

Minutes
Electrical Power Working Group
Wednesday, 22 March 2000
Adam's Mark Hotel
Denver, CO

Chairs: Ken Vannice; NSI Corporation (Leviton Manufacturing Co., Inc.); Principal; Producer
Bob Luther; Lex Products Corp.; Principal; Producer

Recording secretary: Karl G. Ruling, ESTA
Members attending: Doug Kraus; Advanced Devices, Inc.; Principal; Producer
Jeff deRecat; Advanced Devices, Inc.; Alternate; Producer
Tim Bachman; Barbizon Light (Barbizon Companies); Principal; User
Trevor Forrest; Helvar Lighting Control; Principal; Producer
Roger Lattin; IATSE Local 728; Alternate; User
Jose J. Flores; Kino Flo, Inc.; Principal; Producer
Louis Bradfield; Louis Bradfield; Individual; User
Phil Fram; Marinco; Principal; Producer
W. G. Krokaugger P.E.; Mole-Richardson Co.; Principal; Producer
Tim Cox; PLASA; Principal; General Interest
Andy Topinka; Technical Group Services, Inc.; Principal; General Interest
Colin Waters; TMB Associates; Principal; Producer
Brian Dowd; TMB Associates; Alternate; Producer
Warren Mays; TMB Associates; Alternate; Producer
Richard Wolpert; Union Connector Company; Principal; Producer
Richard Thornton Brown; Zero 88 Ltd.; Observer; Producer (joined at this meeting)

1 Opening remarks

Ken Vannice called the meeting to order at 8:02 a.m.
Bob Luther offered additional copies of the agenda to attendees.

2 Attendance and membership

2.1 Introduction of those present

Vannice asked those present to introduce themselves, which they did, starting with Vannice and proceeding clockwise around the table.

2.2 Determination of quorum (8 needed)

Luther and Vannice counted heads and announced that we have a quorum.

2.3 Recognition of alternate voting members

Luther announced that only principals may vote if principals and alternates are there. No alternates identified themselves as voting for a company, although some were present.

2.4 Requirements for membership

Vannice reminded voting members that on the 3rd consecutive meeting missed by both themselves and their alternates, they would be changed to observer status.

Luther directed Ruling to change the voting status of those who had missed three meetings in a row to observer. At this meeting, the following members had missed three meetings in a row, and will be changed to observer members:

- Ron Dahlquist, Dadco
- Paul F. Mardon, Pulsar
- Eckart Steffens, VPLT

2.5 Processing of new membership requests

The following people had applied for membership:

- Don Gray, Kohler Events, applied as principal, user
- George Long, Aggreko Event Services, applied as principal, user.
- Kevin Stopey, Hollywood Rentals, applied as principal, general interest

Eddie Kramer moved that membership be offered to these applicants as observers in consideration that they have not attended this meeting. Seconded. The motion was carried with 14 in favor, none against, no abstentions.

It was agreed that they may move to a voting status if they attend and request this change.

The voting body for this meeting was thus:

Name	Company	Parent company or org. represented	Voting status	Interest category
Doug Kraus	Advanced Devices, Inc.	Advanced Devices, Inc.	P	P
Bud Toly	Advanced Devices, Inc.	Advanced Devices, Inc.	A	P
Jeff deRecat	Advanced Devices, Inc.	Advanced Devices, Inc.	A	P
David Evaniew	B. I. M. Limited	B. I. M. Limited	P	P
Tim Bachman	Barbizon Light	Barbizon Companies	P	U
Jeffrey Measley	Crouse-Hinds Molded Products	Crouse-Hinds Molded Products Inc.	P	P
Trevor Forrest	Helvar Lighting Control	Helvar Lighting Control	P	P
Edwin S. Kramer	IATSE, Local 1	I.A.T.S.E. Local 1	P	U
R. Bruce Prochal	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U
Roger Lattin	IATSE Local 728	I.A.T.S.E. Local 728	A	U
Jose J. Flores	Kino Flo, Inc.	Kino Flo, Inc.	P	P
Ken Vannice	NSI Corporation	Leviton Manufacturing Co., Inc.	P	P
Mitchell Stein	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	A	P
Bob Luther	Lex Products Corp.	Lex Products Corp.	P	P
Louis Bradfield	Louis Bradfield	Louis Bradfield	I	U
Phil Fram	Marinco	Marinco	P	P
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
Steve Terry	PRG Lighting Division	PRG	P	U
Teddy Van Bommel	PRG Lighting Division	PRG	A	U
Robert Barbagallo	Proximo Inc.	Proximo Inc.	P	G
Andy Topinka	Technical Group Services, Inc.	Technical Group Services, Inc.	P	G
Colin Waters	TMB Associates	TMB Associates	P	P
Brian Dowd	TMB Associates (NJ)	TMB Associates	A	P
Warren Mays	TMB Associates	TMB Associates	A	P
Richard Wolpert	Union Connector Company	Union Connector Company	P	P
Mitch Hefter	Rosco/Entertainment Technology	USITT	P	G
			20 voting members	

