

Minutes
Electrical Power Working Group
Friday, 18 October 2002
Las Vegas Hilton

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

Recording secretary: Karl G. Ruling; ESTA

Members attending: Arnold Tang; Arnold Tang Productions; observer; general interest
Brian Dowd; TMB; principal; producer
Jeff deRecat; Advanced Devices, Inc.; observer; producer
Joe Boardman; Bender Inc. (Bender GmbH & Co. KG); alternate; producer
Michael Amorelli; AC Power Distribution Inc.; principal; general interest
Michael Klein; Environmental System Design; principal; general interest
Michael Lay; Strand Lighting (Strand Lighting Ltd.); principal; producer
Mitch Hefter; Entertainment Technology (Genlyte Thomas Group), representing
USITT; observer; general interest
Paul Menetrey; Power Guard Systems, LLC (SMS Inc./PGS LLC); alternate;
producer
Reinhold Luther; Lex Products Corp.; observer; producer
Richard D. Thompson; Thompson Associates; principal; general interest
Richard Thornton Brown; Zero 88 Ltd. (i Light Group PLC); observer; producer
Roger Lattin; I.A.T.S.E. Local 728; principal; user
Ron Dahlquist; Dadco; observer; producer
Stewart Cox; Cooper Crouse-Hinds Molded Products; observer; producer
Tim Cox; PLASA; principal; general interest
W. G. Krokaugger P.E.; Mole-Richardson Co.; principal; producer
William N. Masten; SMS Inc. / PGS LLC; principal; producer
Louis Bradfield; Louis Bradfield; individual; user

Visitors: Ken McGarland; Marinco
Mark Crosthwaite; IATSE Local 728
Pat Miller; Hubbell Inc.
Bill Maiman; ESTA

1 Opening remarks

Ken Vannice called the meeting to order at 19:04.

2 Attendance and membership

2.1 Introduction of those present and taking attendance

Ken Vannice welcomed all to the meeting and thanked those attending for coming.

Those present introduced themselves, proceeding clockwise around the table. A chartreuse sign-in sheet was passed around the table in a counterclockwise direction, and those present were instructed to indicate their presence by checking the box near their name or signing in on the visitors pages.

2.2 Determination of quorum

Vannice asked voters to raise their hands. Vannice noted that we have a quorum present so the meeting could proceed and reach decisions.

2.3 Recognition of alternate voting members

There were none to recognize.

2.4 Requirements for membership

Vannice explained that membership is open to all who are affected by the work of the group, but that people who would be in the user and general interest categories are particularly welcome. He reminded people that voting members must attend meetings and vote on letter ballots in a timely fashion to maintain voting status.

2.5 Processing of new membership requests

Bob Luther read the following membership applications:

Stewart Cox; Cooper Crouse-Hinds Molded Products; observer; producer

Reuben Goldberg; Technic Services; observer; user

Reinhold Luther; Lex Products; observer; producer

Roger Lattin moved that the applications be accepted. The motion was seconded. The motion was accepted with a unanimous show of hands.

Mitch Hefter asked to become a principal voting member again. Roger Lattin moved that Hefter be restored to principal representing USITT. The motion was seconded. The motion was approved by a unanimous show of hands. The complete voting body, including those not present, was thus:

Name	Company	Representing (sort field)	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
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
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	TMB	P	P
Colin Waters	TMB	TMB	A	P
Mitch Hefter	Entertainment Technology (Genlyte Thomas Group)	USITT	P	G
				5 G
				8 P
				4 U

3 Approval of the minutes from the previous meeting

Louis Bradfield moved that the minutes of the last meeting be approved as written. The motion was seconded and approved by a unanimous show of hands.

4 Reading of the call for patents

The following was read aloud by Ken Vannice:

"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 patents or other protected intellectual property issues were brought to the attention of the assembly.

5 Reading of the anti-trust statement

The following was read aloud 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 \$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."

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

6 Approval of agenda

Richard Thompson moved that the agenda be approved as written. The motion was seconded. The motion was approved by a unanimous show of hands.

7 Old business - task group reports

7.1 EMC task group [Vannice]

Not much is going on with the LFEIC, reported Vannice. He reported that he hasn't gotten any response to questions directed to the GE standards manager, who normally is a fount of information.

7.2 Problems with pin connectors

Vannice reported that Chuck Kurtin had said to write to the chief engineer, who is now Lee Dosedlo. Vannice wrote to him asking for a commitment to resolve the problem and a timeline for doing this. Vannice reported that he is waiting for a response, but he is certain we will need to move the USITT standard into the ESTA process to make it an ANSI standard to resolve this issue.

Vannice also reported that there were big changes happening at UL. There are now no local offices; inspectors now have laptops and cell phones and work out of their homes. There are no more snap-out forms; reports are generated on the laptops, rather than by filling out papers by hand.

