

**Minutes**  
**Electrical Power Working Group**  
Friday, 02 August 2013  
D/FW Marriott Solana  
Westlake, TX

**Presiding chairman:**

Mitch Hefter; USITT; P; U

**Recording secretaries:**

Erin Grabe; PLASA  
Karl G. Ruling; PLASA

**Members attending:**

Matthew Antonucci; Contract Services Administration Trust Fund; P; U  
Don Earl; Earl Girls, Inc.; O; DR  
Ed Garstkiewicz; Harting Inc., North America (Harting KGAA); P; G  
Jerry Gorrell; Theatre Safety Programs; P; U  
Tyrone Mellon\_Jr.; Lex Products Corp.; P; CP  
Edwin S. Kramer; I.A.T.S.E. Local 1; P; U  
Roger Lattin; I.A.T.S.E. Local 728; P; U  
Michael Lay; Philips Color Kinetics (Royal Philips); P; MP  
Nathan Leonard; Bender Group (Bender GmbH & Co. KG); P; MP  
Alan M. Rowe; IATSE Local 728; A; U  
Larry Schoeneman; DesignLab Chicago, Inc.; P; DR (arrived at 9:53)  
Steve Terry; Electronic Theatre Controls; P; MP  
Ken Vannice; Ken Vannice LLC; I; G  
Art Wanuch; Entertainment Electrical Safety Committee of Ontario; P; G  
Alex Yoon; Mole-Richardson Co.; A; CP

**Visitors:**

None

**1 Opening remarks**

The meeting was called to order by Mitch Hefter at 8:03. He welcomed everyone to hot Texas.

**2 Attendance and membership**

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

An orange sign-in sheet was passed clockwise while self-introductions took place counterclockwise.

**2.2 Determination of quorum**

Mitch Hefter asked for voting members to raise a hand. He counted them and announced that quorum present.

**2.3 Recognition of alternate voting members**

Mitch Hefter asked alternate voting members to raise and hand for recognition. He noted that Alan Rowe and Roger Lattin both were present. Only one would be allowed to 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. Voters who would be in the designer or 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 or three consecutive letter ballots 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:

Richard Cadena; Academy of Production Technology; G

Jody Williquette; Electrivot, Inc.; CP

Keith S. Woods & Simon Hunt; IATSE Local 891; U

Vincent J. Cannavale, Peter Herrmann, & David Herrmann; Motion Laboratories; CP

None of the listed voters were present. Mitch Hefter announced that they were now moved to observer status.

## 2.6 Processing of new membership requests

Matthew Antonucci; Contract Services Administration Trust Fund; P; U

Ken Vannice; Kenneth Vannice LLC; I; G

Steve Terry moved to approve these applicants. Eddie Kramer seconded the motion which was then unanimously approved by a show of hands. (13 voters was a unanimous vote before a tardy voter arrived.)

## 2.7 Consensus body

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

Name	Representing	Voting status	Int. cat.
James Davey	AC Power Distribution Inc.	P	CP
Greg Mayberry	AC Power Distribution Inc.	A	CP
Jeff deRecat	Actuant Corporation	P	MP
William Drake	Actuant Corporation	A	MP
Nathan Leonard	Bender GmbH & Co. KG	P	MP
Joe Boardman	Bender GmbH & Co. KG	A	MP
Torsten Gruhn	Bender GmbH & Co. KG	A	MP
Stephen (Steve) Brock	Bender GmbH & Co. KG	A	MP
Matthew Antonucci	Contract Services Administration Trust Fund	P	U
Larry Schoeneman	DesignLab Chicago, Inc.	P	DR
Steve Terry	Electronic Theatre Controls, Inc.	P	MP
Art Wanuch	Entertainment Electrical Safety Committee of Ontario	P	G
Ian Foulds	Entertainment Electrical Safety Committee of Ontario	A	G
Rodger Dean	Entertainment Electrical Safety Committee of Ontario	A	G
Ed Garstkiewicz	Harting KGAA	P	G
Howard Forryan	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
R. Bruce Prochal	I.A.T.S.E. Local 728	A	U

