



CIGRE UK Technical Committee Meeting

30th November, 2011 Warwick

Report from Study Committee B3 – Substations

Paul Fletcher (Mott MacDonald Ltd) – Regular Member

1. Scope of B3

The design, construction, maintenance and ongoing management of substations and electrical installations in power stations (excluding generators).

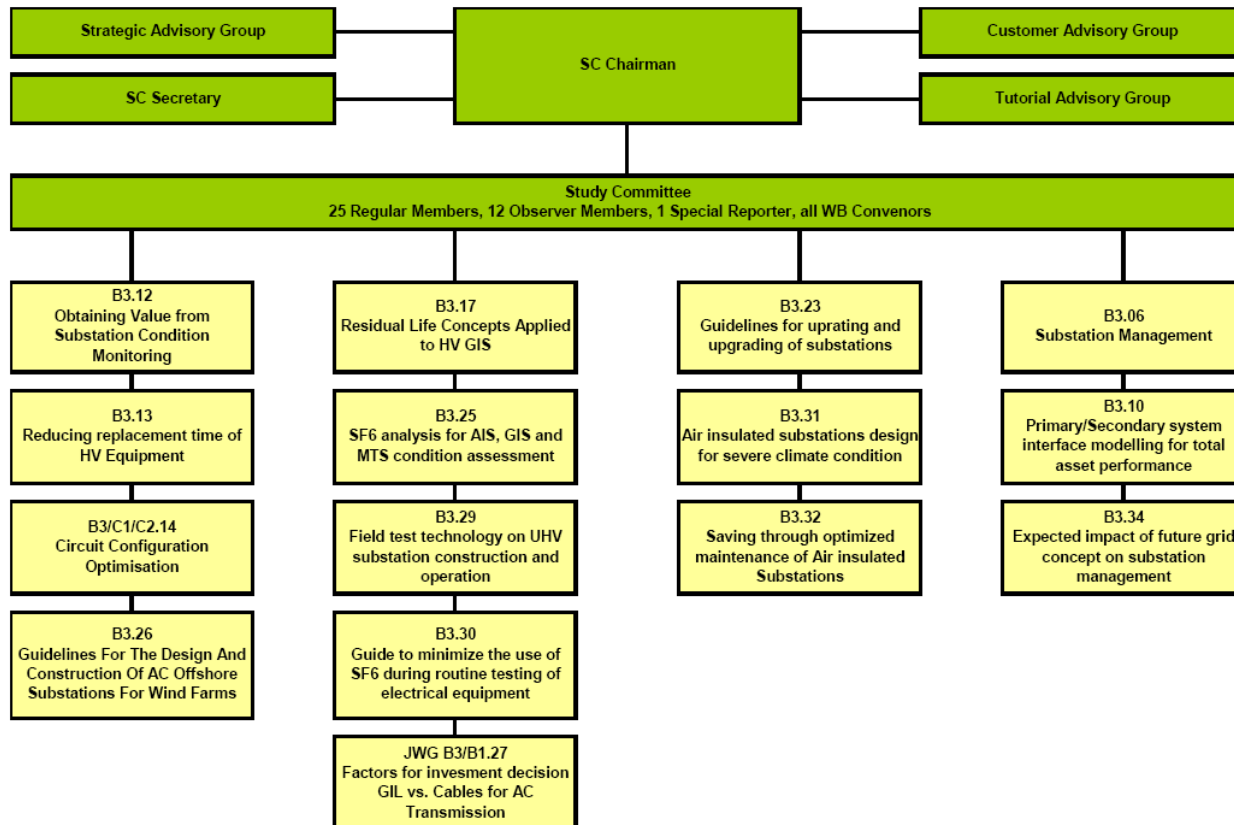
2. Management of the Study Committee

Chairman: Franz Besold (Switzerland) - Retires 2012

Chairman Designate: Terry Krieg (Australia)

Secretary: Claude Counan (France)

The structure of the Study Committee is as follows:





3. SC B3 Activities

3.1 Advisory Groups

The SC has 3 advisory groups.

***Strategic Advisory Group: Convener Franz Besold
(UK Member Mark Osborne)***

The SAG has the following tasks:

- Update of the Strategic Plan and of the Action Plan
- Discussing and preparing proposals for future activities
- Establishing new Working Groups
- Selection and preparation of future meetings
- Screening and reporting of the activities of Working Groups and SC members
- Issuing proposals to the Technical Committee
- Support of the SC Chairman
- Cooperation with other international bodies such as IEE, IEEE, CIRED, VDE

The SAG has produced the following documents in 2010/11:

- Update of the Strategic Plan 2005-2014
- Production of an Action Plan 2011-2013
- Production of the 2010 SCB3 Activity Report.

