Overhead Contact Systems Sub-committee for Rail Transit

To: OCS Committee Members

From: Paul F. White, Chairperson

Date: 10 June 2009

Re: Report of 03 & 04 June 2009 OCS Committee Meeting, Philadelphia, Pennsylvania

Attached is the report and attendance list of this meeting. The minutes were sent out separately. If you wish to contact me, please do so as follows:

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For those of you from transit systems who did not receive the IEEE reimbursement forms, it is attached or go on line at www.ieee.org/portal/site/iportals/ enter in the search window: expense reports. This is in EXCEL, fill it out with all expenses and dates. Print out, sign and date it. You must put your IEEE membership number on it where it says member number, attach all original receipts and mail it to me at my home address or scan and send to me at catenarydesign@aol.com. Remember, you
must be a member of the IEEE and VTS to receive reimbursement. If you have not joined IEEE, please do so.

We had a successful meeting with 45 attending on the 3rd and 22 on the 4th and it was held at the Southeastern Pennsylvania Transportation Authority (SEPTA) main offices. Mr. Andrew Gillespie, P.E., Assistant Chief Engineer-Power welcomed us and discussed the system. Andy also made the arrangements for the lunch. MAC Products, Inc. of Kearny, New Jersey sponsored breakfast and our thanks to them and to Andy for making all of the arrangements for the meeting.

The minutes of the last meeting were accepted by voice vote.

PFW said that Steve Norton, Vice Chairperson of Los Angeles Metro as well as all of the other LACMTA participants were unable to attend due to the opening of the Green Line extension and all hands were needed by their agency to insure a smooth opening. PFW further stated that Mike Bertoty of Port Authority of Allegheny County (Pittsburgh) had informed the committee that he could not assume the responsibilities of recording secretary due to budgetary problems with his agency. He told PFW that he shall continue to be a member of the committee and once the fiscal crunch is resolved, renew his participation.

Due to a need for a recording secretary and a secretary to assist with the web site, the committee approved that Andy Gillespie of SEPTA be Secretary and Paul Campbell of Impulse be Recording Secretary. Request for a motion of acceptance was put forth and it was moved and seconded and passed by voice vote and our thanks to them for their participation.

Dinner logistics were discussed. There was to be a “cocktails and conversation” hour at 6:00 pm, dinner at 7:00 pm and two presentations after the dinner. LTK Engineering Services sponsored our dinner and we extend our gratitude to them for their generosity and the dinner was actually quite good. PFW mentioned that the scheduled presentation by Dr.-Ing., Jens Martin Seifert, Director of R&D and Quality Engineering for LAPP Insulators had to postpone his presentation on brittle fracture of fiberglass insulators. He would like to do it at another time and sends his regrets.

The presentations were separate topics and the first was on OCS construction vehicles by Robert Fletcher of RTS Fleet Resources and Richard Bradshaw of Delphi Body Works. They also set up a presentation table and we thank them for their donation to the transit agency travel fund. The second presentation was by Krishna Agarwal of LTK Engineering Services and discussed the challenges of manufacturing silver bearing copper trolley wire and how it was able to meet the stringent requirements of the Northeast Corridor Project.
I have attached Mr. Agarwal’s presentation and will send out Mr. Fletcher’s and Mr. Bradshaw’s as soon as I receive it.

The next meeting was announced and it will be in Seattle, Washington on September 28th and 29th with the traction power substation committee meeting on the 30th and 1st of October at the same location. It will be hosted by King County Metro Rail and committee member Ray Davis of that agency will make the arrangements.

PFW noted that Ray had been gravely ill with an infection but had recovered and is back to work. It was stated for the record that the Committee wishes Ray well and is happy and relieved that he has made a full recovery.

Bih-Yuan Ku was present and addressed the group stating that travel funding will be available from the IEEE VTS. He further stated that we must support the VTS and make sure that we vote in the upcoming election of VTS officers. Although Bih-Yuan did not endorse anyone as he cannot do, I can. Please vote for Harvey Glickenstein as he has been extremely helpful and supportive to our cause. PFW asked if anyone still was owed reimbursement from the last meeting. He further asked that people get their reimbursement requests in ASAP. Please include all receipts, airline tickets and boarding passes. Keep copies for yourself.

Jim Dietz, chairperson of our parent group, the Rail Transit Vehicle Interface Standards Committee addressed the group and gave an overview of the new requirements for standards and project authorization requests (PAR). He said that more responsibility is being placed on the working group chairpersons in obtaining PARs and steering the standard through the balloting process. Jim addressed the various processes for standards and answered questions.

PFW stated that he had not heard from either the IEEE or APTA regarding the interagency agreement between IEEE and APTA. PFW stated that if there is no interest from these two groups that we should explore continuing the standard and applying for a PAR. Jeff Sisson and Chris Pagni, who have done a lot of work since the last meeting on it, will consider and review this approach.