Name	Representing	Voting status	Int. cat.
Patric J. Abaravich	I.A.T.S.E. Local 728	A	U
Alan M. Rowe	I.A.T.S.E. Local 728	A	U
Ken Vannice	Ken Vannice LLC	I	G
Bill Grande	Leviton Manufacturing Co., Inc.	P	MP
Tyrone Mellon_Jr.	Lex Products Corp.	P	CP
Bob Luther	Lex Products Corp.	A	CP
Sean Sloat	Lex Products Corp.	A	CP
Louis Bradfield	Louis Bradfield	P	U
Brian Eustace	Mole-Richardson Co.	P	CP
Alex Yoon	Mole-Richardson Co.	A	CP
Michael Lay	Royal Philips	P	MP
Jerry Gorrell	Theatre Safety Programs	P	U
Mitch Hefter	USITT	P	U
Jeff T. Miller	Walt Disney Company	P	U
<b>Total votes possible</b>		<b>19</b>	
<b>Votes by interest category:</b>			
	<b>CP</b> (Custom-market Producer)	3	CP
	<b>DE</b> (Designer)	0	DE
	<b>DR</b> (Dealer or Rental company)	1	DR
	<b>G</b> (General)	3	G
	<b>MP</b> (Mass-market Producer)	5	MP
	<b>U</b> (User)	7	U

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

See the draft minutes of the 20 March 2013 meeting, *EPmin03-2013.pdf*

Eddie Kramer moved to approve the minutes of the last meeting as written. Steve Terry seconded the motion and it was approved by a show of hands with one abstention.

### 4 Reading of the call for patents

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

PLASA intends not to publish any standard that contains protected intellectual property, unless that information can be licensed by anyone for a reasonable fee. PLASA uses a process of open patent and copyright disclosures to implement its intent. PLASA 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.

Nothing was reported.

## **5 Reading of the anti-trust statement**

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

The PLASA Board of Directors, the Technical Standards Council, 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 PLASA chairman immediately.

PLASA 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.

A copy of the pamphlet was held up by Erin Grabe. Nothing was reported.

## **6 Approval of agenda**

Roger Lattin proposed an addition to the agenda on UL 334, a letter of investigation on dimmers and dimmer racks; Steve Terry proposed an addition to the agenda on UL 1008 BCEELTS. Lattin moved that amended agenda be accepted. The motion was seconded by discussion and approved by a show of hands with one abstention.

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

### **7.1 EMC task group**

Vannice reported that he has been put back onto all the committees. No particular progress of note at this time. Two things the group is trying to do: (1) Cover commercial and not residential equipment, and (2) Identify those types of loads that are the most polluting, based on individual noise and the amount of product on the market.

### **7.2 ANSI E1.16-2002 (R2012)**

No news or action.

### **7.3 BSR E1.19 – 201x, Recommended Practice for the Use of Class A Ground-Fault Circuit Interrupters (GFCIs) Intended for Personnel Protection in the Entertainment Industry**

*From the draft 20 March minutes:*

*Eddie Kramer moved that we rescind the approval of the draft standard to implement the agreed upon changes and to consider possible the concerns of the motion picture and television industry, as expressed by Wendy Holt. The motion was seconded and then approved with a unanimous show of hands. This was a supermajority.*

*Ken Vannice proposed a task group to this matter and appointed the following members to the task group: Ty Mellon, Art Wanuch, Joe Boardman, Wendy Holt, Alan Rowe, Jerry Gorrell, and Jeff Miller.*

Ty Mellon reported that Mike Skinner has distilled his objections and sent those to the task group, but that the list was only forwarded in the last week, so no changes have been made yet.

Nathan Leonard moved that we take this project from the table at this meeting so the task group can respond to Mike Skinner's concerns in revising the draft. The motion was seconded and discussed. The topic was taken from the table for this meeting by a show of hands with one objection and one abstention.

Mike Skinner was added to the task group.

### **7.4 ANSI E1.24 - 2012, pin connectors**

No news or action.

## **7.5 ANSI E1.32 - 2012, Guide for the Inspection of Entertainment Industry Incandescent Lamp Luminaires**

No news or action.

## **7.6 Grounding and Bonding on portable structures and electrical systems**

*From the draft 20 March minutes:*

*Art Wanuch said that he will have a draft to the working group for the August meeting.*

*Update?*

Art Wanuch distributed two hard-copy documents written for the Ontario community about grounding and bonding respectively. He suggested that one more meeting cycle was necessary to see if a US handout could be produced. Alan Rowe added that the motion picture industry in California has written a document about grounding and bonding.

There was discussion of the acceptable size of the grounding/bonding conductors.

