INTRODUCTION
Traction Power Substations Standards Subcommittee (TPSSC) is on the thirteenth year of operation since it was formed in 2002. We are working on developing new standards, recommended practices, and guides; coordinating with other organizations such as APTA and AREMA and within IEEE; providing up to date information on professional activities of interest to rail and transit industry; and soliciting recommendations, ideas and suggestions that would improve the industry practices. The TPSSC is a subcommittee of the Rail Transportation Standards Committee (RTSC) within Vehicular Technology Society (VTS). TPSSC meets at regular intervals during the year at various transit properties in United States and Canada. TPSSC consist of transit and rail industry leaders in public and private sectors dedicated to writing national consensus standards, recommended practices, and guides which will govern manufacturing, supply, installation, testing, commissioning, and operation of traction power substation equipment.

PURPOSE
The purpose of this meeting was for the Working Groups (WG) and Task Forces (TF) to continue their work on the standards, recommended practices and guides.

Wednesday, March 25, 2015

Meeting called to order by Gary Touryan

Welcome greeting by Ramesh Dhingra, VTA
Mr. Dhingra gave an overview of the VTA System and presented Light Rail Passes to the committee. Welcome greeting JRC Chair David Thurston, VTS Vice President, Land Transportation. Mr. Dhingra also made a passionate speech on encouraging recruiting of new members and asked for the commitment for each member to bring on board two additional members by the next meeting. He started the ball rolling by introducing two new members to our group.

Mr. Thurston gave an overview of the Joint Rail Conference. Mr. Thurston encouraged participation in the JRC.

Mr. Bih-Yuan Ku requested the VTS Members vote for David Thurston in the election for VTS Board of Governors.

Ramesh Dhingra led a short discussion on the problem of SCADA systems open and closed systems. Rather than start a new Task Force, this topic will be added to the Smart Substation Task Force.

Introductions
All
For future meetings with the JRC we discussed inviting students to the meeting, All agreed.
Gary Touryan informed that for the next meeting in mid-October 2015, we have contacted MTA Baltimore, MA. However, any other options in northeast such as SEPTA in Philadelphia, and the multitude of the agencies in NY/NJ area are also possibility. He encouraged the members to reach out to their contacts in the agencies and see if we can have additional options for the next meeting or potential venues for the subsequent meetings in northeast.

RTSC /Web site http://grouper.ieee.org/groups/railtransit/index.htm
Balloting on Standards is done at the Standards Website: You must be an IEEE Member and a Standards Association Member to vote: Https://development.standards.ieee.org/my-site

Other Matters
Minutes of the previous meeting were approved Paul Forquer
PatCom info on IEEE Meetings was reviewed Paul Forquer
Chuck Ross suggested streaming part of the meeting on the internet

P1653.1 Standard Practices and Requirements for Traction Power Rectifier Transformers
Vince Paparo/Ethan Kim
Ray Nicholas gave a presentation on the status of the standard. As soon as Ethan Kim finishes his review, Vince will submit to the IEEE for review, comments, and balloting. Hopefully published by year’s end.

P1653.2 Standard for Uncontrolled Traction Power Rectifiers for Substation Applications
Ben Stell/Steve Bezner

P1653.3 Use Guide for Traction Power Systems Modeling
Mark Pfeiffer/Tanuj Khanderwal, David Heatherington
Mark Pfeiffer provided an update announcing that since the last meeting, the official chairs and vice chair positions have been updated with IEEE to reflect Mike Dinoflo’s retirement. The standard was published in 2012, so we are in the dormant period. However, if any members have any proposed additions or changes, please contact David Heatherington or Mark Pfeiffer.

P1653.4 Standard for dc Traction Power System Field Testing and Acceptance Criteria for System Applications up to 1500 Volts dc Nominal
Kelvin Zan/Tom Young/Paul Forquer
All section of P1653.4 Standard was revised and Short Circuit Testing section was rewritten. Train pull away section was discussed during the san Jose meeting. Several inputs were received from members and will be incorporated for next meeting. New revision will be passed on to members. Telephone conference meeting will be conducted before next meeting.

P1653.5 Recommended Practice for Controlled Traction Applications
Vince Paparo
Expect to have draft by middle of June for review by group. Need volunteers to help with some of the sections!

