# Minutes Electrical Power Working Group

Friday, 17 July 2009 Dallas/Ft. Worth Marriott Solana Westlake, TX

**Presiding chairman:** Mitch Hefter; Entertainment Technology (Royal Philips Electronics), representing USITT: P; U

Recording secretary: Karl G. Ruling; ESTA

### Members attending:

James Davey; AC Power Distribution Inc.; P; CP

Wendy Holt; Alliance of Motion Picture and Television Producers; P; G

Torsten Gruhn; Bender Inc. (Bender GmbH & Co. KG); P; MP

Steve Terry; Electronic Theatre Controls, Inc.; P; MP

Elizabeth E. (Lizz) Pittsley; I; U

Ian Foulds; IATSE Local 873; Entertainment Electrical Safety Committee of Ontario; P; G

Art Wanuch; 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

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.; A; CP

Louis Bradfield; I; U

Jeff deRecat: Marinco: O: MP

W. G. Krokaugger, P. E.; Mole-Richardson Co.; P; CP

Michael Lay; Philips Strand Lighting (Royal Philips Electronics); P; MP

Michael Scudday; SSRC, Inc.; P; CP

Jerry Gorrell; Theatre Safety Programs; P; U

Visitor: Graham Likeness; Lex Products Corp.

#### 1 Opening remarks

Mitch Hefter called the meeting to order at 9:00. He welcomed all to Texas. Hefter explained that Ken Vannice, his co-chair, was the winner of the ESTA Foundation Behind the Scenes trip and had just returned from his trip to Machu Picchu. Shortly after his return, his knee swelled up and he was unable to travel due to the limited mobility.

Roger Lattin asked for a moment of silence for the four technicians who had recently died.

#### 2 Attendance and membership

# 2.1 Introduction of those present and taking attendance

A blue sign-in sheet was circulated while those present introduced themselves.

## 2.2 Determination of quorum

Hefter counted the number of voters in the room and then announced that a quorum was present and business could be conducted.

# 2.3 Recognition of alternate voting members

Tyrone Mellon Jr. of Lex Products was recognized.

# 2.4 Requirements for membership

Mitch Hefter reminded the assembly that membership 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:

James Davey and Greg Mayberry; AC Power Distribution

Elizabeth E. (Lizz) Chancellor

John (Javid) D. Butler; Integrated Theatre

W. G. Krokaugger and Alex Yoon; Mole-Richardson Co.

William L. Maiman

Of the above recently absent members, Javid Butler and Bill Maiman were not present, and the others were. Mitch Hefter announced that Javid Butler and Bill Maiman were now observer members.

# 2.6 Processing of new membership requests

There were no new membership requests.

Jody Williquette of Harting Inc. asked to be moved to voting status as a principal member with Ed Garstkiewicz as his alternate. Roger Lattin moved that Williquette's request be granted. The motion was seconded and then approved with a unanimous show of hands.

# 2.7 Consensus body

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

Name	Company	Representing	Voting status	Int. cat.
James Davey	AC Power Distribution Inc. AC Power Distribution Inc.		Р	СР
Greg Mayberry	AC Power Distribution Inc.	AC Power Distribution Inc.	Α	СР
George Long	Aggreko Event Services	Aggreko	Р	DR
Wendy Holt	AMPTP	AMPTP Alliance of Motion Picture and Television Producers		G
Torsten Gruhn	Bender Inc.	Bender GmbH & Co. KG	Р	MP
Joe Boardman	Bender Inc.	Bender Inc. Bender GmbH & Co. KG		MP
Steve Terry	Electronic Theatre Controls Electronic Theatre Controls, Inc.		Р	MP
Elizabeth E. (Lizz) Pittsley	Elizabeth Pittsley Elizabeth Pittsley		I	U
lan Foulds	IATSE Local 873 Entertainment Electrical Safety Committee of Ontario		Р	G
Jody Williquette	Harting Inc., North America	Harting KGAA	Р	G
Ed Garstkiewicz	Harting Inc., North America Harting KGAA		Α	G
Edwin S. Kramer	I.A.T.S.E. Local 1		Р	U
Roger Lattin	I.A.T.S.E .Local 728 I.A.T.S.E. Local 728		Р	U
R. Bruce Prochal	IATSE Local 728 I.A.T.S.E. Local 728		Α	U
Patric J. Abaravich	I.A.T.S.E. Local 728		Α	U