Mitch Hefter revised that task group as follows: George Long, David Lester, Richard Cadena, Alan Rowe, Matthew Antonucci, Roger Lattin, Art Wanuch is the leader. He said that the task group is to consider these documents and then make a recommendation for how to move forward at the next meeting in Las Vegas.

## **7.7 A Canadian E1.18**

*From the draft 20 March minutes:*

*Rodger Dean said that more work is needed. There was further discussion of the direction of the document, but no motions were made or votes taken.*

Art Wanuch said that the document is nearing completion and will be sent out to meet the required two weeks before the meeting in Las Vegas.

There was discussion in which it was re-iterated that the group will consider what action to take on this document when the completed piece is presented.

## **7.8 CSA and UL harmonization (on stage luminaires?)**

*From the draft 20 March minutes:*

*Ken Vannice said he will submit a written report to the group.*

Ken Vannice's report:

CSA C22.2 No. 166

1. The major revision is proceeding. It will cover all luminaires including LED. It will not include connector strips. There is no desire to make it a bi-national standard.
2. The intention is to bring it closer to the UL document.
3. The Intertek PDE is on the Committee.
4. We have a table of contents with several new sections.
5. We are updating the existing first. We are down to leakage.
6. I will try to do something about leakage but it will be tough. It is enconced in C22.2 No. 0 General Requirements, Canadian Electrical Code Part II in Sec 7.5. We still need a PLASA position.
7. After this we will fill in the new sections.
8. We teleconference three hours once a month.

IHC 61810-1

1. I thought I was reconnected but haven't seen anything recently. I have asked what is happening.
2. We have our document with many US deviations. It is on hold until 3 below is resolved.

3. We have submitted revisions to the IEC document so our deviation list can be reduced. This is working through the process.
4. UL is forming a STP to process whatever we come up with.

IEEE P1836/37

1. I was informed by the CSA Secretariat that I was re-instated on the committee.
2. I haven't heard much recently. I will be looking into this.

Vannice summarized the three hour per month teleconference and added that more was to come.

### **7.9 PowerCON True1 connectors**

*From the draft 20 March minutes:*

*Steve Terry said that he would hold his two items for another meeting, but he added that there is activity in the industry with people wishing to use UL-recognized powerCON True1 connectors in place of pin connectors. Terry says that we need to collect more information to help with a conversation on this topic later.*

*Update?*

Steve Terry said there is interest within the industry in using True1 connectors as a branch circuit connector, and that ETC has gotten UL listing for a distribution equipment using this connector. He said that the question is whether or not there should be a more mainstream movement on this issue. There was discussion.

Terry explained that asking this to be a regular connector would require Neutrik releasing the configuration drawings, and then we write a standard for it, and then submit that to UL for inclusion in UL 498. Neutrik would have to see a benefit to this.

Mitch Hefter asked what action this group could take at this time other than to keep an eye on it. Hearing no concrete direction he suggested the item be removed from the agenda.

### **7.10 UL 1573**

*From the draft 20 March minutes:*

*Lattin said that he's talked to Hollywood manufacturers and Arri people and they have wish-lists for UL 1573. There is concern about the burn position used during testing.*

Roger Lattin reported two things:

1. The burn position in the standard needs to reflect how they are used.
2. Leakage current test needs to be kept out.

Mitch Hefter said that there was no action item from this, but Terry suggested that the CSA harmonization project that Vannice reported on might suggest possible changes for UL 1573. With interest, this item will remain on the agenda.

### **7.11 CANENA**

*From the draft 20 March minutes:*

*Vannice said that if people have problems with the Canadian stage and studio luminaire standards he needs to know what those problems are. Terry suggested that we need to work with CANENA. There was a brief discussion of the difficulty of the CANENA process.*

Steve Terry said that he withdraws his suggestion that we need to work with CANENA. The process is so long and difficult that it is to be avoided.

Ken Vannice said that there is more flexibility in UL listing for the US only. Older listed products often can continue to be made as they are until changed, rather than having to be updated whenever the listing standard changes. The CANENA process, besides being long, makes bi-national standards, and then products need to be updated immediately when the corresponding product safety standard is changed.

Terry suggested this item be removed from the agenda. Hefter agreed and then recessed the meeting for a short break at 9:30.

## **8 New business**

None.

## **9 Other business**

(Schoeneman arrived in time for this portion of the meeting agenda.)