These documents are available on the SCB3 website.

Customer Advisory Group: Convener Michael Mackey

The current CAG activities are:

- Identify opportunities to increase customer satisfaction
- Collect relevant feedback from CIGRE customers
- Prioritize new work and suggest preferential subjects
- Develop and implement concepts for active communication with customers
- Report on the above for discussion during the meetings of the study committee.



Current activities are:

- An analysis of the Paris 2010 Session Survey has been completed
- A flyer has been produced to advertise the work of SC B3
- New Work Proposals have been reviewed/rationalised based on Paris survey
- Update of the B3 website

Tutorial Advisory Group: Convener Adriaan Zomers/Designate Piet Knol

A number of tutorials and presentation were delivered during the 2011 IEEE/CIGRE SC B3 events in Chicago.

Tutorials are to be discussed for presentation at the 2013 meeting in Brisbane.

3.2 Advisory Areas

Area AA1 – Concepts & Developments (H.E.Olovsson)

- WG B3.12 “Obtaining Value from Condition Monitoring”
(Convener: A.J. Mackrell - UK)
Brochure published June 2011. WG disbanded.
- WG B3.13 “Reducing Replacement Time of HV Equipment”
(Convener: F. Gallon / UK Corresponding Member: D Hackwell)
Start has been delayed.
- WG B3.26 “Guidelines for the Design and Construction of AC Offshore Substations for Windfarms”
(Convener: J.Finn - UK)
Brochure planned to be published autumn 2011. WG will then disband.
- JWG B3/C1/C2-14 “Circuit Configuration Optimization”
(Convener: G. Lingner / Secretary: K Søgard - UK)
Brochure planned to be published Autumn 2011. WG will then disband.

Area AA2 – GIS (P Glaubitz)

- WG B3.17 “GIS Residual Life Time”
(Convener: K.Pohlink / UK Members P Fletcher & P Coventry)
Brochure now finalised. Planned to complete work and disband in 2012.



- WG B3.25 "SF6 Gas Analysis for AIS, GIS, MTS assessment"
(Convener: E.Duggan / UK Members N Kane & H Ding)
Work planned to finish end-2012.
- WG B3.29 "Field Test Technology on UHV Substation Construction and Operation"
(Convener: K.Uehara)
Work planned to finish end-2012
- WG B3.30 "Guide to Minimize the Use of SF6 during Routine Testing of Electrical equipment" (Convener: S.Stangherlin)
Work planned to finish end-2012
- JTF B1/B3.33 "Feasibility of a common dry type interface for GIS and Power cables of 52kV and above" (Convener: P. Argaut)
Terms of Reference circulated for agreement.
- JWG B3/B1.27 "*Factors for Investment decisions GIL versus Cables*"
(Convener: H. Koch)
Terms of Reference agreed Mar 2011.
- *New WG under preparation "Single Line Diagram Layout – Gas Compartments : Optimization and reliability"*
Planned work.
- *New WG under preparation "PD Monitoring Systems for GIS"*
(Convener: M Reuter)
Planned work.

Area AA3 – AIS

- WG B3-23 "Guideline for Uprating & Upgrading of Substations"
(Convener: H.Imagawa / UK Member: J Nixon)
Work planned to finish 2012
- TF B3-31 "Substations in Severe Climate Conditions"
(Convener: M.McVey / UK Member: J Nixon)
TOR approved Feb 2011.
- WG B3-32 "Saving Through Optimised Maintenance of Air Insulated Substations"
(Convener: A.Okada / UK Member: J Nixon)
New work.



Area AA4 – Substation Management

- JWG B3-06 “Substation Management”
(Convener: J. Smit / UK Member: Z Ma) :
 - TF 01 “Maintenance and Organization - Practical Aspects for Outsourcing Utility Services”
 - TF04 “Replacement Philosophy for Substation equipment”
 - TF05 “Practical Application of AM Information Strategies”



- WG B3-10 "Primary/Secondary system interface modeling for total asset performance optimisation" (J. Smit)

Due to complete work August 2011. WG will then disband.

- WG B3-34 "Expected impact of future grid concept on substation management"

New work. Brochure due 2014.

4. Paris 2012

The Technical session will be on Tuesday 28 August. A poster session will be held on Wednesday 29 August (pm only).

The date of the SC Paris meeting is to be confirmed.

5. Future meetings and colloquia

5.1 2012 Paris

5.2 2013 Brisbane

Paul Fletcher
29 November 2011