

Lists of papers for 2005 CIGRE SC A3&B3 Joint Colloquium in Tokyo 2005

PS1: Advanced HV equipment and related emerging technologies and their influence on substation design and operation

New maintenance practices, life management and asset management such as RCM, CBM, IT based program

101 Sweden, Norway, France (WG A3.06)

First results from on-going CIGRÉ enquiry on reliability of high voltage equipment
C.-E. Sölver, M. Runde and A. Giboulet, on behalf of CIGRÉ WG A3.06

102 Netherlands (TF A3.01)

Electrical Arcing Stresses of High-Voltage Circuit Breakers in Service: a Statistical Analysis Based on World Wide Field Data
R. P. P. Smeets

Non-standard duties with changing network conditions

103 Netherlands, United Kingdom, Switzerland (WG A3.13)

Changing network conditions and system requirements: an overview and examples,
A. L. J. Janssen et al., M. Waldron, J. Jäger, Q. Bui-Van, M. Glinkowski, M. Claessens, F. Gallon and H. Kawano

104 United Kingdom

Short-circuit currents with high DC component time constants; calculation methodology and impact on switchgear specification and rating
Tom Fairey and M. Waldron

105 USA, Japan

Development of 245kVGCB with a spring operating mechanism and application of a grading capacitor as a mitigation system for severe SLF duties
H. Wilson, Stan Billings, D. Yoshida, H. Ito, K. Kamei and H. Kohyama

106 Canada, Netherlands

Capacitive current interruption in atmospheric air
R. P. P. Smeets, J. G. Krone and D. F. Peelo

New solutions for HV equipment, Mixed Technology Substation: Hybrid GIS and compact AIS

108 Japan, Sweden

Design and testing of polymer housed surge arresters with special emphasize on seismic stresses and selection of specific creepage in costal areas

S. Narita, S. Narita, A. Sawada, H. Watanabe, B. Johnnerfelt and L. Stenström

109 Germany, Japan, Australia

Sydney's Haymarket substation – a major milestone in applied innovation in substation design,

D. Kunze, K. Toda and D. Paton

110 Japan

Gas insulated transformer for urban under-ground substation,

T. Kobayashi, K. Toda and H. Hashimoto

111 Japan

Operating performance of the STATCOM in the Kanzaki Substation,

H. Yonezawa, D. Takayama, Y. Shinki, N. Morishima, S. Funahashi, T.Fujii, M. Azuma, H. Teramoto and N. Ito

New maintenance practices, life management and asset management such as RCM, CBM, IT based programs

112 Netherlands (JWG B3/C2-14, TF03)

Implementation of information strategy to support utility asset risk management

JWG B3/C2-14, TF03

113 Germany, Switzerland

Selection of maintenance strategy by analysis of service experience

G. Balzer, D. Drescher, F. Heil, P. Kirchesch, R. Meister and C. Neumann

114 Australia

Circuit breaker end-of-life decisions in Australia and New Zealand

S. Jones

115 Japan

Summary of rehabilitation projects for EHV substations owned by EPDC of Japan

T. Sakai

116 Italy

Assembly of high voltage devices

R. Cameroni, C. Granata and L. Calamari

Substation Compaction

117 Sweden

Suitable single line configurations and corresponding availability and space requirements in applications of Disconnecting Circuit Breakers for AIS substations

H. E. Olovsson and C.-E. Sölver

118 Japan

Advanced compaction design for 500kV substations

T. Kobayashi and Y. Ichikawa

119 Korea

Overview of 800kV Gas Insulated Switchgear in real commercial operation

J. B. Kim, D. I. Yang, K. Y. Kweon, W. P. Song and J. C. Huh

120 France, Switzerland

Compact optimized GIS, modular hybrid S/S bays, mobile GIS substations

M. Bues et al and E. Mikes

121 Australia, Italy

Compact integrated bay modules for new 145kV substations

M. Blundell, D. Roby and C. Piazza

Monitoring and diagnostic techniques and their impacts on economical and reliability aspects

122 France, USA

Diagnostic and monitoring tools applied to asset managements

J. P. Dupraz, A. Fanget, T. Jung and G. F. Montillet

123 Japan

Monitoring and diagnostic techniques for GIS / GCB

K. Yoshii, K. Shimizu, M. Kamei, T. Nakajima, T. Kato, Y. Matsuyama

124 United Kingdom

The development of a model to assess the economic viability of on-line condition monitoring and its affect on the reliability of an EHV SF6 circuit breaker