3 Approval of the minutes from the previous meeting

Tim Cox moved that the minutes be approved as written. The motion was seconded. Unanimous voice vote.

4 Call for Patents

Vannice read the following:

“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.”

None were identified by the group.

and Anti-Trust Statement

Vannice also read:

“The ESTA Board of Directors, the Technical Standards Committee, and the leadership of this Working Group will reject or nullify any actions that restrain trade. Anyone who feels that an action restraining trade is being or has been taken is requested to bring the 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 any member of this working group may be found individually liable for any action that restrains trade taken by this working group. An individual convicted of a violation of the Sherman Act may be fined as much as \$100,000 and be imprisoned for up to three years. An easy to read pamphlet describing restraint of trade is available from the Technical Standards Committee.”

No issues were identified by the group.

5 Approval of Agenda

Eddie Kramer moved we approve the agenda. Seconded. Unanimous. No abstentions or objections.

6 Old Business - Task group reports

6.1 Task group on a recommended practice for selection, installation, and use of portable feeder cable

Kramer reported that the group had drafted mission and vision statements:

VISION

Recommended practice for the design, selection, installation, use, removal, inspection and maintenance of portable feeder cable in high amperage portable power distribution systems.

MISSION

STEPS TO ACHIEVE VISION

Develop Vision

Define parts of the recommended practice, taking into account:

People we will impact

People we'll cover

Practices to be used

Minimum criteria

Definitions

Create the document

Develop consensus

Revise the document

Submit to ESTA

Address comments

Kramer said they have begun to develop a survey of users of power feeder cable. The goal is to avoid suggesting practices that people are not using in the industry. There is a very large variety of companies and individuals using portable power feeder cable including those outside of the entertainment industry. There was a discussion as to whether or not the vision statement should limit the recommended practice to the entertainment industry or include those outside of it who use portable feeder cable. This remains to be worked out at the task group level.

Kramer also expressed some concern for keeping the identities of companies's clients confidential. There was a discussion of balancing any confidentiality issues with the need to keep the standards-making process open.

Kramer said the task group will continue the discussion at the end of this meeting.

6.2 Task group for a recommended practice for use of GFCI (Residual Current Devices) in entertainment applications

The task group chair, Mitch Stein, was not present. Bob Luther asked for a report from anyone. No one responded. There was no report. Bob Luther volunteered to contact Mitch Stein to encourage him to continue work and to report at the next meeting.

6.3 Task group to write a configuration standard for HMI power cables and/or head to ballast cables

Colin Waters reported that they have a draft document for power input that is a modification of the PERA document. They still need to identify the Mil-Spec identifications for some of the connectors used.

For head to ballast cabling, they are starting to look at how it is done now. There is no de facto standard way of doing it. Colin says he has a database of the connectors now used for head to ballast cabling. The task group is polling manufacturers and verifying the connectors and connections. The task group is unsure of whether the manufacturers would want to have this information published.

6.4 EMC task group [Vannice]

Vannice gave a verbal report, the text of which is appended to these minutes.

Tim Cox added some information. EN 61000-3-2 1995 on 1 Jan 2001 comes into force for CE marking. There is move to get a clarifying amendment to the European standard done by the time it comes into force next year. Dimmers for incandescent lamps will be Type A, for which there is no test required.

