

**Minutes**  
**Electrical Power Working Group**

Friday, 14 January 2005  
Dallas/Ft. Worth Airport Marriott South  
Ft. Worth, Texas

**Chairmen:** Ken Vannice; Colortran (Leviton Manufacturing Co., Inc.); P; MP  
Bob Luther; Lex Products Corp.; P; CP

**Recording secretary:** Karl G. Ruling; ESTA

**Members attending:** James Davey; AC Power Distribution Inc.; A; CP  
Arnold Tang; Arnold Tang Productions; O; G  
Paul Menetrey; Menetrey Partners (Bender GmbH & Co. KG); A; MP  
Steve Terry; Electronic Theatre Controls, Inc.; P; MP  
Art Wanuch; M.C. Lights & Manufacturing, Ltd., representing the Entertainment  
Electrical Safety Committee of Ontario; O; G  
Pat Miller; Hubbell Wiring Devices (Hubbell Inc.) ; P; MP  
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U  
Roger Lattin; I.A.T.S.E. Local 728; P; U  
Stephen J. Kay; K-Tec Corporation; P; MP  
Louis Bradfield; I; U  
Jeff deRecat; Marince/ADI (Marince); P; MP  
Nic Bowker; PLASA; P; G (joined at this meeting)  
Michael Lay; Strand Lighting (Strand Lighting Ltd.); P; MP  
Jerry Gorrell; Theatre Safety Programs; P; U  
Michele Yindrick; TMB; P; MP  
Mitch Hefter; Entertainment Technology (Genlyte Group), representing USITT; P; U  
William L. Maiman; P; U

**Visitor:** Ian Foulds; IATSE local 873

**1 Opening remarks**

Ken Vannice called the meeting to order at 08:04.

**2 Attendance and membership**

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

Those present introduced themselves. While they did this, a pink and green attendance sign-in sheet was circulated.

**2.2 Determination of quorum**

Ken Vannice asked for a show of voters' hands. He counted thirteen, and announced that a quorum was present so business could be conducted.

**2.3 Recognition of alternate voting members**

Alternates were reminded that only one person from their company could vote on a question. Principals and alternates may not both vote on the same question.

**2.4 Requirements for membership**

Ken Vannice reminded the assembly that membership is open to all who are affected by the work of the group. 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 letter ballots without a loss of voting status.

## 2.5 Processing of new membership requests

Bob Luther read the new applications aloud. Applications had been received from:  
 William Drake of Marinco, applying as an alternate in the MP interest category  
 Nick Bowker of PLASA, applying as a principal in the general interest category

Mitch Hefter moved that the applications be accepted. The motion was seconded. The motion was approved with an unanimous show of hands.

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

Name	Company	Representing	Voting status	Int. cat.
Michael Amorelli	AC Power Distribution Inc.	AC Power Distribution Inc.	P	CP
James Davey	AC Power Distribution Inc.	AC Power Distribution Inc.	A	CP
George Long	Aggreko Event Services	Aggreko	P	DR
Kenny Delahoussaye	Aggreko	Aggreko	A	DR
Wolfgang Hofheinz	Bender GmbH & Co. KG	Bender GmbH & Co. KG	P	MP
Joe Boardman	Bender Inc.	Bender GmbH & Co. KG	A	MP
Paul Menetrey	Menetrey Partners	Bender GmbH & Co. KG	A	MP
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	P	MP
Pat Miller	Hubbell Wiring Devices	Hubbell Inc.	P	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
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
Louis Bradfield	Louis Bradfield	Louis Bradfield	I	U
Jeff deRecat	Marinco/ADI	Marinco	P	MP
Bud Toly	Marinco/ADI	Marinco	A	MP
William Drake	Marinco	Marinco	A	MP
W. G. Krokaugger P.E.	Mole-Richardson Co.	Mole-Richardson Co.	P	CP
Nic Bowker	PLASA	PLASA	P	G
William N. Masten	SMS Inc. / PGS LLC	SMS Inc. / PGS LLC	P	CP
Richard A. Prey	SMS Inc. / PGS LLC	SMS Inc. / PGS LLC	A	CP
Michael Lay	Strand Lighting	Strand Lighting Ltd.	P	MP
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
Richard D. Thompson	Thompson Associates	Thompson Associates	P	G
Michele Yindrick	TMB	TMB	P	MP
Colin Waters	TMB	TMB	A	MP
Mitch Hefter	Entertainment Technology (Genlyte Group)	USITT	P	U
William L. Maiman	William L. Maiman	William L. Maiman	P	U
			21	total
			8	MP
			4	CP
			1	DR
			6	U
			2	G

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

Mitch Heffer moved that the minutes of the October 2004 meeting be accepted as written. The motion was seconded. The motion was approved with a unanimous show of hands.