Name	Company	Representing	Voting status	Int. cat.	
Alan M. Rowe	IATSE Local 728	I.A.T.S.E. Local 728	Α	U	
Keith S. Woods	Lakhri Impressions Ltd.	IATSE Local 891	Р	U	
Simon Hunt	IATSE Local 891 IATSE Local 891		Α	U	
Ken Vannice	Leviton Manufacturing	Leviton Manufacturing Co., Inc.	Р	MP	
Bill Grande	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	Α	MP	
Bob Luther	Lex Products Corp.	Lex Products Corp.	Р	СР	
Tyrone Mellon Jr.	Lex Products Corp.	Lex Products Corp.	Α	CP	
Louis Bradfield	Louis Bradfield	Louis Bradfield	I	U	
W. G. Krokaugger, P. E.	Mole-Richardson Co.	Mole-Richardson Co.	Р	СР	
Alex Yoon	Mole-Richardson Co.	Mole-Richardson Co.	Α	СР	
Vincent J. Cannavale	Motion Laboratories Motion Laboratories		Р	CP	
Peter Herrmann	Motion Laboratories Motion Laboratories		Α	CP	
David Herrmann	Motion Laboratories Motion Laboratories		Α	CP	
Ron Bonner	PLASA PLASA		Р	U	
Michael Lay	Philips Strand Lighting	Philips Strand Lighting Royal Philips Electronics		MP	
Michael Scudday	SSRC, Inc.	SSRC, Inc. SSRC, Inc.		CP	
Jerry Gorrell	Theatre Safety Programs Theatre Safety Programs		Р	U	
Phillip M. Gallo	ТМВ	ТМВ	Р	DR	
Mitch Hefter	Entertainment Technology (Royal Philips Electronics)	USITT	Р	U	
		Total votes	22		
			5	СР	
			4	MP	
		Votes by interest category	2	DR	
			8	U	
			3	G	

# 3 Approval of the minutes from the previous meeting

(See the draft minutes of the March 2009 meeting, EPmin03-2009.pdf.)

Steve Terry moved that the draft minutes of the March 2009 meeting be accepted as written. The motion was seconded and then approved with a unanimous show of hands.

# 4 Reading of the call for patents

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

"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."

No protected intellectual property was reported.

# 5 Reading of the anti-trust statement

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

"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."

Karl Ruling, the Technical Standards Manager, held up one of the easy-to-read pamphlet to show that copies were available.

No restraint of trade issues were reported to the assembly.

# 6 Approval of agenda

Karl Ruling proposed adding an Other Business item of vetting the information on the ESET website.

Eddie Kramer moved that the modified agenda be accepted. The motion was seconded and then approved with a show of hands.

# 7 Old business - task group reports

#### 7.1 EMC task group

(See 2008-09-05 efc ltr to csa.pdf, 61000-3-12\_Fails.pdf, and ltsBack27May2009.pdf.)

Mitch Hefter reported that there was no further report from Ken Vannice. He directed people to read the reports referenced in the agenda. Steve Terry noted that EFC in Canada is doing well and we have been able to benefit from their work.

#### 7.2 ANSI E1.16-2002 (R2007)

No news or action.

# 7.3 BSR E1.18 portable feeder cable selection and use public review report

Jerry Gorrell reported that a draft of some possible resolutions was circulated to the task group. He will have it for the working group by LDI. He spent seven days just pulling the comments from the submitted documents and pasting them into a resolution document, which was difficult because of the incompatible file formats.