Vannice announced that there will be another harmonics workshop May 9th and 10th at the Sheraton Hotel at the Baltimore/Washington International Airport.

7 New business

At the end of the meeting, Richard Thornton Brown of Zero 88, applied as an observer, producer. Andy Topinka moved that his application be accepted. The motion was seconded. The motion was accepted unanimously on a voice vote, with no abstentions and no negative votes.

Andy Topinka presented a folder describing power quality problems that exist. He identified power quality as an issue, and asked the working group how it should be addressed.

The discussion eventually settled on the desirability of writing an informational document dealing with diagnosing and ameliorating power quality problems. Eddie Kramer moved that a task group be created to do this. The motion was seconded. The motion was unanimously accepted by a voice vote. Andy Topinka was appointed by the working group chairs as the task group head.

Ruling tentatively entitled the document Introduction to Power Quality Problems and Solutions. This appeared to be acceptable by the group.

8 Other business

Vannice and Luther announced that time-lines were needed for the task groups to ensure that the projects move along. These time lines will be set at the next meeting. Task group heads were invited to propose time lines at the next meeting.

9 Schedule for future meetings

Vannice announced that the next meeting will be Friday, July 14, 2000, at 8:00 p.m. at the Dallas/Ft. Worth Airport Marriott on Freeport Parkway.

10 Adjournment

Tim Bachman moved we adjourn. The motion was seconded. Unanimous by voice vote. Vannice declared the meeting adjourned at 10:39 a.m.

ESTA Harmonics Update
by
Ken Vannice
3/22/00

1. Dr. Balint Szentkuti is stepping down as Chair of IEC TC77. The US nominated Mr. Johannes Appel, a German from the manufacturing sector. At least 10 national committees expressed their support of this nomination to the IEC. The Secretariat, which is also in Germany, totally ignored this nomination and nominated Mr. Heinrich A. Kunz, a German from the harmonics testing sector. All Chairs of TC77 have been from the electric power and communications industries. The US believes it is time for a change. The US is actively working to get Mr. Kunz rejected and Mr. Appel accepted.

2. The fourth USCCEMC Harmonics Workshop will be held at the BWI Airport Sheraton Hotel. The registration fee is \$275.00 and is due by 4/15/00. The proposed agenda and registration forms are available from Ken at kenv@nsicorp.com.

3. IEC 61000-3-2 (Harmonics) and IEC 61000-3-3 (Inrush) are scheduled to go into effect in the EC by 1/1/01. The US contends that this is pre-mature as extensive revisions are scheduled to be completed due to the following factors:

- Absence of quantitative rationale for broad application of emission limits.
- Failure to consider and employ the full range of available mitigation techniques in order to optimize cost/benefit outcomes.
- Unstable technical content in the standards.
- Conflicting requirements between standards.

The US believes this goes against the WTO's efforts to promote free trade. The LFEIC is working with the US Dept. of State, US Dept. of Commerce, US Congress and Pres. Clinton to file the appropriate complaints and to put forth our US position. The US is putting forth its position to have the EC delay implementation of IEC 6000-3-2 and 3-3 to beyond the 2004 rework completion date by any and every means possible.

4. TC77A/WG1 is working on IEC 61000-3-2 on Harmonics. CENELEC is pushing the IEC for a band-aid to meet the 1/1/01 date. An amendment has been proposed to that end. Tim Cox reported on that amendment at the last meeting. CENELEC is pushing for a fast vote to put this or a similar amendment into effect by 1/1/01. Natalie Baumier, Secretary to TC77A, states that an international agreement has been reached and the IEC will hopefully publish it soon. The US disagrees with this and is filing a complaint based on the following:

- There can't be a national agreement until the amendment is voted on by the national committees.
- The amendment can't be published as an amendment to the Standard until it is voted on by the national committees.