P1653.6 Recommended Practice for Grounding in Systems Supplying Direct Current Traction Power
Ethan Kim/Paul Forquer
No news. The standard is published.

**C37.20.1 dc shunts for appendix of LV ac & dc Switchgear**
John Shullaw
John advised that information covering shunts had been added to C37.20.1, and that the standard had been approved by ballot and would be published this summer. This TF is closed.

**TF on Rail Potential**
Ben Stell

**TF on Smart Substations**
Mark Curry

**“Green Book”**
Roger Avery

**C37.14 Standard for Low Voltage dc Power Circuit Breaker Used in Enclosure**
Brian Gerzeny/Chuck Ross
John Shullaw, standing in for Brian, advised that C37.14 has been approved by ballot, and will be published this summer. TPSS still feels changes are required to this standard regarding breaker for traction applications, such as short-circuit multiplier, time constants, definitions and rectifier breaker ratings (among others). PES is willing to entertain a PAR request for an addendum to C37.14 to cover these changes, but only after TPSS comes up with detailed problem statements, markups of the standard, and proposed new words.

**PC37.20.8 Standard for Metal-Enclosed Low-Voltage (3200V and below) Direct Current Power Circuit Breaker Switchgear for Traction Power Applications**
David Groves/John Shullaw/Mark Griffiths
John reported that the PAR for PC37.20.8 has been withdrawn and that effort is now dead. Mark Griffiths proposed starting an effort to create a recommended practice or application guide covering issues within traction maintenance shops. A new task force will be created to investigate this topic.

**C37.59 Standard Requirements for Conversion of Power Switchgear Equipment**
Richard Rohr
Richard Rohr discussed C37.59 “Requirements for Conversion of Power Switchgear Equipment” document now being reviewed by the PES group.
Although many people consider this a “Circuit Breaker” retro-fit standard, the scope of the document covers “Power switchgear equipment that is converted from a qualified design”.
This document covers any conversions (retro-fits) of existing switchgear. The primary purpose is to make sure converted gear is properly re-tested after the conversion.
The working group for this document is particularly interested in any “new technology” equipment that may be likely to be added to existing equipment and is not currently accounted for in the standard.
Richard is chairing a task force related to the DC Conversions portion of the document.
It was commented that certain transit authorities have current projects related to conversions of existing equipment.
It was agreed there should be cross referencing between the C37.59 document and the P1887 Guide for Wayside Energy Storage Systems. Richard will follow–up with Ken Nutt to make sure the documents are coordinated. Anyone interested in this document is encouraged to comment on it. If they would like to join a task force, please let Richard Rohr know.

Other Matters
Arun Vorha led a discussion on leakage in third rail insulators.

Thursday, March 26, 2015

Meeting called to order & general information			Gary Touryan

P1887 Guide for Wayside Energy Storage Systems for dc Traction Applications
Salwa Fouda/Suresh Shrimavle/Ken Nutt

WG continued conference call meetings on a regular basis to discuss the input provided. Presented to the TPSS group the prepared Draft and discussion took place in greater depth and noted the suggestion with positive remarks. Emphasized that WG would continue a monthly conference call meetings, although there is a long list of participants signed but few attended the conference call meetings earlier. Requested new interested participants to join the WG, who can contribute in developing the guide. The revised Draft will be circulated among the WG within a week and continue progressing with monthly conference call meetings which will help us to achieve a complete the working Draft by end of 2015.

P1884 Guide for Stray Current/Corrosion Mitigation for dc Rail Transit System
Vish Mawley/Kelvin Zan/Bob Wilson

P1884 Standard was revised to incorporate several inputs from Houston meeting and generated new base line. Negative rail overvoltage section was removed. Several comments were provided by members during San Jose meeting. These comments will be incorporated for next meeting. We will contact National Association of Corrosion Engineers (NACE) to verify duplication of topics and notified that this guide will be specific to corrosion caused by DC stray current in Transit industry. Plan to conduct teleconference meeting before next meeting.

VTA Presentation, Ramesh Dhingra, Matt Shipman, Oxo Slayer

Adjourn the second day meeting			Gary Touryan

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