



Study Committee C6
Distribution Systems and Dispersed Generation

Action plan for the period
2007-2008

Introduction

In the period 2002-2006 the activity of SC C6 was driven by the guidelines stated in the Strategic Plan prepared by the SC in 2002-2003. After careful consideration of the achievements attained in this first period, the SC started, late 2005 and 2006, the preparation of a new Strategic Plan aimed to cover, in agreement with CIGRE practice, the next decade.

This Action Plan is aimed to identify the actions to be taken in the period 2007-2008 (just to the end of the present Chairman mandate) on the basis of the guidelines stated in the new Strategic Plan

SC strategies and future activities

The new Strategic Plan, agreed in the 2006 SC Meeting and forwarded to the CIGRE TC indicates some basic guidelines to drive the activity of the SC in the next years. They are:

- ✓ *to study the connection and the integration of dispersed generators, including related devices such as storage, electronic base interfaces and systems; to adopt the concept of Dispersed Energy Resources (DER)*
- ✓ *to study the application of the DG concept as a part of the medium long term evolution of distribution systems, i.e. creation of active distribution networks able to contribute to the improvement of the overall performances of electric power systems.*
- ✓ *to examine the opportunity to extend the SC activity to study the evolution of distribution networks including subjects that are not strictly related to the application of DG concept.*
- ✓ *to continue to study the subject of rural electrification.*

SC working forces

List of existing (beginning 2007) working forces.

Type	Number	Title	Name of Convenor	Created	Disbanded
WG	C6.03	Operating dispersed generation with ICT (Information & Communication Technology) (1)	S. Odagiri (JP)	2003	2004 Disb. end 2006
WG	C6.04	Connection and protection practices for dispersed generation (2)	N. Hatziargyriou (GR)	2003	2006
TF	C6.04.01	Connection criteria at the distribution network for distributed generation (1)	N. Hatziargyriou (GR)	2003	2005 Disb. end 2006
TF	C6.04.02	Computational tools and techniques for analysis, design and validation of distributed generation systems (3)	K. Strunz (US)	2003	2005
WG	C6.05	Technical and economic impact of DG on transmission and generation systems (3)	G. Strbac (UK)	2003	2005
WG	C6.08	Integration of a large share of fluctuating power	H. Weber (DE)	2004	2006
WG	C6.09	Demand side response	A. Baitech (AUS)	2004	2007
WG	C6.10	Technical and commercial standardisation of DER/microgrids components	J. M. Oyarzabal (E)	2006	2009
WG	C6.11	Development and operation of active distribution networks	C. D'adamo (I)	2006	2009

WG	C6.13 (ex07)	Rural Electrification	G. Dagbjartsson (CH)	2006	2008
JWG	C6.14/C3.05	Environmental impact of dispersed generation	T. Smolka (DE)	2006	2009
AG	C6.01	Strategic advisory group	A. Invernizzi (IT)	2002	Permanent
AG	C6.12	Tutorial advisory group	T. Gaunt (ZA)	2006	Permanent

- (1) The working force concluded its work with full achievement of the objectives; it was disbanded at the end of 2006. Publication of results (technical brochure and summary on ELECTRA) shall be finalised by mid 2007.
- (2) The WG shall be disbanded in 2007 together with TF C6.04.02
- (3) The working force is concluding its work; it should be disbanded in 2007.

New proposals

The number of active working forces has to be consistent with the actual availability of experts to be proposed by the SC members and with the actual capability of the SC to control and manage the progress of the working forces and the respect of the planned schedule.

In conjunction with the end of some existing working forces new ones may be started, following the guidelines stated by the TC and the CIGRE Central Office (i.e., preparation of ToR, discussion within the SC, presentation of proposal to the TC, waiting for approval)

SC meetings

The SC shall meet in 2007 in Langkawi (Malaysia), following the invitation of the Malaysia National Committee.

In 2008 the SC will meet in Paris during the CIGRE Conference (Wednesday 27 is a possible date).

In 2009 the SC could meet in USA (Seattle) in conjunction with the CIGRE/IEEE Symposium.

Participation to CIGRE events

In 2007 the SC is participating to the organisation, together with the Malaysian National Committee, of a 2 days Colloquium (May 3 and 4) on “*Electricity for rural socio-economic development*“.

During the 2007 TC meeting the SC was asked to coordinate, on the CIGRE side, the organisation of the 2009 CIGRE/IEEE Symposium (proposed title: *Integrating advanced energy supply technologies in a carbon constrained environment*).

Participation to non CIGRE events and links with other organisations

The Chairman is collaborating with SG and TC Chairman in maintaining contact with EURELECTRIC, CIRED, and IEA. The USA member is charged to assure the adequate link with IEEE Committees and WGs active on topics of interest of the SC.

A number of SC members are involved in some international projects (mostly EC funded); during the 2007 TC meeting the SC was asked to coordinate a group of SC Chairmen (B3, B5, C1, C2, D1, D2) charged to monitor the EU initiatives in the field of power system (for instance, the Technology Platform SmartGrids) and to make recommendations to the TC on the work to be done.

Publications

Recent publications

- ELECTRA, June 2006, “*SC C6 2005 Colloquium: Electrification and dispersed generation*”, by A. Invernizzi and T. Gaunt
- ELECTRA, February 2007, “*Operating dispersed generation with ICT*”, Summary of the Technical Brochure of WG C6.03
- Technical brochure, Ref. 311, 2007, “*Operating dispersed generation with ICT*”, Final report of WG C6.03

Plan for 2007 publications and beyond

- Technical brochure and summary for ELECTRA on results of TF C6.04.01, “*Connection criteria at the distribution network for dispersed generation*” to be published soon
- Technical brochure and summary for ELECTRA on results of TF C6.04.02, “*Computational tools and techniques, design and validation of DG systems*” to be published late 2007 or beginning 2008
- Technical brochure and summary for ELECTRA on results of WG C6.05, “*Technical and economic impact of DG on transmission and generation systems*” to be published late 2007 or beginning 2008
- ELECTRA, report on SC C6 2007 Colloquium, “*Electricity for rural socio-economic development*”, to be published during 2008.