5. A fourteen-member delegation from the US attended the Organisation for Economic Co-operation and Development (OECD) Special Meeting on Technical Barriers to Trade: International Standards and Conformity Assessment. The LFEIC made a presentation of our case. It was well received by everyone except the EC delegate, Brian Jenkinson and the Spanish delegate, Suzanne Troje. Mr. Jenkinson was "surprised by our presentation" and felt it was out of place and "inappropriate". Ms. Troje felt that the US just "did not understand" how the system works and there was nothing mandatory about this particular set of standards and their application within the Directives. Ms. Troje pointed out that this was a perfect example of how the system was broken in places and why it needs to be fixed. Ms. Troje seemed to be defensive rather than looking at the problems of guidelines vs. standards that then become regulatory requirements. She did not believe that industry would spend all the necessary money just to "comply" with non-compulsory regulations. She did not grasp the concept of how the US could vote (or not care) about guidelines and then get upset that such a document was now converted into a standard.

EP/2000-7004

Working Group Membership after Changes Made at 03/22/2000 Meeting

Name	Company	Parent Co./Org Represented	Vot. Stat.	Int. Cat.
Doug Kraus	Advanced Devices, Inc.	Advanced Devices, Inc.	P	P
Bud Toly	Advanced Devices, Inc.	Advanced Devices, Inc.	A	P
Jeff deRecat	Advanced Devices, Inc.	Advanced Devices, Inc.	A	P
George Long	Aggreko Event Services	Aggreko	O	P
David Evaniew	B. I. M. Limited	B. I. M. Limited	P	P
Tim Bachman	Barbizon Light	Barbizon Companies	P	U
Lee J. Bloch	Bloch Design Group Inc.	Bloch Design Group Inc.	O	G
Jeffrey Measley	Crouse-Hinds Molded Products	Crouse-Hinds Molded Products Inc.	P	P
Ron Dahlquist	Dadco	Dadco	O	P
Trevor Forrest	Helvar Lighting Control	Helvar Lighting Control	P	P
Kevin Stolpe	Hollywood Rental Company	Hollywood Rental Company	O	G
Edwin S. Kramer	IATSE, Local 1	I.A.T.S.E. Local 1	P	U
R. Bruce Prochal	I.A.T.S.E. Local 728	I.A.T.S.E. Local 728	P	U
Roger Lattin	IATSE Local 728	I.A.T.S.E. Local 728	A	U
Jose J. Flores	Kino Flo, Inc.	Kino Flo, Inc.	P	P
Don Gray	Kohler Event Services	Kohler Co.	O	U
Ken Vannice	NSI Corporation	Leviton Manufacturing Co., Inc.	P	P
Mitchell Stein	Leviton Manufacturing Co., Inc.	Leviton Manufacturing Co., Inc.	A	P
Bob Luther	Lex Products Corp.	Lex Products Corp.	P	P
Phil Fram	Marinco	Marinco	P	P

Name	Company	Parent Co./Org Represented	Vot. Stat.	Int. Cat.
Hiroshi Kita	Marumo Electric Co., Ltd.	Marumo Electric Co., Ltd.	O	P
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
Steve Terry	PRG Lighting Division	PRG	P	U
George Sabbi	PRG Lighting Group	PRG	O	U
Teddy Van Bommel	PRG Lighting Division	PRG	A	U
Robert Barbagallo	Proximo Inc.	Proximo Inc.	P	G
Paul F. Mardon	Pulsar Ltd.	Pulsar Ltd.	O	P
Andre Broucke	ADB - TTV Technologies	Siemens	O	P
Paul Smith	Strand Lighting Ltd.	Strand Lighting Ltd.	O	U
Andy Topinka	Technical Group Services, Inc.	Technical Group Services, Inc.	P	G
Colin Waters	TMB Associates	TMB Associates	P	P
Warren Mays	TMB Associates	TMB Associates	A	P
Brian Dowd	TMB Associates (NJ)	TMB Associates	A	P
Richard Wolpert	Union Connector Company	Union Connector Company	P	P
Mitch Hefter	Rosco/Entertainment Technology	USITT	P	G
Eckart Steffens	SOUNDLIGHT	VPLT	O	G
Bruce Whitehead	Whitehead Engineering Services	Whitehead Engineering Services	O	G
Peter Brooks	Zero 88 Ltd.	Zero 88 Ltd.	O	P
Richard Thornton Brown	Zero 88 Ltd.	Zero 88 Ltd.	O	P

Working Group Membership after Changes Made at 03/22/2000 Meeting

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 electrical power devices or products
- U User of electrical power devices
- G General interest in electrical power devices