

**Minutes**  
**Electrical Power Working Group**  
Wednesday, 18 March 2009  
Hilton Cincinnati Netherland Plaza  
Cincinnati, OH

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

**Recording secretary:** Karl G. Ruling

**Members attending:**

George Long; Aggreko Event Services (Aggreko); P; DR  
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  
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  
Tyrone Mellon Jr.; Lex Products Corp.; A; CP  
Peter Herrmann; Motion Laboratories; A; CP  
Ron Bonner; PLASA; P; U  
Michael Lay; Strand Lighting (Royal Philips Electronics); P; MP  
Jerry Gorrell; Theatre Safety Programs; P; U  
Phillip M. Gallo; TMB; P; DR

**Visitor:** Edward Condit

**1 Opening remarks**

Ken Vannice called the meeting to order at 09:00.

**2 Attendance and membership**

**2.1 Introduction of those present and taking attendance**

Those present introduced themselves while a hot pink attendance sign-in sheet was circulated.

**2.2 Determination of quorum**

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

**2.3 Recognition of alternate voting members**

Peter Herrmann and Tyrone Mellon were recognized. Vannice reminded Alan Rowe that he couldn't vote on a motion on which Roger Lattin was also voting.

**2.4 Requirements for membership**

Vannice 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**

### 2.5.1 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.

### 2.5.2 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:

George Long of Aggreko Event Services

Paul Menetrey, Joe Boardman, and Wolfgang Hofheinz of Bender

George Long was present and a new application from Torsten Gruhn to represent Bender had been received and Gruhn was present, so no changes in voting status were made.

### 2.6 Processing of new membership requests

Ken Vannice read aloud the working group applications that had been received:

Chuck Kurten; UL; observer; general interest

Jody Williquette; Harting Inc., North America (Harting KGAA); principal; G

Ed Garstkiewicz, Harting Inc., North America (Harting KGAA); alternate; G

Torsten Gruhn, Bender Inc., principal, MP

Eddie Kramer moved that the Harting applicants, who were not present, and the UL applicant be accepted as observers, and that the Bender applicant be accepted as a principal voting member. The motion was seconded and then approved with a show of hands.

Torsten Gruhn reported that Paul Menetrey and Wolfgang can be removed from the working groups membership list as representing Bender, since they will no longer be active with the company.

### 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.	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
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) 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

Name	Company	Representing	Voting status	Int. cat.
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	Leviton Manufacturing Co., Inc.	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
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
		<b>Total votes possible</b>	<b>23</b>	
		Votes by interest categories	6	CP
			4	MP
			2	DR
			9	U
			2	G

### 3 Approval of the minutes from the previous meeting

(See document EP/2009-7003, file EPmin01-2009.pdf.)

Roger Lattin moved that the draft minutes be approved as written. The motion was seconded and then 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."

No protected intellectual property was brought to the attention of the working group.

## **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 Technical Standards Manager held up one of the easy-to-read pamphlets to show its availability.

No restraint of trade issues were reported to the assembly.

## **6 Approval of agenda**

Eddie Kramer moved that the 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**

Ken Vannice read aloud from a handwritten report:

"To start, remember that the harmonics discussion has two parts: power line frequencies and radio frequencies. In the US power frequency issues are voluntary and radio frequency issues are controlled by the FCC.

"1) Canada and the the IEC 61000-3-2 & 12 Adoption

The Canadian power companies tried an end-run with the CSA, but the CSA said No. This is a power frequency issue.

"2) The NEMA lighting division has formed an EMI/EMC task group. I [Ken Vannice] have been asked by Leviton to participate. Ed Yandek, our friend, is on this group but is setting up his retirement.

"On the radio frequency front the international companies are asking to be allowed to substitute CISPR15 (the international standard) for FCC CFR 47 Part 18 covering ballasts. The argument is that Canada and Mexico want to do this. We are looking into allowing this, providing both are acceptable in all three countries. We are trying to set up a workshop at a testing lab to see how the measurements are different.

"We have several other items on the agenda, but they aren't developed enough yet."

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

No news or action.

## **7.3 BSR E1.18 portable feeder cable selection and use**

### **7.3.1 E1.18-1 public review report**

(See the unsorted, unprocessed comment files, CmmntsE1-18-1pr2.zip.)

Mitch Heffer said that the only action that can be taken at this point is to appoint a task group to work on drafting some possible comment resolutions. Jerry Gorrell and George Long were appointed. Jerry Gorrell agreed to a goal of July for the first draft of the comment resolutions.

### **7.3.2 E1.18-2 progress report**

(From the January minutes: " 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.")

Roger Lattin presented a memo that read:

"Due to several political issues around the use of loop circuits in Hollywood we would like to temporarily put E 1.18 -2 Loop Circuits on the back burner until at least next year. During the last meeting of the Electrical Power Working Group there were some issues discussed that we need to address in Hollywood. After many local discussions what we would like to do is:

- "1. Develop an internal policies and procedures document for the use of loop circuits in Hollywood for our local.
- "2. Get our internal document endorsed by the AMPTP and our AHJs.
- "3. Bring the document back into the ESTA / ANSI process for adoption after the usual document approval procedures.

"We will keep the Electrical Power Working Group apprised of the Loop Circuit document progress and ask for assistance from the wealth of knowledge available through out this group."