### **9.1 UL 334**

Steve Terry explained the background on the item added by Lattin, the UL 334 outline of investigation on theatrical dimmers, dimmer racks, rolling dimmer racks, and dimmers in plugging strips. UL 334 describes what sections of other standards are to be applied. Previous to this, Gary Siggins was the engineer at UL who understood what to apply and therefore it had never been written down.

### **9.2 UL 1008 BCEELTS--Branch Circuit Emergency Lighting Transfer Switch**

Steve Terry described a new document which relaxes the requirement for electrical operation and mechanical hold. He noted that it was for smaller circuits, not more than 20 amperes. Having received no negative comments from UL it will now be put through an "accelerated CANENA process" and is due March 2014 if the schedule is met per the NEC revision cycle.

Terry also reported that, now in the NEC, directly controlled luminaires with emergency control inputs in an emergency lighting system must be listed for emergency lighting systems per UL 924.

### **9.3 LDI sessions**

Mitch Hefter asked Erin Grabe to describe the LDI sessions that PLASA is providing in November, so she did.

## **10 Schedule for future meetings**

Hefter announces that the next scheduled meeting is to be on Friday 22 November 2013 at the Las Vegas Hotel in Las Vegas, NV from 07:00 pm to 11:00 pm.

## **11 Adjournment**

Eddie Kramer moved that the meeting adjourn. The motion was seconded and then approved by a show of hands, Mitch Hefter adjourned the meeting at 10:15.

### Membership as of 6 August 2013

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
Matthew Antonucci	Contract Services Administration Trust Fund	Contract Services Administration Trust Fund	P	U
Robert Barbagallo	Solotech Inc.	Solotech Inc.	O	DR
Lee J. Bloch	Bloch Design Group, Inc.	Bloch Design Group, Inc.	O	G
Joe Boardman	Bender Inc.	Bender GmbH & Co. KG	A	MP
Ron Bonner	PLASA Technical Resources Office	PLASA EU	O	U
Eric Bouchard	Cirque du Soliel	Cirque du Soliel	O	CP
Louis Bradfield	Louis Bradfield	Louis Bradfield	P	U
Stephen (Steve) Brock	Bender ET Inc.	Bender GmbH & Co. KG	A	MP
André Broucke	André Broucke	André Broucke	O	G
John (Javid) D. Butler	Integrated Theatre, Inc.	Integrated Theatre, Inc.	O	CP
Richard Cadena	Academy of Production Technology	Academy of Production Technology	O	G
Vincent J. Cannavale	Motion Laboratories	Motion Laboratories	O	CP
Michael J. Carnaby	Mikan Theatricals	Mikan Theatricals	O	DR
Edward R. Condit	Edward R. Condit	Edward R. Condit	O	U
James Davey	AC Power Distribution Inc.	AC Power Distribution Inc.	P	CP
Jeremy Day	Philips Color Kinetics	Royal Philips	O	MP
Rodger Dean	R. Dean Lighting Limited	Entertainment Electrical Safety Committee of Ontario	A	G
Kenny Delahoussaye	Aggreko	Aggreko	O	DR
Jeff deRecat	Marinco	Actuant Corporation	P	MP
Jim Digby	The Collaborative Endeavor Group	Linkin Park Touring/The Collective	O	U
William Drake	Marinco	Actuant Corporation	A	MP
Marsha DuBois	Pintech Stage Connectors, Inc.	Pintech Stage Connectors, Inc.	O	CP
Steve DuBois	Pintech Stage Connectors, Inc.	Pintech Stage Connectors, Inc.	O	CP
James Eade	PLASA	PLASA EU	O	G
Don Earl	Earl Girls, Inc.	Earl Girls, Inc.	O	DR
Brian Eustace	Mole-Richardson Co.	Mole-Richardson Co.	P	CP
Jose J. Flores	Kino Flo, Inc.	Kino Flo, Inc.	O	MP
Trevor Forrest	Helvar Lighting Control	Helvar Lighting Control	O	MP
Howard Forryan	Harting Ltd.	Harting KGAA	A	G