The task group was identified as Jerry Gorrell, George Long, Lizz Chancellor, and Javid Butler.

Jerry Gorrell noted that a substantial number of comments were from working group members. He would like to deal with any disagreement within the group before the document goes to another public review.

Eddie Kramer asked to see the summary of the comments. Ruling asked Gorrell for that document. He'll send it on to the working group when it's received.

#### 7.4 BSR E1.19 GFCI progress report

## 7.4.1 Publication

Mitch Hefter reported that it's published.

### 7.4.2 Resolving Keith Woods's objections

Keith Woods was not present to explain his objections and what actions would satisfy him.

Steve Terry moved that we hold the discussion of modifying the document until Keith Woods or someone else submits a written request for a revision or appears at a meeting and makes a motion to that effect. The motion was seconded. There was discussion in which it was noted that there are pending changes to the National Electrical Code that might warrant other changes to E1.19. The motion carried with a show of hands.

# 7.5 BSR E1.24 - 20xx, pin connectors

(See E1-24r2-95 draft.pdf and E1-24Supplement.pdf.)

Steve Terry reported that on June 12 he had a good meeting with Chuck Kurten in Melville, NY. Kurten is very supportive of referencing E1.24 in UL 498. He suggested using NEMA WD6 as a model for E1.24. It's a configuration document and familiar to most manufacturers. So, we need to make E1.24 look and smell like NEMA WD6, and this will make it more acceptable to the committee for UL 498.

The E1.24 draft provided to the working group was described as an editorial start. Terry said, once the document is fleshed out with new drawings, he will meet with UL staff to review the document to ensure we are on the right track, and will then bring it to the task group for further refinement. The supplement draft provided to the working group also was described as an editorial start that contains material extracted from the original standard, and is not being presented to UL at this time. The working group may decide to refine it as another document, possibly publishing it as an ESTA document rather than as an ANSI-approved standard.

Eddie Kramer asked about the composition of the task group. Terry said it was the task group noted in the last meeting minutes will the addition of Wendy Holt and Bill Krokaugger. Therefore, the full task group is:

Bill Krokaugger Eddie Kramer Mitch Hefter

Phil Gallo

Roger Lattin Steve Terry

Tyrone Mellon

Wendy Holt

There was discussion of perhaps making another document that specifies the shape and fastening means of a panel-mount connectors so that the connectors of different connectors can be interchanged on panels. Terry urged us not to add this to the current E1.24 project to avoid feature creep and delaying the revision by a considerable amount of time.

#### 7.6 BSR E1.32 luminaire inspection guidance progress report

(Report on further work on comment resolutions. See RevsdE1-32ScopeR2.pdf and TotalSectionsLBallot.pdf.)

Jerry Gorrell reported that he'd made some editorial corrections to the scope. Ruling explained that the vote was only to work out the scope. That's done, so now the task group needs to move forward with that scope in mind.

Roger Lattin reported on his presentation at Cinegear. Members of the audience had questions about the ground leakage current test. Lattin said he is looking into PAT equipment. He also reported that some rental houses saw the inspection as a sales quality tool.

Eddie Kramer moved that we have another letter ballot for the editorial corrections in the revised scope. The motion was seconded and there was discussion. Eddie Kramer withdrew the motion.

Mitch Hefter said that the task group needs to take the revised scope statement and use it to review and revise the proposed resolutions and the modified draft standard.

Steve Terry moved that the working group direct the task group to revise the draft second review resolutions and draft standard in view of the approved revised scope statement. The motion was seconded and then approved with a unanimous show of hands.

Roger Lattin asked Steve Terry to provide the ground conductor testing procedure that was used at Production Arts. Steve Terry said he could write this. He has it memorized. The sense of the group, as stated by Mitch Hefter, was that there would be time to include this in an informative annex for the draft document that the task group will prepare for the working group.

#### 8 New business

None.

