

## **TO DO LIST FOR ICC WORKING GROUP A11W**

**As Of: 8/24/05**

**Note to WG Members:** This list is preliminary and subject to change. However, it is an attempt to get better organized and make further progress on the next draft of our guide prior to our forthcoming meeting in New Orleans. Comments and help from all members or contributors will be appreciated. Much of the listing below is based on the good work done by Kent Brown in his thorough review and useful comments on the previous draft of our guide. A copy of that draft, with changes and comments in color, will be distributed with this list. Note that I am showing in parenthesis, after the listing of each item, the names of members that have had previous involvement with that particular item or whom may have information to contribute to the suggested revision. I have listed my name for those changes that are primarily editorial. Where multiple names are shown, the person whose name is listed first is expected to take the lead. However, I do hope that other members will volunteer for one or more assignments. I will proceed with revisions as received and plan to make a distribution of the next draft prior to our next meeting on October 13, 2005.

Joe Snow  
Chair, WG A11W

### **1.1 Scope**

Clarify wording relative to radial & longitudinal metal plastic laminates. This was intended to recognize that such laminate tapes or sometimes applied radially or helically in Europe. (Snow)

### **2.0 References**

Consider if other references are needed. References are those industry or governmental standards that are essential to the user of the guide and therefore should be readily available for reference while the guide is being utilized. Otherwise, they should be in the bibliography. (Snow)

### **3.1 Blocked conductor**

Add further clarification to definition as recommended. (Snow)

### **3.2 Bonded sheath**

Clarify. Perhaps applied instead of folded. (Snow)

### **3.8 Moisture block**

Correct as noted. (Snow)

### **3.11 Strand blocking**

Correct as noted. (Snow)

### **3.12 Swellable powder**

Correct as noted. (Snow)

### **3.13 Under-jacket type**

Remove any reference to "on-core" designs. (Snow)

### **3.14 Water-blocking tape**

Modify as noted. (Snow)

#### **4.1 Cables with radial moisture barriers**

Clarify the reference to helically applied laminates. This type of construction was reported by Mo Dawud and has been used in Europe. Further editing is needed to eliminate anything redundant and consider better description of corrugations. These are applied laterally or crosswise with the axis of the cable. Not longitudinally. (Dawud, Bow & Gau)

##### **4.1, Figure 1 Typical radial design**

Need an illustration for Figure 1. Anyone having a suitable illustration, please contact Snow

##### **4.1.2 Low voltage cable and Table 1**

Correct and clarify time references in text and in Table 1 relative to long-term moisture resistance. (Bow)

##### **4.1.2 Medium voltage cable and Figure 2**

Correct spelling as noted. Finalize and insert a suitable illustration for Figure 2. (Bow, Gau & Snow)

##### **4.1.3 High voltage cable, Table 2 and Figure 3**

Consider any changes in text or tabulation to enhance and clarify data covered by Table 2 and clarify Note (3) of table. Finalize and insert illustration for Figure 3. (Bow, Gau, Banks and Wilki)

##### **4.1.3.1 Aluminum laminate moisture barriers**

Correct error on thickness. (Snow)

##### **4.2.1 Sealed overlap**

Add patent reference. (Bow & Snow)

##### **4.2.2 Aluminum Moisture Barriers**

Ken Bow will add a reference and some text that will reflect EDF practice. (Bow)

##### **4.2.3 Lead Barriers**

Ken Bow advises that he wants to re-look at this clause and possibly add another one for welded bronze. (Bow)

#### **5.2 Laminates for radial designs**

Edit to make changes as noted. (Bow & Snow)

#### **5.3 Optional seam adhesives**

Further investigate latest adhesive technology including pressure sensitive adhesives and revise this clause as needed. (Bow & Gau)

#### **5.4 Properties and testing of laminates**

As recommended by Kent Brown, perhaps we should distinguish between testing specifications and property generalities. The testing specifications could then become an appendix and be utilized as needed by manufacturers or users. Refer to Kent Brown's cover email dated 5/3/05. All members please comment. (Bow, et al)

##### **5.4.2 Flexibility**

Consider suggested changes and reword. (Bow and Gau)

### **5.6.2.1 Description**

Correct reference in first sentence. (Bow & Snow)

## **6. Cable performance criteria**

Take into account Kent Brown's comments in Par. 6.1 and let's reach a decision on how to restructure this entire clause. I concur that testing specifications as such should become an appendix that can be specifically referenced by manufacturers or users to fit into their specifications for manufacturing materials or for completed cable requirements. The need for the tests and fundamentals could still remain in the body of the guide. All members please comment and volunteer for an assignment if there is something you are willing to undertake. (Bow, et al)

### **6.5.3 Effect of Jackets**

Note Kent's suggestion that we provide typical data for various jacketing materials that are suitable for use with a chemical/moisture barrier sheath. Perhaps a table listing critical properties would be useful. This could also be considered for the appendix.. Members please comment and volunteer for an assignment. (Gau, Bayer & Bow)

### **6.6.1 Accelerated water treeing test**

Eliminate reference to on-core and related text. (Snow & Bow)

### **6.8 CIGRE test protocol**

Check and correct IEC reference. (Bow & Snow)

### **7.1.2 Attachment of pulling devices**

Remove reference to on-core design and related text (Snow & Bow)

### **7.2.1 Terminations**

This needs an extensive rewrite with illustrations to provide more specific information on termination methods that have been used with moisture barrier cable. (Gau, Bow, Bayer, et al)

### **7.2.2 Joints**

This clause also needs a considerable amount of additional work. Note Kent's comments on how test evidence can be submitted and what are acceptable methods. (Gau, Bow, Bayer, et al)

## **8. Bibliography**

Much work remains to review and better organize the bibliography. (Bow, Hiranandani, Snow, et al)  
Because of the large number of technical papers listed, Ken Bow has suggested subdivisions of Clause 8.1 as follows:

### **8.1.1 Design of Moisture Barrier Cables**

### **8.1.2 Materials for Moisture Barrier Cables**

### **8.1.3 Testing of Moisture Barrier Cables**

### **8.1.4 Low Voltage Moisture Barrier Cables**

### **8.1.5 Medium Voltage Moisture Barrier Cables**

### **8.1.6 High Voltage Moisture Barrier Cables**

Clause 8.2 Patent references, 8.3 Specification references and 8.4 Other references will remain as is with updating and editing as needed. We need help from all WG members and contributors on this bibliography clause and its subdivisions. Please join in and in particular submit anything that is new, appropriate and not previously listed. We will try to come out with a new version of this clause in the near future and make distribution for further consideration. So please submit inputs ASAP.