

Minutes
Electrical Power Working Group
Friday, 26 July 2002
Dallas/Ft. Worth Marriott South
Ft. Worth, TX

Chairmen: Ken Vannice; Colortran (Leviton Manufacturing Co., Inc.); principal; producer
Bob Luther; Lex Products Corp.; principal; producer

Recording secretary: Karl G. Ruling; ESTA

Members attending: Michael Amorelli; AC Power Distribution Inc.; principal; general interest
George Long; Aggreko Event Services (Aggreko); principal; user
Kenny Delahoussaye; Aggreko; alternate; user (joined at this meeting)
Arnold Tang; Arnold Tang Productions; observer; general interest
Steve Terry; Electronic Theatre Controls; principal; producer
Michael Klein; Environmental System Design; principal; general interest
Edwin S. Kramer; I.A.T.S.E, Local 1; principal; user
Roger Lattin; I.A.T.S.E. Local 728; principal; user
W. G. Krokaugger P.E.; Mole-Richardson Co.; principal; producer
Tim Cox; PLASA; principal; general interest
William N. Masten; SMS Inc. / PGS LLC; principal; producer
Richard A. Prey; SMS Inc. / PGS LLC; alternate; producer
Michael Lay; Strand Lighting (Strand Lighting Ltd.); principal; producer
Richard D. Thompson; Thompson Associates; principal; general interest
Brian Dowd; TMB; principal; producer

Visitors: Bill Maiman; ESTA

1 Opening remarks

Ken Vannice called the meeting to order at 08:15.

2 Attendance and membership

2.1 Introduction of those present and taking attendance

The screaming pink attendance sign-in sheet was circulated in a clockwise direction around the table, while those present introduced themselves, proceeding in a counterclockwise direction.

2.2 Determination of quorum

Ken Vannice asked for the principals present to raise their hands. There were 13 present (Terry arrived at 9:00), including the chairmen, so Vannice announced that there was a quorum and the meeting could proceed.

2.3 Recognition of alternate voting members

There were no alternates present who would be voting in place of their principal.

2.4 Requirements for membership

Ken Vannice reminded people of the requirements for membership. Membership is open to all who have a material interest in the work of the group. The group needs to have a balance of interests, so members of the general interest and user interest groups are particularly welcome. However, voting members must attend meetings. Any principal voting member and his alternate, who both miss three meetings in a row, will have their voting status changed to observer.

2.5 Processing of new membership requests

Kenny Delahoussaye applied as an alternate to George Long of Aggreko in the user interest category. Bob Luther asked for a motion in support of the application. Steve Terry so moved. The motion was seconded. The motion was accepted by a unanimous show of hands.

The full voting body, including those not present, was thus:

Name	Company	Representing	voting status	Interest category
Michael Amorelli	AC Power Distribution Inc.	AC Power Distribution Inc.	P	G
James Davey	AC Power Distribution Inc.	AC Power Distribution Inc.	A	G
Jeff deRecat	Advanced Devices, Inc.	Advanced Devices, Inc.	P	P
Bud Toly	Advanced Devices, Inc.	Advanced Devices, Inc.	A	P
George Long	Aggreko Event Services	Aggreko	P	U
Kenny Delahoussaye	Aggreko	Aggreko	A	U
Wolfgang Hofheinz	Bender GmbH & Co. KG	Bender GmbH & Co. KG	P	P
Joe Boardman	Bender Inc.	Bender GmbH & Co. KG	A	P
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	P	P
Michael Klein	Environmental System Design	Environmental System Design	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
Ken Vannice	Colortran	Leviton Manufacturing Co., Inc.	P	P
Mitchell Stein	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	A	P
Tim Bachman	Leviton/Colortran	Leviton Manufacturing Co., Inc.	A	P
Bob Luther	Lex Products Corp.	Lex Products Corp.	P	P
Louis Bradfield	Louis Bradfield	Louis Bradfield	I	U
W. G. Krokaugger P.E.	Mole-Richardson Co.	Mole-Richardson Co.	P	P
Brian Parker	Mole-Richardson Co.	Mole-Richardson Co.	A	P
Tim Cox	PLASA	PLASA	P	G
Robert Barbagallo	Proximo Inc.	Proximo Inc.	P	G
William N. Masten	SMS Inc. / PGS LLC	SMS Inc. / PGS LLC	P	P
Richard A. Prey	SMS Inc. / PGS LLC	SMS Inc. / PGS LLC	A	P
Paul Menetrey	Power Guard Systems, LLC	SMS Inc./PGS LLC	A	P
Michael Lay	Strand Lighting	Strand Lighting Ltd.	P	P
Richard D. Thompson	Thompson Associates	Thompson Associates	P	G
Brian Dowd	TMB (NJ)	TMB	P	P
Colin Waters	TMB	TMB	A	P
Mitch Hefter	Entertainment Technology (Genlyte Thomas Group)	USITT	P	G
		19 possible votes		9 P
				4 U
				6 G

