

## CIGRE Study Committee N° D1

### PROPOSAL FOR CREATION OF A NEW WORKING GROUP

<b>WG* N° D1.42</b>	<b>Name of WG Chairman: Toshikatsu Okamoto (JP)</b>
<b>Title of the Group : Radiation Ageing of Polymeric Insulating Materials</b>	
<b>Background :</b> There are many nuclear power plants throughout the world that are more than 30 years old and are being reassessed to determine their remaining life. As part of the qualification process, one main concern is the condition of electrical insulations such as in control cables and motor insulation which are located in a radiation environment. The insulation condition will be determined by ageing due radiation, thermal, moisture and voltage stresses, i.e., multistress conditions. Although there was a lot of work done in this area about 20 years ago, the information has not been widely published as it is mostly contained in reports.	
<b>Scope :</b> The scope of the work is to collect information on, and analyze: <ul style="list-style-type: none"><li>• Polymeric insulating materials used</li><li>• Accelerated ageing test conditions used</li><li>• Experimental data obtained from the accelerated ageing tests</li><li>• “Standard” tests used</li></ul>	
The work will start with a literature review and collection of published data, followed by an analysis of data and end up with a technical brochure and Electra paper that will include recommendations for the future work.	
<b>Deliverables :</b> Report to be published in Electra and technical brochure with summary in Electra	
<b>Time Schedule :</b> start : 2010 <b>Final report :</b> 2013	
<b>Comments from Chairmen of SCs concerned :</b> A1, A3, B1	
<b>Approval by Technical Committee Chairman :</b> Klaus Fröhlich <b>Date :</b> 14/08/1010	