<b>Name</b>	<b>Company</b>	<b>Representing</b>	<b>Voting status</b>	<b>Int. cat.</b>
Ian Foulds	IATSE Local 873	Entertainment Electrical Safety Committee of Ontario	A	G
Ed Garstkiewicz	Harting Inc., North America	Harting KGAA	P	G
Richard B. Glickman	Gliconen Corporation	Rosco Laboratories	O	MP
Reuben Goldberg	Technic Services	Technic Services	O	U
Jerry Gorrell	Theatre Safety Programs	Theatre Safety Programs	P	U
Bill Grande	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	P	MP
Torsten Gruhn	Bender Inc.	Bender GmbH & Co. KG	A	MP
Mitch Hefter	Mitch Hefter	USITT	P	U
Peter Herrmann	Motion Laboratories	Motion Laboratories	O	CP
David Herrmann	Motion Laboratories	Motion Laboratories	O	CP
Jim Holladay	Luxence	Luxence	O	G
Simon Hunt	IATSE Local 891	IATSE Local 891	O	U
Richard L. Eberth_Jr.	North Shore Safety	Airpax Corporation	O	MP
Tyrone Mellon_Jr.	Lex Products Corp.	Lex Products Corp.	P	CP
Hiroshi Kita	Marumo Electric Co., Ltd.	Marumo Electric Co., Ltd.	O	MP
Wayne Kowalski	Coleman Cable Inc.	Coleman Cable Inc.	O	MP
Edwin S. Kramer	I.A.T.S.E. Local 1	I.A.T.S.E. Local 1	P	U
Charles (Chuck) Kurten	Underwriters Laboratories, Inc.	Underwriters Laboratories, Inc.	O	G
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U
Michael Lay	Philips Color Kinetics	Royal Philips	P	MP
Marty Lazarus	Chicago Spotlight, Inc.	Chicago Spotlight, Inc.	O	DR
Nathan Leonard	Bender Group	Bender GmbH & Co. KG	P	MP
Dave Lester	Clair Global	Clair Global	O	U
George Long	Aggreko Event Services	Aggreko	O	DR
Bob Luther	Lex Products Corp.	Lex Products Corp.	A	CP
William L. Maiman	William L. Maiman	William L. Maiman	O	U
Paul F. Mardon	Pulsar Ltd.	Pulsar Ltd.	O	MP
Greg Mayberry	AC Power Distribution Inc.	AC Power Distribution Inc.	A	CP
Pat Miller	Hubbell Wiring Devices	Hubbell Inc.	O	MP
Jeff T. Miller	Worldwide Standards and Auditing	Walt Disney Company	P	U
David Murray	IPC Resistors Inc.	IPC Resistors Inc.	O	CP

Name	Company	Representing	Voting status	Int. cat.
Kevin O'Brien	Bestek Lighting & Staging	Bestek Lighting & Staging	O	U
Natti Pierce-Thomson	North American Theatre Technology	North American Theatre Technology	O	U
Elizabeth E. (Lizz) Pittsley	Elizabeth Pittsley	Elizabeth Pittsley	O	U
R. Bruce Prochal	IATSE 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
Jared Saltzman	Jared Saltzman	Jared Saltzman	O	U
Larry Schoeneman	DesignLab Chicago, Inc.	DesignLab Chicago, Inc.	P	DR
Ford Sellers	Cornell University	Cornell University	O	U
Mike Skinner	CBS Studio Center	Alliance of Motion Picture and Television Producers	O	U
Sean Sloat	Lex Products Corp.	Lex Products Corp.	A	CP
Arnold Tang	Arnold Tang Productions	Arnold Tang Productions	O	G
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	P	MP
Robert Timmerman	Philips Color Kinetics	Royal Philips	O	MP
Eric Tishman	Rosco Laboratories	Rosco Laboratories	O	MP
Stephen Vanciel	Stephen Vanciel	Stephen Vanciel	O	U
Ken Vannice	Ken Vannice.	Ken Vannice LLC	I	G
Art Wanuch	Entertainment Electrical Safety Committee of Ontario	Entertainment Electrical Safety Committee of Ontario	P	G
Colin Waters	TMB	TMB	O	DR
Jody Williquette	Electrivot, Inc.	Electrivot, Inc.	O	CP
Richard Wolpert	Union Connector Company (MO)	Union Connector Company	O	CP
Keith S. Woods	Lakhri Impressions Ltd.	IATSE Local 891	O	U
Jiantong Wu	Beijing Special Engineering Design & Research Institute	Beijing Special Engineering Design & Research Institute	O	G
Alex Yoon	Mole-Richardson Co.	Mole-Richardson Co.	A	CP

Voting status & interest category legend			
P	principal voting member	CP	custom-market producer
A	alternate voting member	MP	mass-market producer
I	individual voting member	DE	designer
O	observer, non-voting member	DR	dealer/rental company
		U	user
		G	general interest