3 Approval of the minutes from the previous meeting

Richard Thompson moved that the draft minutes be approved as written. The motion was seconded. There was no discussion. The motion was accepted by a unanimous show of hands.

4 Reading of the call for patents

Bob Luther read the following aloud:

“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 issues were brought to the attention of the group.

5 Reading of the anti-trust statement

Ken Vannice read the following aloud:

"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."

Bill Maiman held up some copies of the pamphlet.

No anti-trust issues were brought to the attention of the assembly.

6 Approval of agenda

Eddie Kramer moved that the agenda be approved. The motion was seconded. The motion was accepted with a unanimous show of hands.

7 Old business - task group reports

7.1 EMC task group

Not much has been happening, reported Vannice. He promised to "beat the bushes" for the next meeting to see if there is anything new going on, but he hadn't heard of anything.

7.2 Problems with pin connectors

Ken Vannice said he hasn't written the letter yet to UL and pressing UL to use the USITT standard. He promised to do this.

Brian Dowd said that at TMB they'd found a pair of 100A connectors from one manufacturer in which the male and female won't physically fit together.

There was a general discussion of the need to make progress between meetings and how to do this. The use of an action list recap at the end of the meeting was discussed. Vannice also suggested that time-lines for tasks will help. He noted that the end of August is when individuals need to send stuff to their partners on task groups for the next meeting. Waiting until two weeks does not allow time for collaboration in the task groups.

There was a discussion of UL and how it is restructuring . Richard Thompson pointed out that UL has reorganized their advisory panels and turned them into true standards panels with representation from a diversity of interests. Many present noted that they are on these various UL panels, but that the panels seem to be inactive. Many manufacturers noted that the standards seem to be changed without any of the changes being presented to the panels. There was a discussion of how to get UL to follow procedure.

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

Eddie Kramer reported that the task group had met last night and that it had been productive. There was a discussion of what parts of the outline have been filled in yet. In general, progress is being made.

There was a discussion whether this recommended practice should describe practices that are contrary to the NEC. The resounding advice was No. This should be a recommended practice that recommends best practice, which would be in accordance with the NEC.

There was discussion of what constitutes "bundling." A particular case discussed was whether the common Hollywood practice of lacing tie line between cables to make a flat assembly that lies on a catwalk is considered bundling. Other issues discussed with bundling were harmonics and rules of thumb for gauging operating temperature. Bob Luther will look into the heat rise issues with bundling and present a report at the next meeting.

Vannice asked what will we see of the BSR E1.18 document at the next meeting. Luther said that three of six sections are written, at least in rough draft. The goal for the next meeting would be to flesh out the section 4 the working group has seen. They hope to present two more sections.

7.4 BSR E1.19 GFCI task group

Bill Masten reported that the task group had a meeting last night that was productive. There was some discussion of the draft document that was sent to the working group.

Masten reported that UL is developing standards for a range of different types of ground fault protection devices. He has a commitment from UL to incorporate in UL 943 higher current devices that we need in our industry while still calling them personal protection devices.

There was an extended discussion of the purpose of the document, and the effect that the existence of new GFP devices and this documents might have on code requirements and the consensus of what needs to be done to conform with the general duty of care.

It was resolved that at the next meeting there will be another copy of BSR E1.19. It will be distributed before the 2 week deadline. This new version will be developed using the email reflector and incorporating input from task group members outside of California.

Roger Lattin volunteered to be the project manager for BSR E1.19. He will develop intermediate deadlines and will badger people to get their parts of the projects done on time. His offer was accepted.

Steve Terry offered the world-wide teleconferencing services of ETC to the task group. All the task group needs to do is call a number, and they are on.