PFW mentioned that the AREMA Chapter 33 Committee was interested in a barrier standard and that Ian Hayes may want to contact Rich Falcon and Herb Zwilling as he (Ian) is very concerned on the importance of insulating screens. At the most recent AREMA committee meeting, of which I am a member, it was discussed that a joint meeting of the AREMA Chapter 33, IEEE Traction Power Substation and IEEE Overhead Contact Systems committees have a joint meeting as a means to discuss current standards and recommended practices. This will be discussed with the committee chairpersons and I will inform the committee of any future joint meetings.
The working groups gave progress reports as follows:

- **WG 16 Standard P1629 Current Collectors-Jeff Sisson and Ron Bennell** reported that they will finalize the standard during the working group session and then send it to the IEEE for the balloting process. It was stated that agencies are using this standard and the question of validity of a draft standard was raised. Jim Dietz said that draft standards can be purchased from IEEE but that the user does so at risk. There was discussion of changing the title to remove DC from it but Jim Dietz said the standard could be amended after the fact to save time for the balloting process.

- **WG 16 Standard P1628 Maintenance for Overhead Contact Systems-Jeff Wharton** reported that the standard has been balloted and they must address questions.

- **WG 17 Lightning Arrestors-PFW** reported that the standard is being finalized and will be sent to the IEEE for editorial review. Paul Dev E-mailed PFW and said he is doing so and will send it before the end of June.

- **WG 18 Standard P1626 Insulation Requirements-Ron Clark** reported that progress has been restricted due to the EN standards being very similar and that it may be more prudent to use the EN standards on the subject. The working group will review and advise as to how to proceed.

- **WG20 Standard P1620 Supporting Structures-Steve Adkins** gave the report and this standard will be forwarded to IEEE for the balloting process.

- **Standard P1791 OCS Terminology (better known as the OCS Dictionary)-Chris Pagni** reported that this is complete. There are some formatting issues as the standard cannot be formatted in regular IEEE format due to its unique structure and he is working on that at which point it can be go through the editorial and balloting process.

- **Live Line Maintenance Standard**—This is progressing.

- **Catenary Design Criteria Standard-Moises Ramos** reported progress is being made and the standard is going forward.

- **Heritage OCS Standard-PFW** reported that he has not heard from either IEEE or APTA on the proposed memorandum of Understanding for a joint standard and that if there is no response, we will consider doing it
as an IEEE standard. Jeff Sisson reported on the progress and that he has taken the original ATEA standard and reformatted it into IEEE format. He also said he is missing some pages of the ATEA standard and is waiting for PFW to provide them [the ATEA manual has been provided to Jeff].

PFW gave the IEEE PATCOM slide presentation and it was stated that there is no knowledge of any patents with the standards being developed.

The dinner and the ‘cocktails and conversation’ hour took place at the Philadelphia Airport Marriott Hotel and was sponsored by LTK Engineering Services. There were two presentations after the meeting on trolley wire and OCS line construction vehicles. After these presentations there was general discussion. Mr. Harold Watkins of the Salt River Project discussed their system and some of the problems they were having with wood poles splitting and breaking taking down the overhead. Their system is a 50 kV line. Various solutions were given and a general discussion ensued. Rodolfo Middelmann of Kummler + Matter, Zurich, Switzerland reported that K+M will be changing its name in October to ALPIQ. They are a large energy conglomerate in Europe and all the individual companies associated with them will have a common name.

PFW thanked donors who had contributed to the transit agency travel fund last year and this year and they were:

- NMC Power Switch
- MAC Products, Inc.
- AutoCommutte
- Kummler + Matter (this year 2009)
- Delphi Body Works (2009)

During the second day of the meeting, the committee broke out into working groups. In the afternoon when the meeting concluded, a tour of the SEPTA Operations Control Center was conducted by Andy Gillespie and all found the control center very impressive.

Again, I wish to thank you for attending the meeting and participating in the committee and I look forward to seeing you at the next one which will be held on September 28th and 29th 2009 in Seattle, Washington at King County Metro Rail. As soon as the particulars are firmed up, we will send out a notice of the meeting.
Wednesday (6-3-09):

Breakfast (7:30-8:30) Compliments of Mac Products

Meeting called to Order and Welcome comments offered by Host (SEPTA)

Update from Bih-Yuan Ku (IEEE-VTS) and Jim Dietz (IEEE- Rail Transit Vehicle Interface Standards Committee)

- Interface between Sub-Committees.
- An open invitation to join the VTS segment of the IEEE.
- Working group chairpersons responsibilities

Minutes of last meeting - Accepted and seconded

Officers – Moved to accept and seconded by group.

Andy Gillespie of SEPTA (Secretary) to update Web Site with Paul White
Paul V Campbell of IMPulse NC, Inc (Recording Secretary)

Announcement of Wednesday Night’s evening dinner meeting with dinner sponsored by LTK Engineering .Services

Reports on Working Group Status:

WG 16 Standard P-1629 Current Collectors
Standards complete – passing onto IEEE committee for approval
Needs Par changed – remove “DC” form Title.