### **4 Reading of the call for patents**

Ken Vannice read the following statement aloud to the assembly.

"ESTA intends to publish no standard that contains protected intellectual property, unless that property can be licensed by anyone for a reasonable fee. ESTA uses a process of open patent disclosure to implement this intent. ESTA does not conduct patent searches and does not warrant that its standards contain no protected intellectual property.

"In keeping with the open disclosure policy, I ask if anyone present wishes to notify the working group of the existence of a patent or copyright that might protect material in a standard being developed by the working group. You need not be the holder of the patent or copyright in order to notify the working group of its existence."

No protected intellectual property issues were 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 \$100,000 and imprisoned for up to three years. An easy to read pamphlet describing restraint of trade issues is available from the Technical Standards Manager."

Karl Ruling held up a couple of the easy-to-read pamphlets. No restraint of trade issues were brought to the attention of the assembly.

### **6 Approval of agenda**

Ken Vannice asked for a motion to approve the draft agenda.

Eddie Kramer asked that we add under New Business a discussion of the dissemination of unapproved draft documents outside the working group. Someone else suggested that we should have an update on UL 1573.

Eddie Kramer moved that the draft agenda be approved with the addition of a discussion under New Business of the dissemination of unapproved draft documents outside the working group, and with an update on UL 1573 under Other Business. The motion was seconded. The motion was approved with a unanimous show of hands.

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

#### **7.1 EMC task group**

No news from the US interest group, reported Ken Vannice

Steve Terry reported that Adam Bennette is now on the British committee that deals with mains harmonic emissions. He will attend meetings and prepare a report for the entertainment industry.

#### **7.2 BSR E1.24 pin connectors**

Ken Vannice reported that the TSC will vote on the motion to offer it for public review at the TSC meeting later this day. The working group had approved the public review motion by letter ballot. [See

the "Summary of Electrical Power Working Group Letter Ballot for Public Review of BSR E1.24, Entertainment Technology —Dimensional Requirements for Stage Pin Connectors," document number EP/2004-7008.]

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

Eddie Kramer said that the majority of the task group wants to offer the draft document (EP/2002-7003r6) for public review. Steve Terry said he was the member of the task group opposed to this motion. He listed his reasons why. Most of these dealt with the document still containing esoteric information that makes the document hard to understand and the mixture of motion picture practices with live entertainment practices. It also contains many editorial errors. Ken Vannice noted that clause 1.1 says the document has four parts, but that only three are listed. Jerry Gorrell held up his marked up copy, which bristled with Post-It notes. He argued that the number of notes indicated that the document in his opinion is not ready for public review.

There was a discussion of whether the document now reflects the directions given by the working group at the March 2004 meeting. Ken Vannice read from the minutes of the March meeting:

*"Steve Terry moved that the scope be changed to read: "This document shall encompass the selection, installation, and safe use of single-conductor portable power feeder cable systems used in the entertainment and live-event industries with a portable power distribution system operating at less than 601 volts nominal." The motion was seconded. The motion was approved by a show of hands. This vote and the following votes were restricted to voting members.*

*"Steve Terry moved that all voltage drop and temperature correction tables be moved into annexes. The motion was seconded. The motion was approved by a show of hands.*

*"Steve Terry moved that items that are in conflict with the National Electrical Code (NFPA 70) be removed or changed to conform to the National Electrical Code. The motion was seconded. The motion was discussed. Eddie Kramer listed several common industry practices that do not conform to the requirements of the NEC, but that have excellent safety records. Steve Terry and Ken Vannice suggested that the NEC needs to be changed if there are conflicts between it and what is considered common, good practice in the industry. By show of hands, the vote was seven in favor and seven against, with no abstentions. (Jerry Gorrell was now present.) The motion failed.*

*"Steve Terry moved that arguments be provided in the document for the unusual recommendations in the document, particularly those in conflict with the NEC. The motion was seconded. There was discussion. The motion carried by a show of hands, with 12 voting in favor, 1 against, and 1 abstention."*

A straw poll was held to see how many thought it was ready for public review. The poll indicated that a letter ballot vote for public review would fail. There was no formal motion for public review.