#### 9 Other business

# 9.1 NEC Report on Proposals

Mitch Hefter announced that the NEC ROP is published and available for comment. See <a href="http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=70">http://www.nfpa.org/aboutthecodes/AboutTheCodes.asp?DocNum=70</a>

#### 9.2 Vetting ESET

Karl Ruling reported that there was a request from the Essential Skills committee for EPWG members to vet the information on the ESET website. He gave out the user name and password to use to access the website.

Steve Terry said that the ESET glossary is an absolute mess, an embarrassment to ESTA and the Technical Standards Program.

#### 9.3 LDI

Ruling projected the final list of LDI sessions. There was a discussion of the sessions that were approved.

#### 10 Schedule for future meetings

Ruling announced that the next working group meeting is scheduled for Friday, November 20, from 7:00 p.m. until 11:00 p.m. The following meeting is scheduled for January 22 from 8:00 a.m. to noon, but the start might be pushed back to 9:00. We rarely need four hours.

## 11 Adjournment

Wendy Holt moved that the meeting adjourn. The motion was seconded and then approved with a unanimous show of hands. Mitch Hefter declared the meeting adjourned at 11:12.

# Working Group Membership and Contact Information as of 19 August 2009

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.
James Davey	AC Power Distribution Inc.	ution Inc. AC Power Distribution Inc.		СР
Greg Mayberry	AC Power Distribution Inc.	AC Power Distribution Inc.	А	СР
George Long	Aggreko Event Services	Aggreko	Р	DR
Kenny Delahoussaye	Aggreko	Aggreko	0	DR
Richard L. Eberth Jr.	North Shore Safety	Airpax Corporation	0	MP
Wendy Holt	AMPTP	Alliance of Motion Picture and Television Producers	Р	G
Mike Skinner	CBS Studio Center	Alliance of Motion Picture and Television Producers	0	U
Arnold Tang	Arnold Tang Productions	Arnold Tang Productions	0	G
Jiantong Wu	Beijing Special Engineering Design & Research Institute	Beijing Special Engineering Design & Research Institute	0	G
Torsten Gruhn	Bender Inc.	Bender Inc. Bender GmbH & Co. KG		MP
Joe Boardman	Bender Inc.	Bender GmbH & Co. KG	А	MP
Lee J. Bloch	Bloch Design Group, Inc.  Bloch Design Group, Inc.		0	G
Marty Lazarus	Chicago Spotlight, Inc.  Chicago Spotlight, Inc.		0	DR
Eric Bouchard	Cirque du Soliel Cirque du Soliel		0	СР
Wayne Kowalski	Coleman Cable Inc.	Coleman Cable Inc.	0	MP
Ford Sellers	Cornell University	Cornell University	0	U
Don Earl	Earl Girls, Inc.	Earl Girls, Inc.	0	DR
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	Р	MP
Elizabeth E. (Lizz) Pittsley	Elizabeth Pittsley	Elizabeth Pittsley	I	U
lan Foulds	IATSE Local 873	Entertainment Electrical Safety Committee of Ontario	Р	G
Art Wanuch	Entertainment Electrical Safety Committee of Ontario	Entertainment Electrical Safety Committee of Ontario	0	G
Jody Williquette	Harting Inc., North America Harting KGAA		Р	G
Ed Garstkiewicz	Harting Inc., North America Harting KGAA		A	G
Trevor Forrest	Helvar Lighting Control	Helvar Lighting Control	0	MP
Kirk D. Keen	Hollywood Lighting Services, Inc.	Hollywood Lighting, Inc.	0	DR
Pat Miller	Hubbell Wiring Devices	Hubbell Inc.	0	MP
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	Р	U