G. D. Camps, T.A. Cumming, D. Gibson, S. Olson, G.W. Ault and J.R. McDonald

126 France

Interoperability field experiments in substations using IEC 61850-9.2 with Non Conventional Instruments Transformers and all secondary equipment

D. Chatrefou

127 Canada, Finland

Optical current and voltage sensors in EHV series capacitor banks application
F. Rahmatian, D. Peelo, G. Polovick, B. Sunga, and J. Lehtimaki

PS2: Field experience of novel techniques applied to substation design and layout

AC and DC HV equipment

201 USA (WG A3.17)

Integrated Surge Arrester Systems
R. S. Perkins

202 Switzerland

Refurbishment of a 380 kV AIS-substation using hybrid HV technology
B. Sander, S. Läderach and R. Vogt

203 Switzerland

Refurbishment of the 380kV AIS-substation Laufenburg using hybrid switching modules
D. Fücksle and R. Vogt

Mitigation system for severe duties (e.g. capacitors, arresters and fault current limiters)

205 Germany, Brazil, (WG A3.16)

Fault Current Limiters -Application, Principles and Experience
H. Schmitt, J. Amon, D. Braun, G. Damstra, K.-H. Hartung, J. Jäger, J. Kida, K. Kunde, L. Martini, Q. Le, M. Steurer, Ch. Umbricht and C. Neumann

206 Brazil

Brazilian Successful Experience in the Usage of Current Limiting Reactors for Short-Circuit Limitation
J. Amon Filho, P. Fernandez, E. Rose, A. D'Ajuz and A. Castanheira

Controlled switching technologies and their impacts on economical and reliability aspects

207 France

Field experience in HV circuit breakers controlled switching and condition monitoring in Latin America
R. Boero and W. Finazzi

208 Brazil

Use of Controlled Switching Systems in Power System to Mitigate Switching Transients. Trends and Benefits - Brazilian Experience

P. Fernandez, P. Esmeraldo, J. Amon Filho and C. Zani

209 Japan

Field experience of transformer controlled switching system taking account into residual flux in transformer core

M. Hijimoto, K. Kamei, H. Kohyama, H. Ito and T. Sugiyama

AC and DC HV equipment (GCB)

210 Sweden

Field Experience with Motor Drive as an Operating Mechanism for HV Circuit Breakers

D. Windmar, T. Roininen, R. Cameroni and L. Nordin

211 Japan

Fault Protection of Metallic Return Transfer Breakers - Field Experience of HVDC equipment of Kii Channel Transmission System

Y. Oue, Y. Nakagoshi, M. Hatano, M. Takasaki, T. Yamagiwa, S. Nishiwaki, K. Kamei and H. Ito

Substation secondary equipment

212 Netherlands

Field experience with digital control equipment in substations and lessons learned

A. N. Zomers

213 Netherlands

Change Management of Substation Automation Systems

F. Baldinger

214 Korea

Development of Intelligent Gas Insulated Switchgear using Electronic Technology

J. B. Kim, T. W. Kim, M. S. Kim, S. Y. Nam, J. G. Hong and W. P. Song

PS3: Environment issues

301 Australia, New Zealand

New Techniques for Recapturing and Recycling SF6 Gas and Topping-up Energized Equipment

A. Stokes, C. Jones, M. Blundell, S. Jones, D. Rody, J. Shann

302 Norway

Efficient Measures for Reducing Emissions of SF6 from High Voltage Equipment

A. Mjelve and M. Runde

303 Japan

Recent Practice for huge reduction of SF6 gas emission from GIS and GCB in Japan

K. Yokotsu, Y. Ichikawa, H. Yonezawa, T. Yamagiwa and T. Yokota

304 France, Switzerland

Full EcoDesign of a 72.5kV GIS Substation

I. Hue, H. Aeschbach, C. Tschannen and J-L Bessede

305 Spain, Germany

Economical and Environmental Comparison Based on Electrical Losses with Regard to AIS and Mixed Technology Substation Lay-out

E. Pagan, C. Martinez, F. Salamanca, R. Salazar, P. Glaubitz, S. Poehler and T. Weström

306 Germany

Investigations concerning discussed alternative SF6 in HV equipment for insulating and arc-extinguishing properties

E. Kynast