

**Minutes**  
**Electrical Power Working Group**  
Saturday, 19 July 2008  
Pace University  
New York, NY

**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:** George Long; Aggreko Event Services (Aggreko); P; DR  
Wendy Holt; Alliance of Motion Picture and Television Producers; P; G (joined at this meeting)  
Joe Boardman; Bender Inc. (Bender GmbH & Co. KG); A; MP  
Paul Menetrey; Bender Inc. (Bender GmbH & Co. KG); A; MP  
Louis Bradfield; I; U  
Elizabeth E. (Lizz) Chancellor; I; U  
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; IATSE Local 1; P; U  
Roger Lattin; IATSE Local 728; P; U  
Alan M. Rowe; IATSE Local 728; A; U  
Keith S. Woods; Lakhri Impressions Ltd., representing IATSE Local 891; P; U  
John (Javid) D. Butler; Integrated Theatre, Inc.; P; CP  
Bob Luther; Lex Products Corp.; P; CP  
Ron Bonner; PLASA; P; U  
David Herrmann; Motion Laboratories; A; CP  
Peter Herrmann; Motion Laboratories; A; CP  
Michael Lay; Strand Lighting (Royal Philips Electronics); P; MP  
Jerry Gorrell; Theatre Safety Programs; P; U

**Visitors:** Phillip Gallo; TMB  
Harvey Holt; CBS

**1 Opening remarks**

Mitch Hefter called the meeting to order at 14:02.

**2 Attendance and membership**

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

Those present introduced themselves while a blue sign-in sheet was circulated.

**2.2 Determination of quorum**

Mitch Hefter counted the number of voters present and announced that there was a quorum and business could be conducted.

**2.3 Recognition of alternate voting members**

Mitch Hefter asked for alternates to raise a hand. He reminded people that there is only one vote allowed per company or other voting entity.

**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. They also may not miss three letter ballots in a row."

## 2.5 Processing of new membership requests

The following applications had been received:

Dominic Vincenty; Television Production Services; observer; dealer/rental company  
Wendy Holt, AMPTP; principal; general interest

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

There was a discussion of how to bring in more non-manufacturers as voting members.

The voting body during the period of 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
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
Stephen J. Kay	K-Tec Corporation	K-Tec Corporation	P	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
Kenneth M. Makowski	Lex Products Corp.	Lex Products Corp.	A	CP
Tyrone Mellon Jr.	Lex Products Corp.	Lex Products Corp.	A	CP
Louis Bradfield	Louis Bradfield	Louis Bradfield	I	U
Jeff deRecat	Marinco/ADI	Marinco	P	MP
William Drake	Marinco	Marinco	A	MP
Michael J. Carnaby	Mikan Theatricals	Mikan Theatricals	P	DR
W. G. Krokaugger, P. E.	Mole-Richardson Co.	Mole-Richardson Co.	P	CP

Name	Company	Representing	Voting status	Int. cat.
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
Stephen Vanciel	Stephen Vanciel	Stephen Vanciel	P	U
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
Richard Wolpert	Union Connector Company (MO)	Union Connector Company	P	CP
Mitch Hefter	Entertainment Technology (Royal Philips Electronics)	USITT	P	U
William L. Maiman	William L. Maiman	William L. Maiman	P	U
		Total possible votes	27	
		Possible votes by interest category	7	CP
			6	MP
			2	DR
			10	U
			2	G

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

See document EP/2008-7006, file EPmin03-2008.pdf.

Steve Terry moved that the draft minutes be accepted as written. The motion was seconded and then approved with a unanimous show of hands. There were no abstentions or negative votes.

### 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 group.

### 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."

Karl Ruling, the Technical Standards Manager, held up one of the easy-to-read pamphlets.

No restraint of trade issues were brought to the attention of the assembly.

## **6 Approval of agenda**

Steve Terry asked that a discussion of NFPA 70E on manufactured dimming systems be added to the agenda, along with a call for NEC proposals.

Keith Woods moved that the agenda so modified be accepted. The motion was seconded and then approved with a unanimous show of hands.

## **7 Old business - task group reports**

### **7.1 EMC task group**

Ken Vannice reported on the past CSA proposal to adopt the IEC 61000-3-2 in North America. He said that there is a meeting to discuss it in Mississauga on September 26. He and Steve Terry will attend, with Terry representing ESTA.

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

No news or action needed.

### **7.3 BSR E1.18-1 portable feeder cable selection and use**

The comments and reasons from the public review of 11 April through 26 May 2008 were discussed.

Steve Terry moved that the working group reject the comments that urge reverting E1.18-1 to the original document, E1.18, version r10.2. The motion was seconded. There was discussion. By a show of hands, the motion passed with a simple majority, with 11 voting in favor, three against, and four abstentions.