7.5 BSR E1.16 configuration standard for HMI power cables status report

Ruling reported that the ESTA Board has approved it and that he hopes to have it approved by ANSI in the next few weeks and posted on the ESTA website before the next meeting.

8 New business

There was a discussion of "An Idiot's Guide to Entertainment Electrical Practices" project. There was a discussion of the need to provide educational material for the industry.

Terry recommended that we finish the projects we have before taking on others. The consensus was for agreement with Terry. This is a good project, but it should be removed from the agenda until other projects are finished.

9 Other business

Eddie Kramer brought up the issue of where the temporary wiring chapter needed to go in NFPA 70, the National Electrical Code. It had been a chapter 3 "Wiring Methods and Materials" as article 305, but now is in Chapter 5, "Special Occupancies" as article 527 – right in the middle of the entertainment sections between 525, "Carnivals, Circuses, Fairs, and Similar Locations," and 530, "Motion Picture and Television Studios and Similar Locations." He asked that ESTA submit a proposal that this section be moved to a later section, away from the entertainment sections.

Eddie Kramer was advised to write up a proposal and we will vote on it at the next meeting. The deadline for proposals is November 1, and this proposal can be dealt with at the next meeting and meet that deadline.

Richard Thompson suggested that we should invite UL people to our next meeting so they know what we are doing. He said we need to have ESTA representation on all committees for all the UL standards that affect our business. There was a discussion of the committees on which ESTA or its members already have representation.

Richard Thompson also reported on the licensing requirements for electrical contractors in California.

Karl Ruling noted that the following had now missed three meetings in a row, and would be listed as observers:

Jeff deRecat and Bud Toly, representatives for Advanced Devices, Inc.

Robert Barbagallo, representative for Proximo Inc.

Mitch Hefter, representative for USITT

10 Schedule for future meetings and discussion of action items

Vannice announced that the next EPWG meeting will be 7:00 p.m. to 11:00, Friday, October 18, at the Las Vegas Hilton Hotel. The meeting after that will be January 17, 2003 from 08:00 to 12:00.

The action items that shall be accomplished before the next meeting were reviewed:

- 1) Ken Vannice agreed to actively pursue gathering information for a more detailed EMC report.
- 2) Ken Vannice agreed to write a letter to UL complaining about the lack of a test for intermateability between different brands in the UL listing process for pin connectors. He will point out that this is a serious safety issue for our industry.
- 3) The BSR E1.18 task group shall flesh out the section 4 the working group has seen and work to present two more sections.
- 4) Eddie Kramer will forward the BSR E1.18 document for Michael Klein's use in the Certification Program.
- 5) Bob Luther will look into the heat-rise issues with cable bundling and present a report at the next meeting.
- 6) Karl Ruling will send the working group a listing of who is on the 4ought@esta.org reflector list so that it can be updated as needed. Members will send corrections, additions, and deletions to Karl Ruling.
- 7) The BSR E1.19 task group will present another version of BSR E1.19 at the next meeting. It will be distributed before the 2-week deadline. This new version will be developed using the email reflector and incorporating input from task group members outside of California.
- 8) Karl Ruling will send the working group a copy of the gfci@esta.org alias list so that it can be updated as needed. Members will send corrections, additions, and deletions to Karl Ruling.
- 9) Roger Lattin will work as a project manager for BSR E1.19. He will develop intermediate deadlines and will badger people to get their parts of the projects done on time.
- 10) Eddie Kramer will draft a proposal that the article of the NEC covering temporary wiring (Article 527) should be moved to the end of Chapter 5, out of the midst of the entertainment articles. The EPWG will decide at the next meeting if they will endorse the proposal and submit it to the NFPA as a proposal from the working group.

11 Adjournment

Steve Terry moved that the meeting adjourn. The motion was seconded. The motion was approved unanimously by a show of hands. Ken Vannice declared the meeting adjourned at 11:06.

