



# Call for Papers



## DEVELOPMENT OF ELECTRICITY INFRASTRUCTURES IN SUB-SAHARAN AFRICA

### International Symposium



Cape Town –South Africa – October 26-30 2015

Organized by CIGRÉ Technical Committee in cooperation with  
CIGRÉ National Committee of South Africa

Leading Study Committee C6

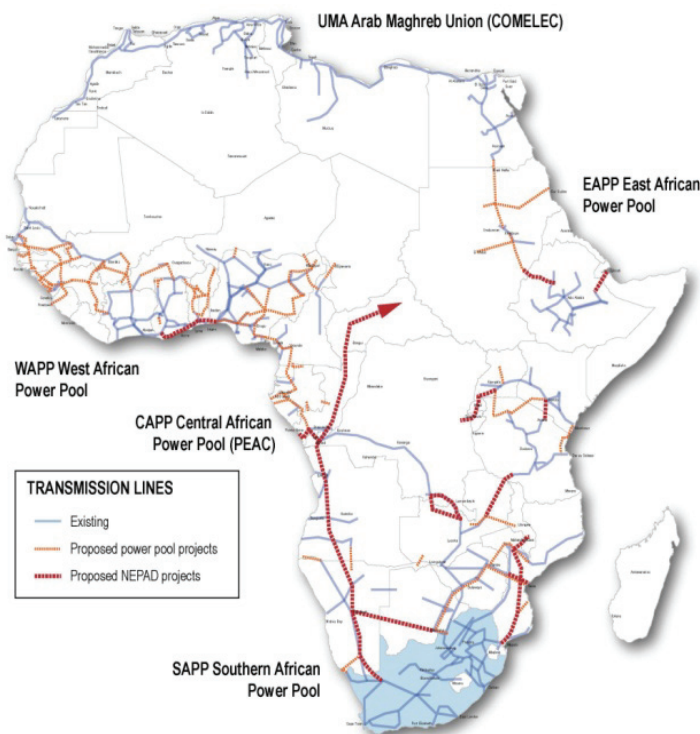
Supporting Study Committees B1, B2, B3, B4, B5, C1, C2, C5

IEC Technical Committees 8/SC8A, 82 115, 120, and 122

And AFSEC Technical Committees 8, 82

#### SYMPOSIUM VENUE

**LORD CHARLES HOTEL, SOMERSET WEST,  
CAPE TOWN**



#### BACKGROUND and SCOPE

Sub-Saharan Africa is a region of historical paradox and full of promise for the future, particularly in the domain of electricity. Many opportunities exist:

- About 20% of the population has access to electricity, the figure drops by 8% in rural zones.
- Certain countries, such as South Africa, have an electricity penetration in excess of 80%. It should be possible to learn from such cases.
- Only a small amount of the huge energy resources have been put into use; more than 90% of the hydro capacity can still be exploited.
- Network losses (technical and non-technical) can be as much as 40% due to long distances and inefficient metering and revenue collection systems.
- Because of the lack of electricity infrastructure regular load shedding is necessary in a number of countries for managing the generation/load balance.
- The map of the existing and proposed transmission network reflects that there is still much to do in relation to population spread and economic hubs.

The aim of the symposium, organized with the direct cooperation of African Power Utilities Association (APUA) or ASEA (Association des Sociétés d'Electricité d'Afrique, previously UPDEA), and AFSEC (African Electrotechnical Standardization Commission) is to provide a unique forum for the exchange of ideas and future vision the development of the electrical systems in Sub-Saharan Africa.

#### Contacts

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#### PARTICIPANTS

The Symposium is aimed at transmission, distribution and generation owners, system operators, suppliers, designers, traders, regulators, research laboratories and universities.



## PROGRAMME

The symposium will take place over three days with a day of tutorials preceding the main event. It will include the classical sessions with presentations and discussions of reports that will be prepared in advance, but also one or two panel discussions on these topics. The opening ceremony will be the opportunity to invite one or two leaders to express their opinions on these important subjects.

## MAIN TOPICS

The main subjects for discussion will be the following:

1. Large generation projects and associated transmission infrastructure (CIGRE SC C1, IEC TC 8, TC115 & TC122)
2. Decentralized solutions for generation and network to deliver to isolated rural areas (CIGRE SC C6, IEC TC82),
3. A number of institutional questions: the balance between public/private, the financing of projects, the help to customers at the initial stages, regulation of activities, fixing tariffs, progressively expanding the regional markets into a continental market (SC C5),
4. Current and future technical network solutions, standardization. (CIGRE SC B1, B2, B3, B4, B5, IEC TC120 and AFSEC TC82).
5. The development of the cooperation between the different operators of electric systems (CIGRE SC C2, IEC and AFSEC TC 8)
6. The role of CIGRE, IEC, APUA, African power pools, AFSEC and other international or regional organizations to help the development of electric systems in sub-Saharan Africa.
7. The use of IEC International Standards and Conformity Assessment Systems for rural electrification
8. Harmonization of African Standards through adoption of international standards; or where necessary their adaptation to African conditions

## SUBMISSION OF SYNOPSES

Participants wishing to present papers are invited to submit their abstract in ENGLISH (500 words) to the Central Office of CIGRE before

**30<sup>th</sup> November 2014 to:**  
[sylvie.bourneuf@cigre.org](mailto:sylvie.bourneuf@cigre.org)

Each abstract must indicate the topic(s) that will be addressed. The name, title, company affiliation, e-mail and full address of the author(s) should also be provided.

## LANGUAGES

The papers must be written in English.  
Abstracts and Presentations must be in English.

## COMMITTEES

### TECHNICAL COMMITTEE

Chaired by Britta Buchholtz SC C6

CIGRE Secretary General, Philippe ADAM  
SC B1, Pierre ARGAUT  
SC B2, Konstantin PAPAILIOU  
SC B3, Terry KRIEG  
SC B4, Mohammed RASHWAN  
SC B5, Iony PATRIOTA de SIQUEIRA  
SC C1, Konstantin STASCHUS  
SC C2, Joachim VANZETTA  
SC C5, Andrew OTT  
IEC TC 115, Marcus HAEUSLER  
IEC TC 122, Liangzhong YAO

### LOCAL ORGANIZING COMMITTEE

Chaired by Vivendhra NAIDOO SC B2 & South African NC  
R. STEPHEN Chairman South African NC.  
P. JOHNSON Executive Secretary AFSEC

## PUBLICATION OF PAPERS

The papers will be available for uploading from the Cigre Website before the Symposium for all registered participants.

The Papers will also be available for purchase on electronic format from the CIGRE Central Office, after the Symposium.

A Report on the Symposium will be drafted after the Symposium. It will be published in ELECTRA and posted on the CIGRE as well as IEC and AFSEC websites.

## REGISTRATIONS

The General program of the Symposium will be issued in April 2015, with all the relevant information: technical program, registrations, and accommodation

Further information on the Symposium will then be found on [www.cigre.org](http://www.cigre.org), [www.iec.ch](http://www.iec.ch) and [www.afsec-africa.org](http://www.afsec-africa.org)

## DEADLINES

Authors are kindly requested to take note of the following deadlines:

**Receipt of abstracts:** 30<sup>th</sup> November 2014  
**Notification of acceptance:** 31<sup>st</sup> January 2015  
**Receipt of full papers:** 1<sup>st</sup> May 2015