

Solid Dielectrics Taskforce Meeting

April 30, 2012 – St. Pete Beach, FL

The meeting was called to order at 10:18 AM by Chair Francois Soulard. Co-Chair is Chris Ambrose.

There were 11 (/14) members and 16 guests present for the meeting.

Francois Soulard welcomed the members and guests. He provided a general summary of what the group has been working on. Introductions of attendees was conducted. Sign-up sheets were routed to the group.

Primary objective is to finalize the discussion and work compiling information on solid dielectrics. We will not go through the details of the report. Just the basic information, what the structure is, what was found. Then we are to discuss the recommendations to be presented to RODE. We want to finish this taskforce in the fall.

There (8) different sections in the report including introduction and conclusions/recommendations. A presentation on the sections was displayed. This will be either included in the minutes as an attachment or placed on the group's web site.

Section 1 – Introductions

Summary displayed. No additional discussion other than Francois's presentation.

Section 2 – Scope and Definitions

Summary displayed. No additional discussion other than Francois's presentation.

Section 3 – Material

Summary displayed.

On the molding we are missing the vacuum molding per Gerard Schoonenberg. ACTION

Are there other process being considered rather than injection? Question is whether this was also for coatings for bus bars. Francois provide some discussion. Nenad ACTION

Section 4 – Applications & environmental conditions

Summary displayed.

Section 5 – Testing

Summary displayed. No additional discussion other than Francois's presentation.

It was noted all the C37 series covers is the product made with the solid dielectric system.

Discussion was asked about whether this should be recommended to C37.100.1. Steve Meiners commented that this goes to RODE. It is up to RODE to decide whether it goes to ADSCOM for consideration by other apparatus standards then under RODE.

Section 6 – Standards referring to Solid Dielectric Material

Summary displayed. No additional discussion other than Francois's presentation.

Section 7 – References

Summary displayed. No additional discussion other than Francois's presentation.

Section 8 – Conclusions and recommendations

We will work on this today.

Discussion:

Type tests: Material itself shall be taken into consideration. Explanation of sensitivity to the process.

Edgar Dullni: One aspect is material and the other is system aspect. He thinks the intention is to collect and list tests for the material to prove something new. Tests would be on only new materials, not on the material that has been proved over 20 or 30 years.

Chris Lettow: Material tests don't necessarily belong in a standard. Edgar Dullni replied that the intention of the guideline is to put new tests or concerns for material. Frank Muench commented that there are materials tests such as tracking, UV withstand that you perform on the material. When you take the material and put it in the product you want the apparatus standard to consider the effects that the product has to meet that the what the material should withstand once in as an entity

Edward Jankowich: stated that we are a taskforce and need to go forward with the report. This information is sufficient as a report that some other group will use to create a guide to recommend how to develop. Francois Soulard stated that we will supply a document as a report but we do not need to finalize it at this meeting, fall 2012 is the target.

Timothy Royster: As we go to RODE that we don't just recommend going as a Guide. That RODE use this information to influence existing standards. He wants something done to the standard to make sure Solid Dielectric Switchgear is "solid".

Harold Hirz: says there is so much history out there where Solid Dielectric is not a new material. If someone is coming on the market with a new blend what type of testing would need to be performed. Partial discharge is a big concern. How do you establish a limit? Report, level, extinction and inception? Francois Soulard mentioned that in existing standard take in consideration dielectric gas (SF6) and liquid (Oil) mentioning when it's applicable or not. Standards exist for those elements and performance characteristics are available to evaluate them. We should recommend similar for solid dielectric material.

Chris Lettow: What product tests do not exist that should be considered for the apparatus standard? This is what we should consider.

Scope (reminder):

“Solid dielectric equipment is emerging technology and we need to analyze this equipment to determine what design tests, routine tests, and construction specifications may be needed/used. The solid dielectric equipment will affect many standards, including C37.60, C37.63, C37.66, and C37.74. Due to this equipment affecting many standards, the RODE Subcommittee members agreed that a RODE Subcommittee Task Force needs to be initiated to investigate this type of equipment.”

Recommendation (preliminary proposition): Each members have to comment.

The taskforce recommends to the RODE subcommittee taking into consideration the different information collected in the report. This information may then be applied by others standards.

Actions:

Action item: Nenad Uzelac will provide additional information in material

Action item: Gerard Schoonenberg will provide missing information on the vacuum molding

Action Item: Additional editing of the document will be provided to Francois Soulard by section leader.

Action Item: Francois will submit the existing document to each section leader to modify. Francois will have final comment on it.

Section leaders: (new numbering)

Section 1 – Francois Soulard

Section 2 – Francois Soulard

Section 3 – Nenad Uzelac; Frank Muench; Jeff Gierger; Tim Taylor, Larry Putman

Section 4 – Kirk Smith; Larry Putman; Frank Muench; Frank DeCesaro; Nenad Uzelac (for environmental aging stess)

Section 5 & 6 – Gerard Schoonenberg

Adjourned at 11:56 AM