.S.E. Local 728	A	U
Keith S. Woods	IATSE Local 891	P	U
Ken Vannice	Ken Vannice LLC	I	G
Tyrone Mellon_Jr.	Lex Products Corp.	P	CP
Bob Luther	Lex Products Corp.	A	CP
Louis Bradfield	Louis Bradfield	P	U
Brian Eustace	Mole-Richardson Co.	P	CP

Name	Representing	Voting Status	Interest Category
Alex Yoon	Mole-Richardson Co.	A	CP
Michael Lay	Royal Philips	P	MP
Jerry Gorrell	Theatre Safety Programs	P	U
Mitch Hefter	USITT	P	U
Jeff T. Miller	Walt Disney Company	P	U

Votes by Interest Category	Total
CP (Custom-market Producer)	2
DE (Designer)	0
DR (Dealer or Rental company)	3
G (General interest)	3
MP (Mass-market Producer)	3
U (User)	8
Total votes possible	19

3 Approval of the minutes from the previous meeting

See the draft minutes of the November 2013 meeting, *Epmin11-2013.pdf*

Steve Terry moved to approve the November minutes. The motion was seconded and approved by a show of hands.

4 Reading of the call for patents

The following statement was read aloud to the assembly by Mitch Hefter:

PLASA intends not to publish any standard that contains protected intellectual property, unless that information can be licensed by anyone for a reasonable fee. PLASA uses a process of open patent and copyright disclosures to implement its intent. PLASA 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 Mitch Hefter:

The PLASA Board of Directors, the Technical Standards Council, 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 PLASA chairman immediately.

PLASA 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.

Nothing was reported.

6 Approval of agenda

Items offered for addition to the draft agenda:

UL 943c and 20 mA GFCI devices

UL 1573 update

Above and Beyond Volunteer recognition award. This item will be moved to the top of agenda.

Eddie Kramer moved to approve the revised agenda. The motion was seconded and approved by a show of hands.

7 Volunteer "Above and Beyond Award"

Mitch Hefter reported that the first EPWG recipient of the Above and Beyond volunteer recognition award is Steve Terry. This is the first year for this award, which recognizes exemplary work by a TSP volunteer. Recipients are nominated by their peers, and submission for recipients may be made at any time at tsp.plasa.org/AboveandBeyond.

Mitch Hefter noted the significance of Steve Terry's roll in UL's adoption of ANSI E1.24 and his serious work with UL 1691, single-pole connectors. Mitch Hefter said that all this and much more was accomplished through Steve Terry's efforts.

This year's Above and Beyond Award recipient, Steve Terry, received an enthusiastic round of applause and a certificate.

8 Old business - task group reports

8.1 EMC task group

Report sent as an email from Ken Vannice to Karl Ruling, dated 17 January 2014:

IEEE P1836 and 37 North American harmonics - ballot just went out to kill the project due to the withdrawal of the Canadian Electricity Assoc. Attached was the latest draft proposed by the manufacturers for the record. Also attached were the CEA proposed deviations to the IEC standards. It is assumed CEA will propose these to CSA for adoption in Canada. The deviations do not change the exemption for professional equipment that reads on entertainment equipment. If someone wants to know what there proposed limit are I have that information.

8.2 ANSI E1.16-2002 (R2012) Configuration Standard for Metal Halide Ballast Power Cables (Revision, reaffirmation, or withdrawal by 2017)

No action at this meeting.

8.3 BSR E1.19 – 201x, Recommended Practice for the Use of Class A Ground-Fault Circuit Interrupters (GFCIs) Intended for Personnel Protection in the Entertainment Industry

The draft was sent out for public review beginning on 17 January 2014 and ending on 3 March 2014.

8.4 ANSI E1.24 - 2012, pin connectors (Revision, reaffirmation, or withdrawal by 2017)

No action at this meeting.

8.5 ANSI E1.32 - 2012, Guide for the Inspection of Entertainment Industry Incandescent Lamp Luminaires (Revision, reaffirmation, or withdrawal by 2017)

No action at this meeting.

8.6 Grounding and Bonding on portable structures

From the draft November minutes:

The task group will meet in January at our meetings.

Art Wanuch reported that the task group members had met and are working on the project's scope and plan to present it at the next meeting. They plan to meet every first Tuesday of the month or so to work on the project. The group would like to meet before the EPWG meeting as part of the March meeting cycle.

The task group membership was confirmed: Matthew Antonucci; Alan Rowe; Eddie Kramer; Roger Lattin; Ty Mellon; Richard Cadena; and Art Wanuch, the chair.