There was much praise for the document, too. Ken Vannice said it is now a complete document so we can work on it.

A task group meeting was planned for the following day (January 15) with Steve Terry offering to buy lunch. There was again an urging from the chairman Ken Vannice on the need for working group members to offer comments.

There was further discussion of the draft document, after which there was a 15 minute break.

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

Bob Luther reported that the document was distributed to the task group in late November and that the task group also had a meeting last night [January 13]. He described the discussions of the meeting.

They have limited the use of Class A GFCIs to circuits of 100 A or less. The question of setting a distance for how close to water equipment must be for GFCI to be required to be used was settled by not specifying a distance. Whether GFCI is needed or not would then be decided on a case-by-case basis by the user and AHJ.

Bob Luther said he would like to incorporate the changes agreed upon at last night's meeting into a document that would be circulated to the working group in about three weeks.

## **8 New business**

### **8.1 NFPA 140**

Richard Thompson had asked for this item to be on that agenda, but Thompson was not present for health reasons. Roger Lattin explained the problem, which is that some AHJs are uncomfortable with on-location film and video shoots. These are not covered by NFPA 140, so a proposal has been put forth for NFPA 1 to cover on-location shoots. According to a fax from Richard Thompson, this proposal has been moved back into NFPA 140, which has people on it familiar with production practices.

Karl Ruling said he'd monitor this and report on it in Standards Watch.

### **8.2 Dissemination of unapproved documents.**

Eddie Kramer complained that he'd seen the E1.18 draft listed on a bibliography. Ken Vannice explained that this bibliography was for the electrical skills working group and that it was listed in anticipation of the standard being published. Its listing was a "place holder"; no one is teaching from the draft document.

There was discussion of the distribution of draft documents. Ruling said that since none of our work can be done in secret, that he will distribute draft documents to people outside the working group if the documents are specifically requested. He does this while pointing out that the documents are marked "draft" and are unapproved and may contain errors. He always distributes the last version sent to public review, unless no such version exists. Steve Terry said that he didn't think any pre-public review version should be distributed.

There were no motions offered.

## **9 Other business**

### **9.1 UL 1573**

Ken Vannice reported that he'd told Diana Pappas Jordan (STP 1573 Chair) that the STP wants this to be an ANSI standard. He described his conversations with UL administrators about the strengths and weaknesses of another project manager, Steven Holmes. These conversations included discussions of the willingness for UL to assume risk. If a standard is a UL standard, the liability falls entirely on UL. If a standard is an American National Standard, it's an industry consensus standard, and UL's liability is much less. There was a discussion of the probability that UL will or will not take 1573 into the ANSI process. There was a discussion of how we might proceed if UL declines.

Terry pointed out that with UL 1573, UL has the Standards Technical Panel rising up in revolt against UL staff and insisting that a project become an ANSI standard. He suspects that UL has never been confronted with this before.

### **9.2 CANENA**

There also was a discussion of the CANENA project. Lattin complained that the minutes of the summer CANENA meeting had not been distributed to the group. Also, the meeting that was supposed to be held in conjunction with this current set of TSP meetings had been cancelled. The general question was "What's up with CANENA?" Ken Vannice said that he would try to find out

#### **10 Changes to observer status with third meeting missed**

Members who have missed the previous two meetings:

Richard A. Prey and William N. Masten of SMS Inc. / PGS LLC

Karl Ruling announced that, per our procedures for this working group, they are now observers since they have failed to meet the minimum attendance requirements for voting members. He noted that Bill Masten is seriously ill, and this has kept him from attending. However, when the principal is unable to attend meetings, the alternate (Richard A. Prey) is supposed to attend. He has not done so.

#### **11 Schedule for future meetings**

Ken Vannice announced that the next working group meeting is scheduled for Wednesday, 16 March 2005, from 08:00 to noon at the Fairmont Royal York Hotel in Toronto, Ontario. The following meeting will be Friday, 29 July 2005, from 08:00 to noon, at the Dallas/Ft. Worth Airport Marriott South in Ft. Worth, Texas, with a GFCI task group meeting the previous evening, July 28, from 19:00 to 23:00.

#### **12 Adjournment**

Steve Terry moved that the meeting adjourn. The motion was seconded. The motion was approved by a unanimous show of hands. Ken Vannice declared the meeting adjourned at 10:45.

