

Meeting Report
ABYC Electrical Project Technical Committee
Plano, Texas
September 25-26, 2007

1. Transformer Working Group
 - Discussed adding an approved transformer without a shield, citing IEC as a reference.
 - Next action: Need PTC input.
2. In-water shock hazard project.
 - ABYC contracted from the CG to do this work.
 - Project being completed soon. Findings to be presented at IBEX.
 - Quality of water affects electrical voltage gradient. Tests were conducted in fresh water.
 - Next step: To continue work with human protection shock hazard device, a whole-boat RCD device.
3. UL 1107, Battery Switches for Use on Boats, standard review
 - ABYC is taking over this standard and the initial draft is in its first review.
 - This is a testing document versus a construction and installation standard.
 - Discussion on who will be responsible for maintenance of this standard, a subcommittee of this PTC or another new PTC. Discussed creating an electrical component PTC to handle this new standard and other component standards such as Galvanic Isolators. Tech Board to review request.
 - Need UL guarantee that they would test to the new ABYC standard and not to two standards.
 - Next action: Extend the comment period for UL 1107. The comments will then go to the subcommittee to review via conference call in November before going to the new PTC.
4. AC Power Conversion subcommittee
 - Held June meeting and reviewed all comments submitted to draft standard. Draft revised 3 times already. Still lacking some diagrams.
 - Questions about IEC references.
 - Next action: Once the diagrams are installed the draft will go to the PTC for review. Should be in 2 months.
5. High Voltage AC & DC subcommittee
 - Members are from all over the world and include boat manufacturers who build these boats.
 - Looking at ground fault monitoring and master disconnects. Also looking at hybrid systems and cable cooling.
 - Current limiting is used in these systems in lieu of overcurrent protection.
 - Log out and tag out procedures also addressed.
 - Next meeting in San Diego in October. Goal is to have a working document to present to the PTC after this meeting.
6. Distributed Power Subcommittee
 - Met in Plano and considered all submitted comments. One outstanding item.
 - Next action: Send draft standard to the PTC within 2 months.
7. ISO standards
 - ISO I0133, DC systems standard, is in a DIS review and ballot is available for comment. Comments to be sent to the US TAG for review and then sent to ANSI to forward to ISO. Comments are due to ABYC by October 19.
8. NMEA 2000
 - CG still reviewing all the NMEA comments and request for exceptions to the CFR. In the CG legal shop.

11. Tech Board asked to review the Request for Interpretation policy.
12. No action on the review of the SAE conductor labeling requirements.
13. E-11, AC and DC Electrical Systems on Boats
 - Will be on a 3 year review cycle.
 - Modified the requirements for liquid level gauge transmitters to exempt isolated sending units that are isolated from the static grounding and bonding systems. Applications are given for senders on both metallic tank and non-metallic tank.
 - For battery reserve capacity calculations, Table 1, for banks constructed of multiple paralleled batteries, divide the amperage requirement by the number of batteries. Reserve minutes apply to each individual battery in the bank.
 - Looking to modify the tables for determining conductor sizes when bundled, sheathed or in a conduit (Tables VII A, B and C). Future action item.
 - DC Equipment located in machinery spaces or in contact with fuel lines or that may be on contact with bilge water or seawater shall be designed so that the current carrying parts of the device are insulated from all exposed electrically conductive parts. E-11.15.2.1.
 - Deleted the requirement for AC circuit breakers to be “fit for further use”.
 - Deleted the Diagrams 8 and 11 and their respective texts. These diagrams do not allow for a return path to shore for fault current. Deleted Diagrams 6 and 9 and their respective texts. These types of transformers are no longer used in the industry.
 - Added a definition for Residual Current Protection (RCP). Also added a requirement for installation of a Residual Current Device with or in addition to the main breaker. The RCD shall have a maximum 30mA detection level and a trip time of 100ms. This was done to help minimize in-water shock hazards.
 - Changes in transformer requirements were discussed and this topic may be moved to the newly proposed components PTC.
 - Next Action: Draft standard will be sent out for consensus ballot in 2/3 weeks. 45 day comment period. A small task force will review all comments and give recommendations at the next PTC meeting.
14. E-2, Cathodic Protection
 - Currently in comment period until October 6.
 - Task Force reviewed the entire document and made numerous changes.
 - Next action: Expect a positive vote for publication.
15. A-28, Galvanic Isolators
 - Next Action: Ballot for publication out for PTC vote. Expect a positive vote for publication.
17. The next meeting of the ABYC Electrical PTC was tentatively set for January 15-16, 2008 in Orlando, FL.

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