

Minutes
Electrical Power Working Group
Friday, 23 January 2009
Marriott Solana
Westlake, Texas

Chairmen:

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

Recording secretary: Karl G. Ruling; ESTA

Members attending:

Wendy Holt; AMPTP; P; G
Steve Terry; Electronic Theatre Controls, Inc.; P; MP
Ian Foulds; IATSE Local 873, representing the Entertainment Electrical Safety Committee of Ontario; 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; I.A.T.S.E. Local 728; A; U
Keith S. Woods; Lakhri Impressions Ltd., representing IATSE Local 891; P; U
Tyrone Mellon Jr.; Lex Products Corp.; A; CP
Louis Bradfield; I; U
Vincent J. Cannavale; Motion Laboratories; P; CP
Ron Bonner; PLASA; P; U
Michael Lay; Strand Lighting (Royal Philips Electronics); P; MP
Michael Scudday; SSRC, Inc.; P; CP
Jerry Gorrell; Theatre Safety Programs; P; U
Phillip M. Gallo; TMB; P; DR

Visitors:

Knut Skjonberg; Skjonberg Controls
Monica Skjonberg; Skjonberg Controls

1 Opening remarks

The meeting was called to order by Mitch Hefter at 08:35. He welcomed all to our "new meeting home," the Marriott Solana. Those in attendance were invited to have some of the bagels and cream cheese provided by Mitch Hefter and the lox provided by Eddie Kramer.

2 Attendance and membership

2.1 Introduction of those present and taking attendance

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

2.2 Determination of quorum

Mitch Hefter asked for a show of hands by voters. He counted them and then announced that a quorum was present.

2.3 Recognition of alternate voting members

Tyrone Mellon Jr. was recognized as voting for Lex Products Corp. Companies with two voting members present were reminded that only one may vote on a question.

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. 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 Processing of new membership requests

As of Thursday, 08 January 2009, the following application had been received:

Kirk D. Keen; Hollywood Lighting Services, Inc.; observer; dealer or rental company

Michael Scudday (SSRC, Inc., CP) asked to be accepted again as a principal voting member.

Keith Woods moved that Keen and Scudday's applications be accepted. The motion was seconded and then approved with a show of hands.

2.6 Consensus body

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

Name	Company	Representation	Voting status	Interest category
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	Alliance of Motion Picture and Television Producers	P	G
Wolfgang Hofheinz	Bender GmbH & Co. KG	Bender GmbH & Co. KG	P	MP
Joe Boardman	Bender Inc.	Bender GmbH & Co. KG	A	MP
Paul Menetrey	Bender Inc.	Bender GmbH & Co. KG	A	MP
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	P	MP
Elizabeth E. (Lizz) Chancellor	Elizabeth Chancellor	Elizabeth Chancellor	I	U
Ian Foulds	IATSE Local 873	Entertainment Electrical Safety Committee of Ontario	P	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
Simon Hunt	IATSE Local 891	IATSE Local 891	A	U
John (Javid) D. Butler	Integrated Theatre, Inc.	Integrated Theatre, Inc.	P	CP
Ken Vannice	Colortran	Leviton Manufacturing Co., Inc.	P	MP
Bill Grande	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	A	MP

Name	Company	Representation	Voting status	Interest category
Bob Luther	Lex Products Corp.	Lex Products Corp.	P	CP
Tyrone Mellon Jr.	Lex Products Corp.	Lex Products Corp.	A	CP
Louis Bradfield	Louis Bradfield	Louis Bradfield	I	U
Michael J. Carnaby	Mikan Theatricals	Mikan Theatricals	P	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
Ron Bonner	PLASA	PLASA	P	U
Michael Lay	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
William L. Maiman	William L. Maiman	William L. Maiman	P	U
		Total votes	24	
		Votes by interest categories	6	CP
			4	MP
			3	DR
			9	U
			2	G

3 Approval of the minutes from the previous meeting

(See document EP/2008-7021, file EPmin10-2008.pdf.)

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

4 Reading of the call for patents

Ken Vannice 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 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 brought to the attention of the assembly.

5 Reading of the anti-trust statement

Ken Vannice read the following statement aloud to the assembly:

"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 Technical Standards Manager held up one of the easy-to-read pamphlets. No restraint of trade issues were reported.