Eddie Kramer moved that the working group work en masse to resolve the comments, with a task group to draft a rough document for the working group to consider, point by point, at LDI. The motion was seconded. By a show of hands, the motion passed with a simple majority, with 10 voting in favor, seven against, and one abstention.

A new task group consisting of George Long, Javid Butler, Liz Chancellor, and Jerry Gorrell was appointed by Mitch Hefter. Javid Butler moved that this task group be accepted. The motion was seconded and then approved with a show of hands. The consensus was that suggested text could come from the other working group members. This text would be sent to Karl Ruling, who would then send it to the task group.

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

The comments from the public review of 11 April through 26 May 2008 were discussed. There were few comments and all were from one commenter. Resolutions were drafted at the meeting.

Javid Butler moved that the resolutions (document number EP/2008-7013) be accepted. The motion was seconded. The motion was accepted by a supermajority of the working group, with a show of hands. Eighteen voted in favor, none voted against, and there were no abstentions. A majority of the entire voting body was 14 or more votes, and 18 exceeded that.

Javid Butler moved that the last public review document of BSR E1.19 (document number EP/2001-7012r14) be accepted as an American National Standard. The motion was seconded. The question will be decided by letter ballot to allow all voting members, not simply those at this meeting, to have an opportunity to vote on the final acceptance of the document.

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

No news or action was needed.

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

The TSC had approved the second public review, reported Ruling. He will file the request for a public review announcement in ANSI's *Standards Action* after this weekend of meetings.

## **8 New business**

Steve Terry reported that some analyses of arc flash hazards are finding that a dimmer rack with replaceable modules could have a worker replacing a module within the arc-flash boundary. The fault current (>50,000 amps) is high enough that very heavy protective gear is needed. He reported that TÜV is also pushing toward requiring lock-out/tag-out for a worker to replace a dimmer module. Terry feels that dimmer manufacturers should be aware of this, and write lock-out/tag-out procedures into their user manuals.

Eddie Kramer said that 120 volt to ground does not pose that much of a problem because the arc is not self-sustaining. Roger Lattin noted that the arc flash can only happen when the module is unplugged, and at that point the module protects the worker. Terry said that the big problem is not in the unplugging, but in the plugging. If the module has a dead short, there could be an arc-flash explosion as the dimmer module is put in.

Terry said that the consultants referencing NFPA 70E are seeing a possible problem. Ken Vannice said that he had not heard of any arc-flash incidents with Colortran Leviton equipment. Michael Lay said that Strand Lighting also had not seen arc-flash problems with dimmer modules in the field.

Terry argued that if there is a problem being identified by arc-fault consultants, there needs to be an industry response.

## **9 Other business**

Steve Terry and Mitch Hefter issued a call for NEC proposals. People with proposals were invited to send them to Ken Vannice to have them included in the USITT NEC proposal project.

## **10 Changes to observer status**

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

None now, but Stephen J. Kay of K-Tec Corporation; Louis Bradfield; Jeff deRecat and William Drake of Marinco; and William L. Maiman missed the last letter ballot.

### **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:

Keith S. Woods and Simon Hunt of IATSE Local 891  
Jeff deRecat and William Drake of Marinco  
Stephen Vanciel

Keith Woods was present.

Mitch Hefter announced that Jeff deRecat and William Drake of Marinco and Stephen Vanciel were now moved to non-voting observer status due to their lack of regular attendance.

## **11 Schedule for future meetings**

Mitch Hefter announced that the next meeting is scheduled for Friday, 24 October 2008, from 19:00 to 23:00 at Harrah's Las Vegas. The following meeting will be Friday, January 23, from 9:00 to noon at the Dallas/Ft. Worth Marriott Solana at 5 Village Circle in Westlake, TX 76262. It is further from the

airport, so it takes longer to get to the Solana than it did to the Dallas/Ft. Worth Airport Marriott South, but there is a free shuttle service.

**12 Adjournment**

Steve Terry 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 16:53.

## Working Group Membership and Contact Information as of 6 August 2008

Name	Company	Representing (This is the sort field.)	Vote stat.	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
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
Stephen J. Kay	K-Tec Corporation	K-Tec Corporation	P	MP
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
Reinhold Luther	Lex Products Corp.	Lex Products Corp.	O	CP
Kenneth M. Makowski	Lex Products Corp.	Lex Products Corp.	A	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
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	P	DR
W. G. Krokaugger, P. E.	Mole-Richardson Co.	Mole-Richardson Co.	P	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

Name	Company	Representing (This is the sort field.)	Vote stat.	Int. cat.
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
Mac Perkins	PNTA Inc.	PNTA Inc.	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
Colin Waters	TMB	TMB	O	MP
Richard Wolpert	Union Connector Company (MO)	Union Connector Company	P	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