**Working Group Membership and Contact Information as of 2005-02-02**

Name	Company	Representing (This is the sort field.)	Vote stat	Int. cat.
Michael Amorelli	AC Power Distribution Inc.	AC Power Distribution Inc.	P	CP
James Davey	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	A	DR
Mike Skinner	CBS Studio Center	Alliance of Motion Picture and Television Producers	O	U
Arnold Tang	Arnold Tang Productions	Arnold Tang Productions	O	G
Lowell R. Nutter	Array Connector Corp.	Array Connector Corp.	O	MP
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	Menetrey Partners	Bender GmbH & Co. KG	A	MP
Lee J. Bloch	Blue Sky Design, Ltd.	Blue Sky Design, Ltd.	O	G
Wayne Kowalski	Coleman Cable Inc.	Coleman Cable Inc.	O	MP
Jeffrey Measley	Crouse Hinds Molded Products	Cooper Crouse Hinds Molded Products Inc.	Ø	MP
Stewart Cox	Crouse Hinds Molded Products	Cooper Crouse Hinds Molded Products Inc.	Ø	MP
Ron Dahlquist	Dadco	Dadco	O	MP
Don Earl	Earl Girls, Inc.	Earl Girls, Inc.	O	DR
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	P	MP
Art Wanuch	M.C. Lights & Manufacturing, Ltd.	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.	P	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
Gian Carlo C. Bartolotti	Ibeam SP / Banco de Eventos	Ibeam SP / Banco de Eventos	O	U
Bill Kanne	Illumination Dynamics	Illumination Dynamics	O	U
Kevin Stolpe	Illumination Dynamics	Illumination Dynamics	O	U
Stephen J. Kay	K-Tec Corporation	K-Tec Corporation	P	MP
Jose J. Flores	Kino Flo, Inc.	Kino Flo, Inc.	O	MP
Don Gray	Kohler Event Services	Kohler Co.	O	U
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
Louis Bradfield	Louis Bradfield	Louis Bradfield	I	U
Jim Holladay	Luxence	Luxence	O	G
Jeff deRecat	Marinco/ADI	Marinco	P	MP
Phil Fram	Marinco	Marinco	O	MP
Bud Toly	Marinco/ADI	Marinco	A	MP
William Drake	Marinco	Marinco	A	MP
Hiroshi Kita	Marumo Electric Co., Ltd.	Marumo Electric Co., Ltd.	O	MP
Michael Klein	Metropolitan Engineering, Inc.	Metropolitan Engineering, Inc.	O	G
W. G. Krokaugger P.E.	Mole-Richardson Co.	Mole-Richardson Co.	P	CP

Name	Company	Representing (This is the sort field.)	Vote stat	Int. cat.
Chris Guptill	Ohlone College	Ohlone College	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
Nic Bowker	PLASA	PLASA	P	G
James Eade	PLASA	PLASA	O	G
Mac Perkins	PNTA Inc.	PNTA Inc.	O	G
Richard Thornton Brown	i Light Group	Polaron PLC	O	MP
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
William N. Masten	SMS Inc. / PGS LLC	SMS Inc. / PGS LLC	O	CP
Richard A. Prey	SMS Inc. / PGS LLC	SMS Inc. / PGS LLC	O	CP
Robert Barbagallo	Solotech Inc.	Solotech Inc.	O	DR
Stephen Vanciel	Stephen Vanciel	Stephen Vanciel	O	U
Michael Lay	Strand Lighting	Strand Lighting Ltd.	P	MP
Reuben Goldberg	Technic Services	Technic Services	O	U
Andy Topinka	Technical Group Services, Inc.	Thea & Schoen, Inc.	O	G
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
Richard D. Thompson	Thompson Associates	Thompson Associates	P	G
Michele Yindruck	TMB	TMB	P	MP
Colin Waters	TMB	TMB	A	MP
Richard Wolpert	Union Connector Company	Union Connector Company	O	CP
Mitch Hefter	Entertainment Technology (Genlyte Group)	USITT	P	U
Eckart Steffens	SOUNDLIGHT	VPLT	O	G
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

The Crouse-Hinds Molded Products representatives have left the company and so are struck from this membership list. Email sent to them is rejected by the Crouse-Hinds email system, and a telephone call to the company on 02 February 2005 resulted in the receptionist saying they were both no longer employed by Crouse-Hinds.