6 Approval of agenda

Mitch Hefter asked for a discussion of UL liaison issues to be under other business.

Roger Lattin asked for a discussion of chain hoist control/power cable issues under other business.

Eddie Kramer moved that the amended draft 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

No news, said Vannice

7.2 ANSI E1.16-2002 (R2007)

No news or action needed.

7.3 BSR E1.18 portable feeder cable selection and use

7.3.1 E1.18-1 public review report

Karl Ruling reported that there were three public review responses received so far. He said that they looked thoughtful.

7.3.2 E1.18-2 progress report

(From the 24 October minutes: "Roger Lattin was appointed to start work on a draft standard for closed loop systems, an E1.18-2, and to identify others to work with him. His deliverables for the January 2009 meeting would be a scope statement, and a section stating why and where closed loops are advantageous, and a section stating why and where closed loop systems are not. He is also to develop a timeline for the completion of the rest of the document.")

A scope and outline had been delivered two days before the meeting, but there were no objections to discussing the documents at this meeting.

Steve Terry noted that we have not received all the deliverables, that we do not have all the things we need to decide if this project can go forward.

Roger Lattin explained that he had trouble opening the draft minutes and agenda and couldn't read what they said until too late to address all the action items.

Eddie Kramer noted that the loop circuit has been a polarizing issue, with some in strongly favor and some strongly against. He spoke strongly in favor of continuing the project.

Terry said that the assignments were to establish the validity of the project with clear statements. If we defer the decision until March, as some have suggested, we are just pushing off the decision. We need a good, documented set of reasons for why these loops should be used in some situations.

Mitch Hefter summarized the situation: We do not need a mathematical model of loop systems, simply a good description of what one is. We need the full set of documents that were requisitioned at the October meeting for the March meeting so we can make a go/no-go decision on the project.

Jerry Gorrell made an argument for putting the reasons for loops in the scope statement.

Eddie Kramer moved that Roger Lattin be directed to develop for the USITT meeting (meeting the two-week deadline) a document describing the advantages and disadvantages of closed loop systems and a time-line for the possible development of the project, so that the working group can decide at that meeting to go forward with the project or not or to modify it. The motion was seconded. There was discussion. The motion was accepted with a show of hands, with no objections and one abstention.

7.4 BSR E1.19 GFCI progress report

Karl Ruling reported that the TSC approved it. It's before the ESTA Board.

7.5 ANSI E1.24-2006, pin connectors

Steve Terry reported on asking Don Talka at a recent NEC meeting about the adoption of ANSI E1.24 by reference in UL 498. It was recommended that one or two EPWG members become members of the UL 498 STP.

There was a discussion of whom to appoint.

Eddie Kramer moved the Steve Terry be ESTA's representative on the UL 498 panel. The motion was seconded and then approved with a unanimous show of hands.

Vannice said that he was planning to write a rebuttal to the objections to adopting E1.24 voiced by STP member D. Lutz of Hubbell Inc.'s wiring devices division.

7.6 BSR E1.32 luminaire inspection guidance progress report

(From the 24 October minutes: "Jerry Gorrell was assigned the task of drafting comment resolutions with Steve Vanciel, Alan Rowe, Javid Butler, and Roger Lattin as his task group. The due date was set as the March meeting.")

Jerry Gorrell said that the task group has resolved most of the issues except the leakage current test, and is working on that. He expects to be able to meet the March deadline.

8 New business

None.

9 Other business

9.1 chain hoist control/power cable issues

Roger Lattin reported on discussions within the Rigging Working Group of the voltage loss issues with power cables to electric hoists. He suggested that we should work on some sort of branch circuit guidance document.

There was discussion of how to work with the Rigging Working Group task group on the power distribution aspects of their control project.

The consensus was that the RWG's E1.6-4 task group should send the Technical Standards Manager a copy of the draft standard that he will then distribute to the working group for comment.

9.2 UL liaison

(See item 7.5 above, where this topic was also discussed and action taken.)

The discussion of a possible UL liaison started with a report on the NEC meeting at Hilton Head by those EPWG members who attended. They reported that they were good meetings, with the only material changes to the Code being those that were offered by Mitch Hefter. The color coding of border light cable was clarified. No new requirements were added, but language was adopted to offer a reasonable interpretation of the existing requirements. Also the language detailing the exceptions to conduit fill requirements that need to be applied to drop boxes was clarified.