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Roger Lattin	I.A.T.S.E. Local 728 I.A.T.S.E. Local 728		Р	U
R. Bruce Prochal	IATSE Local 728	I.A.T.S.E. Local 728	Α	U
Patric J. Abaravich	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	А	U
Alan M. Rowe	IATSE Local 728	I.A.T.S.E. Local 728	А	U
Keith S. Woods	Lakhri Impressions Ltd.	IATSE Local 891	Р	U
Simon Hunt	IATSE Local 891	IATSE Local 891	А	U
John (Javid) D. Butler	Integrated Theatre, Inc.	Integrated Theatre, Inc.	0	СР
David Murray	IPC Resistors Inc.	IPC Resistors Inc.	0	СР
Jose J. Flores	Kino Flo, Inc.	Kino Flo, Inc.	0	MP
Ken Vannice	Leviton Manufacturing	Leviton Manufacturing Co., Inc.	Р	MP
Bill Grande	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	Α	MP
Bob Luther	Lex Products Corp.	Lex Products Corp.	Р	СР
Tyrone Mellon Jr.	Lex Products Corp.	Lex Products Corp.	А	СР
Louis Bradfield	Louis Bradfield Louis Bradfield		ı	U
Jim Holladay	Luxence	Luxence	0	G
Phil Fram	Marinco	Marinco	0	MP
Jeff deRecat	Marinco/ADI	Marinco	0	MP
William Drake	Marinco	Marinco	0	MP
Hiroshi Kita	Marumo Electric Co., Ltd.	Marumo Electric Co., Ltd.	0	MP
Michael J. Carnaby	Mikan Theatricals	Mikan Theatricals	0	DR
W. G. Krokaugger, P. E.	Mole-Richardson Co.	Mole-Richardson Co.	Р	СР
Alex Yoon	Mole-Richardson Co.	Mole-Richardson Co.	Α	СР
Vincent J. Cannavale	Motion Laboratories	Motion Laboratories	Р	СР
Peter Herrmann	Motion Laboratories	Motion Laboratories	Α	СР
David Herrmann	Motion Laboratories	Motion Laboratories	Α	СР
Marsha DuBois	Pintech Stage Connectors, Inc.	Pintech Stage Connectors, Inc.	0	СР
Steve DuBois	Pintech Stage Connectors, Inc.	Pintech Stage Connectors, Inc.	0	СР
Ron Bonner	PLASA	PLASA	Р	U

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.
James Eade	PLASA	PLASA	0	G
Paul F. Mardon	Pulsar Ltd.	Pulsar Ltd.	0	MP
Douglas Franz	QVC Network	QVC Network	0	U
Eric Tishman	Rosco Laboratories	Rosco Laboratories	0	MP
Richard B. Glickman	Gliconen Corporation	Rosco Laboratories	0	MP
Michael Lay	Philips Strand Lighting	Royal Philips Electronics	Р	MP
Jeremy B. Collins	Selecon	Selecon	0	MP
Robert Barbagallo	Solotech Inc.	Solotech Inc.	0	DR
Michael Scudday	SSRC, Inc.	SSRC, Inc.	Р	СР
Stephen Vanciel	Stephen Vanciel	Stephen Vanciel	0	U
Reuben Goldberg	Technic Services	Technic Services	0	U
Dominic Vincenty	TPS	Television Production Service	0	DR
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	Р	U
Phillip M. Gallo	TMB	TMB	Р	DR
Colin Waters	TMB	TMB	0	DR
Charles (Chuck) Kurten	Underwriters Laboratories, Inc.	Underwriters Laboratories, Inc.	0	G
Richard Wolpert	Union Connector Company (MO)	Union Connector Company	0	СР
Mitch Hefter	Entertainment Technology (Royal Philips Electronics)	USITT	Р	U
William L. Maiman	William L. Maiman	William L. Maiman	0	U

Key to codes:	Р	principal voting member	MP	mass-market producer interest category
	Α	alternate voting member	CP	custom-market producer interest category
	I	individual voting member	DR	dealer or rental company interest category
	0	observer, non-voting	U	user interest category

U user interest category
G general-interest interest category