

Minutes from WG Evaluation and Reconditioning of Liquid Immersed Power Transformers C57.140

Chairman- Paul Boman Vice-Chairman-Brian Sparling Secretary- Saurabh Ghrob

The Meeting was held in San Antonio, Texas from 4:45-6:00pm on 4/13/2015

18 members were required for a 2/3 majority, 15 members were required for a quorum

60 attendees, 19 members were present, 41 guest

Motion to approve the agenda

1st - Derek Baranowski

2nd - Sue McNally

Minutes from previous meetings were not provided to the Working Group in advance so Minutes were not approved at this time.

PAR expires December, 2015 so a extension to the PAR will be requested

Report on draft 5 of the straw ballot

Unresolved comments

- Index number 10, section 4 page 4 ... 1st bullet
 - Balloter recommended moving all of section 4 to an annex
 - Several members felt this section should be part of the assessment
 - Motion to leave the section in the standard
 - § 1st – Derek Baranowski
 - § 2nd – Sue McNally
 - § Discussion – Additional comments received from members that the data is an important part of the assessment and needs to be in the standard and the data is part of the evaluation that should occur before considering life extension
 - Vote
 - § Yes – 10
 - § No – 0
 - § Abstain – 0
- Index 15, section 5, page 16
 - Balloter recommended removing this section since it is covered in other standards
 - Motion was made to table the recommendation until members have had an opportunity to review C57.143
 - § 1st – Eric Davis
 - § 2nd - Gary Hoffman
 - § Discussion

- This is covered in the guide for diagnostic guide for field testing. This standard should just reference that guide
 - Recommendation was also made to list the recommended tests to be performed with no description of the test method and then refer to the field test guide
 - Chair indicated this is essentially what is being done now
 - Joe Watson indicated these types of decisions are normally made during the formal ballot process
- Vote to table discussion until they have had an opportunity to review C57.152
 - § Yes - unanimous
 - § No – 0
- Index 17, section 5.1, page 17
 - Chair decided to table this discussion until members have had an opportunity to review C57.143 since it is similar to the previous comment
- Index 46, section 4.6
 - Chair asked attendees if they remembered the time frame of short-circuit duty standards were changed.
 - There was no response from the attendees so the comment information will be used in the Guide
- Index 113, section 6.1.3, page 38 – Reblocking and Re-clamping
 - Balloter recommended removing this section because of possible misuse by public.
 - Motion made to remove the recommended clamping pressures and the example on page 42 and leave the rest
 - § 1st – Sue McNally
 - § 2nd – Eric Davis
 - § Discussion
 - There is no industry standard so the numbers referenced on page 42 should be removed along with the examples below
 - There is no industry standard for this so the specific example doesn't belong
 - Get rid of the numbers and list the equations for the calculations
 - Recommendation to remove the example and pick up on the sentence stating toreclamp to the original factory values
 - § Following the discussion the chair asked for volunteers to rewrite the section. This will be revised before the next draft being circulated
 - Volunteers
 - Branimir Petosic-Furan Section of Clause 5
 - Richard Amos- C57-143 Comparison
 - Emilio Morales – Qualitrol C57-152 Comparison
 - Volunteers to submit their revised wording by 5/15

§ Motion was withdrawn following the discussion and after receiving volunteers to rewrite the section.

- Item 126 was withdrawn by the balloter (Patrick McShane)
- Index 170, section 6.4.1, page 57
 - Balloter requested that a definition of “oil backing” be added to the standard
 - Chair asked the members if anyone could offer a definition
 - Members agreed that the term was used to recommend welding in the presence of oil to avoid excessive heat from being generated. Since there are other methods that can be used members felt it was better to reword the section to avoid the term “oil backing” and instead state that “techniques to minimize damage during welding should be used”.
 - Chair asked for a volunteer to rewrite this paragraph
 - Volunteer
 - § Ken McNeish – will submit revised wording by 4/20
- Index 177, section 7.2, page 74
 - Balloter recommended adding a section to refill with a natural ester fluids which naturally reduce the moisture in the insulation
 - The mechanism is called Hydrolysis
 - Retro-filling transformers will a different fluid
 - § This method was approved in FERC accounting rules for capitalization activities
 - § Retro-filling only be done after a proper design review by the manufacturer or a knowledgeable expert on the design of the transformer
 - § Germany is using esters to dry transformers – representative from M&I Fluids
 - § Gary Hoffman recommended adding this to an informative reference discussing this
 - § Balloter agreed with this proposal
 - § Patrick McShane to provide text for Annex.
 - § No further discussion

Motion to adjourn

1st – Richard Amos

2nd – Gary Hoffman

Vote – unanimous

Respectfully Submitted,

Paul Boman, Chairman