8.7 BSR E1.51—A Canadian E1.18

From the draft November minutes:

Art Wanuch moved that the draft document become the basis for an American National Standard. The motion received a second and was unanimously approved by a show of hands.

The project has been approved by the Technical Standards Council reported Karl Ruling. He has filed a PINS form with ANSI.

Ty Mellon moved that we offer the draft standard for public review. The motion was seconded and the vote shall be by letter ballot. The draft document will be provided at that time. The motion approving this plan of action, to approve a public review by letter ballot, passed by a unanimous show of hands. Art Wanuch will submit the most recent version for distribution.

8.8 CSA and UL harmonization

CSA C22.2 No. 166, IHC 61810-1, et cetera. From the draft November minutes:

Ken Vannice reported on the revision of CSA C22.2. Leakage current set at 3.5 mA per information technology equipment, but there is some opposition. It was also reported that IEC 60947 is for relays and that, IHC 61810-1, when finished, is UL 61810-1.

Report sent as an email from Ken Vannice to Karl Ruling, dated 17 January 2014:

CSA C22.2 No. 166 Stage Luminaires - the task group continues to meet and work on the revised document. The relaxed leakage requirements are still in the draft.

IHC/UL61810 Electromechanical Elemental Relays - draft distributed to STP for preliminary review before being sent out for review/vote.

Steve Terry expressed interest in getting the CSA C22.2 Leakage Current Limits published so it can be used.

8.9 BSR E1.52—19-Pin circular connectors

From the draft November minutes:

A task group, consisting of Colin Waters and Ty Mellon was appointed. They will reach out to other manufacturers for involvement.

Ty Mellon reported that he has contacted Veam, and while the company has no plans to join the effort, the engineering manager expressed some interest. He has not heard back from Colin Waters about his efforts to reach out to manufacturers. He asked for support from any members of the working group who are willing and able to help the task group.

9 New business -- UL 943C, 20 mA GFCI devices

Steve Terry reported that IAEI magazine has an article from Littelfuse that recommends class C devices with a 20 mA threshold. There was discussion of how these documents work. He asked the working group if it should incorporate these devices in our standard or if the consensus was to have it added into the NEC.

There was further discussion in which Ty Mellon read the application notes in UL 943C.

Eddie Kramer moved that this working group draft proposals for changes to the NEC to support the use of class C GFCI in the entertainment industry, and that Steve Terry be the head of the task group in this effort. The motion was seconded by discussion and approved by a show of hands.

Steve Terry requested additional assistance, which Nathan Leonard offered from Bender. Steve Terry, Ken Vannice, Mitch Hefter, Eddie Kramer, and Alan Rowe will comprise the task group.

10 Other business

10.1 UL 1573 update

It was reported that, as of yesterday, hard-usage cords can be used on low-temperature stage and studio luminaires.

10.2 NEC update

10.2.1 Revision news

Mitch Hefter reported that it's revision time and the code development process is on-line. There was a discussion of the new NFPA process.

10.2.2 Article 520 changes

Changes were listed by Steve Terry. There are changes in the emergency lighting section to allow directly controlled luminaires.

10.2.3 UL's new label

Jerry Gorrell asked the group for their opinions on the new UL certification label. There was some discussion.

11 Schedule for future meetings

The next meeting is scheduled for Wednesday 26 March 2014, from 9:00 to noon at the Hilton Fort Worth.

12 Adjournment

Larry Schoeneman moved that the meeting adjourn. The motion was seconded and approved by a show of hands. Mitch Hefter declared the meeting adjourned at 10:13 a.m.

Name	Company	Representing	Voting Status	Int. Cat.
James Davey	AC Power Distribution Inc.	AC Power Distribution Inc.	O	CP
Greg Mayberry	AC Power Distribution Inc.	AC Power Distribution Inc.	O	CP
Richard Cadena	Academy of Production Technology	Academy of Production Technology	O	G
Jeff deRecat	Marinco	Actuant Corporation	O	MP
William Drake	Marinco	Actuant Corporation	O	MP
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
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
Nathan Leonard	Bender Group	Bender GmbH & Co. KG	P	MP
Joe Boardman	Bender Inc.	Bender GmbH & Co. KG	A	MP
Torsten Gruhn	Bender Inc.	Bender GmbH & Co. KG	A	MP
Stephen (Steve) Brock	Bender ET Inc.	Bender GmbH & Co. KG	A	MP
Kevin O'Brien	Bestek Lighting & Staging	Bestek Lighting & Staging	O	U
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
Dave Lester	Clair Global	Clair Global	O	U
Wayne Kowalski	Coleman Cable Inc.	Coleman Cable Inc.	O	MP
Matthew Antonucci	Contract Services Administration Trust Fund	Contract Services Administration Trust Fund	P	U
Ford Sellers	Cornell University	Cornell University	O	U
Larry Schoeneman	DesignLab Chicago, Inc.	DesignLab Chicago, Inc.	P	DR
Don Earl	Earl Girls, Inc.	Earl Girls, Inc.	P	DR