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

Roger Lattin reported and distributed a version of the document with DRAFT*DRAFT*DRAFT at the top and bottom. There was a discussion of the state of the sections of the document.

Bob Luther stated that the task group is committed to having a complete draft document by the winter solstice.

Vannice urged working group members to read the document and to consider if this is the direction the document should take.

Bob Luther asked for comments on the V2.2.1 document.

Vannice said that by the end of November the draft has to be done and circulated to the group, so any changes can be made and it can go to the ESTA office for circulation by the end of December.

7.4 BSR E1.19 GFCI task group

Bill Masten reported on the work the group has been doing and also changes to the UL standards covering GFCIs to cover higher current devices.

Lattin complained that a draft went out via the reflector in August, but comments didn't come back until three days before Lattin had to send it to Karl Ruling.

Lattin committed to having another draft out by Thanksgiving.

Lattin thanked Steve Terry and ETC for the use of their conference call facilities which has been very handy for the task group work.

7.5 ANSI E1.16-2002 configuration standard for HMI power cables status report

Karl Ruling reported that it's available on the ESTA website and the ANSI website. It's free both places.

8 New business

Cable length color-coding project: Bob Luther reported on his correspondence with Derek Smith of Sound Technology Consultants, Inc. in which Smith asked us to undertake developing a standard for using colored bands to indicate cable length. He said he had indicated to Smith that Smith's involvement would have a lot to do with whether the working group accepted this project, and he noted that Smith was not present.

There was a discussion of the merits of undertaking the project.

Roger Lattin moved that we acknowledge the request but that we not undertake this project at this time. The motion was seconded. By a show of hands, the motion was accepted unanimously. The chairmen directed Karl Ruling to inform Mr. Smith of the working group's decision.

9 Other business

Richard Thompson reviewed the history and rationale for a UL program for assembler-maintainers. There needs to be a way for a rental house to maintain equipment without voiding the listing of the equipment, he argued. He urged the EPWG to get UL to facilitate this UL program. There was no support for the proposal, and no motion was offered.

Roger Lattin suggested that we need to look at branch service cables. He suggested that we need to do an article for *Protocol* or something. He's seen 100' 100-amp cable with #4 cable. If you run 100A that far, the voltage drop is too much. Excessive voltage drop in multi-conductor cable with multipin circular connectors is an issue too. Others talked about the problems of bundled cables overheating. There was a discussion if there is something we should do about one or more of these issues. Michael Klein said that these problems will be dealt with in the electrical essential skills group.

Ken Vannice introduced the ESTA Bucks program.

Richard Thompson suggested that James Stallcup should be invited to our next meeting to see what we're doing. Ken Vannice argued that his talents would be better applied in reviewing a document, and that that would be a better thing for us to ask him to do. There is no time in the meeting for a presentation by him, explained Vannice. Vannice added that our meetings are open, so if Mr. Stallcup

wants to attend, he certainly may. No formal motion was offered, and no action item was assigned as a result of this discussion.

10 Changes to observer status

None.

11 Schedule for future meetings

Bob Luther announced the schedule. The next meeting will be Friday, 17 January 2003, from 08:00 to noon at the Dallas/Ft. Worth Marriott South in Ft. Worth, Texas. The following meeting will be Wednesday, 19 March 2003. 08:00 to noon, Hilton Minneapolis

Vannice reviewed the action items from this current meeting:

- 1) The BSR E1.18 task group will have a finished first draft by the Winter Solstice (December 21). To do this, task group members will have their parts ready for circulation within the task group by December 1.
- 2) Ken Vannice will follow-up with chief engineer with UL about the pin connector issue, and will also follow up with the USITT.
- 3) The BSR E1.19 task group will have more good, measurable progress by the next meeting. To do this, Lattin committed to having another draft out by Thanksgiving.
- 4) Karl Ruling shall inform Derek Smith of the working group's decision not to accept the project of developing a cable length color-code standard.

12 Adjournment

Richard Thompson 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 21:00.

Working Group Membership and Contact Information as of 2002-11-14

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	A	U
Arnold Tang	Arnold Tang Productions	Arnold Tang Productions	O	G
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	Cooper Crouse-Hinds Molded Products	Cooper Crouse-Hinds Molded Products Inc.	O	P
Stewart Cox	Cooper Crouse-Hinds Molded Products	Cooper 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
Reinhold Luther	Lex Products Corp.	Lex Products Corp.	O	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
Reuben Goldberg	Technic Services	Technic Services	O	U
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 (NJ)	TMB	P	P
Richard Wolpert	Union Connector Company	Union Connector Company	O	P
Mitch Hefter	Entertainment Technology (Genlyte Thomas Group)	USITT	P	G
Eckart Steffens	SOUNDLIGHT	VPLT	O	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