Working Group Membership and Contact Information as of 2002-10-1

Name	Company	Representing	Voting status	Int. cat.
Michael Amorelli	AC Power Distribution Inc.	AC Power Distribution Inc.	P	G
James Davey	AC Power Distribution Inc.	AC Power Distribution Inc.	A	G
Bud Toly	Advanced Devices, Inc.	Advanced Devices, Inc.	O	P
Jeff deRecat	Advanced Devices, Inc.	Advanced Devices, Inc.	O	P
George Long	Aggreko Event Services	Aggreko	P	U
Kenny Delahoussaye	Aggreko	Aggreko	U	
Arnold Tang	Arnold Tang Productions	Arnold Tang Productions	O	G
David Evaniew	B. I. M. Limited	B. I. M. Limited	O	P
Wolfgang Hofheinz	Bender GmbH & Co. KG	Bender GmbH & Co. KG	P	P
Joe Boardman	Bender Inc.	Bender GmbH & Co. KG	A	P
Lee J. Bloch	Bloch Design Group Inc.	Bloch Design Group Inc.	O	G
Jeffrey Measley	Crouse-Hinds Molded Products	Crouse-Hinds Molded Products Inc.	O	P
Ron Dahlquist	Dadco	Dadco	O	P
Steve Terry	Electronic Theatre Controls	Electronic Theatre Controls, Inc.	P	P
Michael Klein	Environmental System Design	Environmental System Design	P	G
Trevor Forrest	Helvar Lighting Control	Helvar Lighting Control	O	P
Edwin S. Kramer	I.A.T.S.E., Local 1	I.A.T.S.E. Local 1	P	U
R. Bruce Prochal	IATSE Local 728	I.A.T.S.E. Local 728	A	U
Roger Lattin	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U
Patric J. Abaravich	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	A	U
Richard Thornton Brown	Zero 88 Ltd.	i Light Group PLC	O	P
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
Jose J. Flores	Kino Flo, Inc.	Kino Flo, Inc.	O	P
Don Gray	Kohler Event Services	Kohler Co.	O	U
Ken Vannice	Colortran	Leviton Manufacturing Co., Inc.	P	P
Mitchell Stein	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	A	P
Tim Bachman	Leviton/Colortran	Leviton Manufacturing Co., Inc.	A	P
Bob Luther	Lex Products Corp.	Lex Products Corp.	P	P
Louis Bradfield	Louis Bradfield	Louis Bradfield	I	U
Jim Holladay	Luxence	Luxence	O	G
Phil Fram	Marinco	Marinco	O	P
Hiroshi Kita	Marumo Electric Co., Ltd.	Marumo Electric Co., Ltd.	O	P
Brian Parker	Mole-Richardson Co.	Mole-Richardson Co.	A	P
W. G. Krokaugger P.E.	Mole-Richardson Co.	Mole-Richardson Co.	P	P
Art Wanuch	M.C. Lights & Manufacturing, Ltd.	Ontario Film & Television Prod. Electrical Comm.	O	G
Tim Cox	PLASA	PLASA	P	G
Mac Perkins	PNTA	PNTA Inc.	O	G
Robert Barbagallo	Proximo Inc.	Proximo Inc.	O	G
Paul F. Mardon	Pulsar Ltd.	Pulsar Ltd.	O	P
Douglas Franz	QVC Network	QVC Network	O	U
Andre Broucke	ADB - TTV Technologies	Siemens	O	P
William N. Masten	SMS Inc. / PGS LLC	SMS Inc. / PGS LLC	P	P
Richard A. Prey	SMS Inc. / PGS LLC	SMS Inc. / PGS LLC	A	P
Paul Menetrey	Power Guard Systems, LLC	SMS Inc./PGS LLC	A	P
Michael Lay	Strand Lighting	Strand Lighting Ltd.	P	P
Andy Topinka	Technical Group Services, Inc.	Thea & Schoen, Inc.	O	G
Richard D. Thompson	Thompson Associates	Thompson Associates	P	G
Colin Waters	TMB	TMB	A	P
Brian Dowd	TMB	TMB	P	P
Richard Wolpert	Union Connector Company	Union Connector Company	O	P

Mitch Hefter	Entertainment Technology (Genlyte Thomas Group)	USITT	0	G
Eckart Steffens	SOUNDLIGHT	VPLT	0	G
Voters			8	P
			4	U
			4	G
Observers			12	P
			4	U
			9	G

Voting Status

- P Principal voting representative for a company or organization
- A Alternate voting representative for a company or organization
- I Individual representing no organization other than himself or herself
- O Observer; non-voting

Interest Categories

- P Producer (manufacturer) of power distribution equipment
- U User of power distribution equipment
- G General interest in power distribution equipment