WG 17 Standard P-1627 Lightning Arrestors
Standard ready to go to Editorial Board for review (2-3weeks)

WG 18 Standard P-1626 Insulation Requirements
Needs more work
Possibility to change from a “Standard” to a Guide

WG 19 Standard P-1628 Maintenance for Overhead Contact Systems
(1) Item remaining – Submission to IEEE Board for approval on June 16th
WG 20 Standard P-1630 Supporting Structures
Standard to be submitted for Ballot
Remove “DC” from Title
Mandatory Comments- Working on during the meeting

Standard P-1971 OCS Terminology
Received PAR – Change Title and Submit

Live Line Maintenance:
To be written in general terms- 8 drafts written thus far
Submit most recent draft for comments and PAR

Cantenary Design and Construction Standards:
Outline for definition
Reconvene at this meeting
Prepare for line by line preview in Seattle (September 29th)

IEEE/APTA Standard agreement-Heritage Trolley Overhead Standards
Preparing to submit for PAR during the Seattle meeting in September
Line by Line review to be undertaken upon completion of standard
Concerns on Museum Operations added reason for standard based on old ATA Standards.

Other Business:
Public Safety Shielding/ Safe Working Spaces
To be addressed in Live Line Maintenance
Discuss – OSHA Standards

Presented PatCom Slides

Break for Lunch: Compliments of SEPTA

Break out for Work Groups after Lunch

Dinner: at the Marriott Airport Hotel compliments of (LTK Engineering Services)

Technical Presentations:
Delphi Body Works – Jim Johnston/ Dick Bradshaw
LTK Engineering Services - Krishna Agarwal

General Discussion
Harold Watkins-Deseret Western Railway (Salt River Project)
mentioned that wood poles overloaded, splitting and breaking.
Kummler + Matter – Rodolfo Middlemann mentioned that K&M will be changing its name in the Fall to ALPIQ
Thursday (6-04-09)

Breakfast (7:30-8:30) Compliments of MAC Products

Meeting called to order at 8:30

Breakout into Working Groups

Lunch: compliments of SEPTA

1:00 pm – Tour of SEPTA Operations Center -19th Floor

2:30 pm Discussions, Final Comments
   Look for new locations for Meeting Sites
   Possible include meetings Off Shore (South America, Mexico)

   Next Meeting scheduled in Seattle (September 28th and 29th) with King County
   being the Host (Ray Davis- Contact Person)
   Acknowledged SEPTA for their hospitality in hosting this meeting

3:00 pm Meeting adjourned
Meeting Location: SEPTA Headquarters
11th Floor-Room 11C
1234 Market Street
Philadelphia, Pennsylvania 19107

Hotel is: Marriott Philadelphia Airport Hotel
One Arrivals Road
Philadelphia, PA 19153
Tel: 215-492-9000

Wednesday, June 3rd

8:30 am Meeting called to order
Safety Briefing for Facility

8:35 am Opening remarks by the Chairperson
Introductions of attendees

8:40 am Welcome greeting by SEPTA personnel

8:45 am Remarks by IEEE Representatives
  • Remarks by Bih-Yuan Ku of IEEE VTS
  • Remarks by Jim Dietz of IEEE Rail Transit Vehicle Interface Standards Committee

8:55 am Committee Business
  • PatCom Slides
  • Minutes of the previous meeting
  • Travel funding status
  • Dinner logistics
  • Dinner Presentation Information
  • Next meeting location and date

9:10 am Report of the Chairperson
  • General Committee information

9:15 am Report of the Vice-chair

9:20 am Recording Secretary
  • Update on Position of Recording Secretary

9:25-10:00 am Report of Working Group status
  • WG 16 Standard P-1629 Current Collectors
  • WG 19 Standard P-1628 Maintenance for Overhead Contact Systems
• WG 17 Standard P-1627 Lightning Arrestors
• WG 18 Standard P-1626 Insulation Requirements
• WG 20 Standard P-1630 Supporting Structures
• OCS Terminology Standard P-1791
• Live Line Maintenance
• Catenary design and construction standards
• IEEE/APTA Standard agreement-Heritage trolley overhead standards
• Other business

10:00-10:20 am  Break

10:30-12:00 noon  Breakout into working groups

12:00-1:00 pm  Lunch (compliments of MAC Products, Inc.)

1:00-3:00 pm  Breakout into working groups

3:00-3:15 pm  Break

3:15-4:00 pm  Breakout into working groups

4:00-4:10 pm  Discussion and adjournment

6:00-7:00 pm  Cocktails and conversation at Marriott Airport Hotel

7:00 pm  Dinner (at Marriott Airport Hotel), presentations and discussion (Dinner cost is sponsored by LTK Engineering Services). Technical presentations after the dinner.

Thursday, June 4th

8:30 am  Meeting called to order

8:35-10:00 am  Breakout into working groups

10:00-10:15 am  Break

10:15-12:00 pm  Breakout into working groups

12:00-1:00 pm  Lunch (compliments of MAC Products, Inc.)

1:00-1:45 pm  Breakout into working groups

1:45 pm-3:30 pm  Discussion, final comments, date of next meeting

3:30 pm  Adjournment