Name	Company	Representing	Voting Status	Int. Cat.
Edward R. Condit	Edward R. Condit	Edward R. Condit	O	U
Jody Williquette	Electrivers, Inc.	Electrivers, Inc.	O	CP
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	P	MP
Elizabeth E. (Lizz) Pittsley	Elizabeth Pittsley	Elizabeth Pittsley	O	U
Art Wanuch	Entertainment Electrical Safety Committee of Ontario	Entertainment Electrical Safety Committee of Ontario	P	G
Ian Foulds	IATSE Local 873	Entertainment Electrical Safety Committee of Ontario	A	G
Rodger Dean	R. Dean Lighting Limited	Entertainment Electrical Safety Committee of Ontario	A	G
Ed Garstkiewicz	Harting Inc., North America	Harting KGAA	P	G
Howard Forryan	Harting Ltd.	Harting KGAA	A	G
Trevor Forrest	Helvar Lighting Control	Helvar Lighting Control	O	MP
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	O	U
John (Javid) D. Butler	Integrated Theatre, Inc.	Integrated Theatre, Inc.	O	CP
Jared Saltzman	Jared Saltzman	Jared Saltzman	O	U
Ken Vannice	Ken Vannice LLC	Ken Vannice LLC	I	G
Jose J. Flores	Kino Flo, Inc.	Kino Flo, Inc.	O	MP
Bill Grande	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	O	MP
Tyrone Mellon_Jr.	Lex Products Corp.	Lex Products Corp.	P	CP
Bob Luther	Lex Products Corp.	Lex Products Corp.	A	CP
Jim Digby	The Collaborative Endeavor Group	Linkin Park Touring/The Collective	O	U
Louis Bradfield	Louis Bradfield	Louis Bradfield	P	U

Name	Company	Representing	Voting Status	Int. Cat.
Jim Holladay	Luxence	Luxence	O	G
Hiroshi Kita	Marumo Electric Co., Ltd.	Marumo Electric Co., Ltd.	O	MP
Michael J. Carnaby	Mikan Theatricals	Mikan Theatricals	O	DR
Brian Eustace	Mole-Richardson Co.	Mole-Richardson Co.	P	CP
Alex Yoon	Mole-Richardson Co.	Mole-Richardson Co.	A	CP
Peter Herrmann	Motion Laboratories	Motion Laboratories	O	CP
Vincent J. Cannavale	Motion Laboratories	Motion Laboratories	O	CP
David Herrmann	Motion Laboratories	Motion Laboratories	O	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 Technical Resources Office	PLASA EU	O	U
James Eade	PLASA	PLASA EU	O	G
Erin Grabe	PLASA NA	PLASA NA	exf	G
Karl G. Ruling	PLASA NA	PLASA NA	exf	G
Paul F. Mardon	Pulsar Ltd.	Pulsar Ltd.	O	MP
Richard B. Glickman	Gliconen Corporation	Rosco Laboratories	O	MP
Michael Lay	Philips Color Kinetics	Royal Philips	P	MP
Robert Timmerman	Philips Color Kinetics	Royal Philips	O	MP
Jeremy Day	Philips Color Kinetics	Royal Philips	O	MP
Robert Barbagallo	Solotech Inc.	Solotech Inc.	O	DR
Stephen Vanciel	Stephen Vanciel	Stephen Vanciel	O	U
Reuben Goldberg	Technic Services	Technic Services	O	U
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
Colin Waters	TMB	TMB	O	DR
Jonny Starr	TMB	TMB	O	MP
Charles (Chuck) Kurten	Underwriters Laboratories, Inc.	Underwriters Laboratories, Inc.	O	G

Name	Company	Representing	Voting Status	Int. Cat.
Richard Wolpert	Union Connector Company (MO)	Union Connector Company	O	CP
Mitch Hefter	Mitch Hefter	USITT	P	U
Jeff T. Miller	Worldwide Standards and Auditing	Walt Disney Company	P	U
William L. Maiman	William L. Maiman	William L. Maiman	O	U

Voting Status and Interest Category Legend

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