Alan M. Rowe, the alternate representative for I.A.T.S.E. Local 728, agreed that this is what his Local would like to see done with the project.

Steve Terry moved that the working group endorse the memo presented by Roger Lattin and remove BSR E1.18-2 as an active project from the EPWG agenda. The motion was seconded and then approved with a unanimous show of hands.

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

Karl Ruling reported that the ESTA Board had approved accepting BSR E1.19 as an American National Standard but that submitting it to ANSI has been held pending the completion of an appeal by Keith Woods.

## **7.5 ANSI E1.24-2006, pin connectors**

Steve Terry reported that a proposal to have UL 498 reference ANSI E1.24 was submitted to the 498 STP, but received some negative comments from Dave Lutz of Hubbell. He rejected it as not appropriate for adoption. Now a formal vote is being held. Terry said that Chuck Kurten reported that he doesn't think its adoption is likely to reach consensus.

Ken Vannice reported that he had found a defect in the standard in trying to respond to the comments to from the STP. The problem is the 240 volt Mole-Richardson connector and the designation of the the ground pin location and length.

There was a discussion of what to do. Terry thinks that it is highly unlikely that UL will adopt E1.24 as it is.

Steve Terry moved that we will start the revision process for E1.24. The motion was seconded and then approved with a unanimous show of hands.

The chairman appointed a task group of: Steve Terry, Mitch Hefter, Phil Gallo, Roger Lattin, Eddie Kramer, and Tyrone Mellon. Terry emphasized that the task group will be working on Internet time, with conference calls, et cetera, so the revised document is done by the next meeting.

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

Jerry Gorrell reported that we have a draft set of comment resolutions (E1-32CmmentResolutions.pdf) and a revised draft document (BSR\_E1-32\_2006-7016r4.pdf). The draft comment resolution has a lot of educational material because some people do not understand the purpose of the project.

Steve Terry raised questions about the resolutions to some of the comments, particularly comment 11, where it says:

"This standard should document current best practices, not define major new requirements. As it is written, the document goes far beyond the current practices of any entertainment company with which I am familiar.

"Eric Johnson

"RESOLUTION: Reject

"See resolution to comment #9. Part of the reason for this document is that the working group believes that current industry practices are not sufficient."

There was discussion about whether current industry practices are indeed not sufficient. Further questions were about what the supporting evidence is for the recommended testing frequencies.

There was a lengthy discussion of the scope of the document (who it would affect) and finding a balance between making recommendations that will help assure a safe workplace if followed and yet would not be so onerous that they would in fact not be followed.

Steve Terry moved that specific references to rental houses and rental operations be removed. The motion was seconded. Gorrell spoke in favor of the motion, saying that renters can add the inspection requirements to the rental order, or not, as the equipment user decides. The market can then decide. The motion was approved with a show of hands, with all voting yes, except for one abstention.

Steve Terry moved that the working group direct the task group to adopt scenario-based inspection frequency recommendations. There was discussion, and the motion was seconded by discussion. The motion was accepted with a show of hands. "Routine" and "comprehensive" were two words often used in the discussion, and Jerry Gorrell remarked that they were useful.

Jerry Gorrell moved that revised sections 1 and 2 shall be sent to the working group with a 21-day letter ballot for accepting them. Comments and reasons shall be recirculated for two weeks. Acceptance by a supermajority shall decide the question. If the motion fails, the task group shall revise sections 1 and 2 to address the comments and reasons, and shall try again. The motion was seconded by discussion. It was approved with a show of hands.

Jerry Gorrell asked if we should include as an appendix addition the OSHA regulations. The sense of the group was that we not do this.

#### **8 New business**

Mike Lay mentioned that there seemed to be two different pin-outs used in the industry with 19-pin socapex connectors and break-outs. One is for 208-volt equipment and the other is for 120-volt equipment. It makes it so that 120-volt breakouts can't be used with 208-volt circuits.

There was discussion but no motions were offered.

#### **9 Other business**

Powerhouse One is being dismantled at the Paramount lot, reported Roger Lattin.

#### **10 Schedule for future meetings**

Mitch Hefter reported that the next meeting is scheduled for the morning of Friday, 17 July 2009, at the Marriott Solana, in Westlake, Texas.

#### **11 Adjournment**

Mike Lay moved that the meeting adjourn. The motion was seconded and then approved with a show of hands. Mitch Hefter declared the meeting adjourned at 12:03.

**Working Group Membership and Contact Information as of 7 May 2009**

<b>Name</b>	<b>Company</b>	<b>Representing (Primary sort field.)</b>	<b>Voting status</b>	<b>Int. cat.</b>
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
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
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
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



<b>Name</b>	<b>Company</b>	<b>Representing (Primary sort field.)</b>	<b>Voting status</b>	<b>Int. cat.</b>
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
Jody Williquette	Harting Inc, North America	Harting KGAA	O	G
Ed Garstkiewicz	Harting Inc, North America	Harting KGAA	O	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.	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	Leviton Manufacturing Co., Inc.	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

<b>Name</b>	<b>Company</b>	<b>Representing (Primary sort field.)</b>	<b>Voting status</b>	<b>Int. cat.</b>
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

Name	Company	Representing (Primary sort field.)	Voting status	Int. cat.
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 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	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