



Study Committee B3 “Substations”

Working Group

Working Group No: B3-17

Convenor: Chris Jones,

Title of the working group: Residual Life Concepts Applied to HV GIS

Scope of the work

Following the current work of TF 04 with the Brochure “Future GIS” it is proposed to encompass “GIS LIFETIME” issues by restructuring and looking at Residual Life.

For HV GIS equipment, some of which has been in service for 40 years, residual life is becoming a more and more important issue. There is a need to identify the factors which determine the expected residual life of HV GIS. These factors defined as well by manufacturers as users have to be considered alongside associated operational risks so that guidance can be given on the full evaluation of the residual life of any particular HV GIS installation.

Options for maintenance procedures, repair, refurbishment, retrofit or replacement need to be presented to users so that they can make an assessment of the appropriate approach.

The impact of GIS materials and design, monitoring and diagnostics will be included as well as operating duties and environmental conditions.

Practical examples will be used as much as possible to demonstrate experience and different approaches.

Procedures for end of life treatment (recycle and disposal) of HV GIS are relatively straightforward but are included within the scope of this work. The decision of end of life will be determined under service aspects as well.

Deliverables

The output from the work would be presented in a comprehensive brochure that may be split into two parts

- a) Factors which determine the expected residual life of HV GIS
- b) Evaluation methodologies and examples of how residual life is determined and acted upon (maintenance, repair, refurbish, retrofit or replace, end of life)

The activity will result in a report in which the methodology, a number of case studies and guidelines are unfolded. A short paper for Electra will be prepared as well.

Time Schedule

Start Beginning of 2006

Brochure complete May 2007

The working group will be disbanded upon completion of its last deliverable in 2007.

Delivery of an interim report to the Study Committee: to be defined.

Target groups

Manufacturers to learn about the decision making process of replacement of equipment,

Users and owners of HV GIS, particularly those with responsibilities for Asset Management strategy and operation.

Approved by TC Chairman : Aldo Bolza

Date : May 18, 2006