Most of the comments the committee had to address were from one person, Dan Leaf of Seneca, South Carolina, who submitted more than 1100 comments, almost one quarter of the total proposals on the NEC.

The last few minutes of the meetings were perhaps the best, said Terry. Don Talka offered to be our liaison with UL, the person we can contact him if we have problems with UL. Talka broached the idea of a formal relationship between UL and ESTA to write joint standards. Perhaps a standard for dimmer racks, a.k.a. "dimming switchboards" in UL language. UL 891 and UL 508 are now used in combination for evaluating products, and the interpretation of how to use them is variable, which causes problems with compliance. Terry thinks we should put together an emissary body to meet with Don Talka to work on a liaison. This would be a TSC project, not an EPWG project, but it is an opportunity we should not pass up.

10 Changes to observer status

10.1 Notice to the working group of those who missed three consecutive letter ballots

None now, but Louis Bradfield has missed the last two letter ballots. Wendy Holt and the representatives for IATSE Local 728 missed the last one.

10.2 Members in danger of losing voting status because of excessive absence

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:

Michael J. Carnaby; Mikan Theatricals

Mitch Hefter announced that Carnaby is now an observer member.

11 Schedule for future meetings

Mitch Hefter announced that the next meeting is scheduled for Wednesday, 18 March 2009, from 09:00 to noon, at the Hilton Cincinnati Netherland Plaza in Cincinnati, OH. He reminded people of the two-week deadline for documents that are to be voted on at the meeting.

12 Adjournment

Roger Lattin moved that the meeting adjourn. The motion was seconded and then approved with a show of hands. Mitch Hefter declared the meeting adjourned at 10:13.

Working Group Membership and Contact Information as of 23 February 2009

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
Andre Broucke	ADB - TTV Technologies	ADB-TTV Group	O	MP
George Long	Aggreko Event Services	Aggreko	P	DR
Kenny Delahoussaye	Aggreko	Aggreko	O	DR
Brian Merriken	Airpax Corporation	Airpax Corporation	O	MP
Richard L. Eberth Jr.	North Shore Safety	Airpax Corporation	O	MP
Wendy Holt	AMPTP	Alliance of Motion Picture and Television Producers	P	G
Mike Skinner	CBS Studio Center	Alliance of Motion Picture and Television Producers	O	U
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
Wolfgang Hofheinz	Bender GmbH & Co. KG	Bender GmbH & Co. KG	P	MP
Joe Boardman	Bender Inc.	Bender GmbH & Co. KG	A	MP
Paul Menetrey	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 Soleil	Cirque du Soleil	O	CP
Julie Rogers	City of Phoenix Civic Plaza	City of Phoenix	O	G
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) Chancellor	Elizabeth Chancellor	Elizabeth Chancellor	I	U
Ian Foulds	IATSE Local 873	Entertainment Electrical Safety Committee of Ontario	P	G
Art Wanuch	Robertson Electric Wholesale	Entertainment Electrical Safety Committee of Ontario	O	G
Trevor Forrest	Helvar Lighting Control	Helvar Lighting Control	O	MP
Kirk D. Keen	Hollywood Lighting Services, Inc.	Hollywood Lighting, Inc.	O	DR
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.	P	CP
David Murray	IPC Resistors Inc.	IPC Resistors Inc.	O	CP
Jose J. Flores	Kino Flo, Inc.	Kino Flo, Inc.	O	MP
Ken Vannice	Colortran	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
Louis Bradfield	Louis Bradfield	Louis Bradfield	I	U
Jim Holladay	Luxence	Luxence	O	G

Name	Company	Representing (This is the sort field.)	Voting status	Int. cat.
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
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	Strand Lighting	Royal Philips Electronics	P	MP
Jeremy B. Collins	Selecon	Selecon	O	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
Richard Wolpert	Union Connector Company (MO)	Union Connector Company	O	CP
Mitch Hefter	Entertainment Technology (Royal Philips Electronics)	USITT	P	U
William L. Maiman	William L. Maiman	William L. Maiman	P	U

Key to codes:

P principal voting member
A alternate voting member
I individual voting member
O observer, non-voting

MP mass-market producer interest category
CP custom-market producer interest category
DR dealer or rental company interest category
U user interest category
G general-interest interest category