



# 2010 CIGRE SESSION

## TECHNICAL PROGRAMME

### SC A1 ROTATING ELECTRICAL MACHINES

#### **PS1: Developments in electrical machine design and experience in service**

- A1-101 Application of magnetic wedges for stator slots of hydrogenerators  
Z. MILOJKOVI, J. POLAK, J. ЉTUDIR, M. PETRINI, Z. MALJKOVI, D. BAN
- A1-102 Development and production of the world's largest capacity 2p-60 Hz-670 MVA and 4p-60 Hz-370 MVA hydrogen-cooled turbo-generators for a 60Hz-900 MW cross-compound thermal power plant  
H. KATAYAMA, M. KAKIUCHI, D. MURATA, S. NAKAYAMA, H. NAKAMURA, H. ITO
- A1-103 Field verification of multi-input PSS via reactive power input for damping low-frequency power swings  
Y. KITAUCHI, H. MORITA, T. SHIRASAKI
- A1-104 Voltage control for wind power plants. Real experience and results  
E. FERNÁNDEZ, J.C. PÉREZ, C. COMBARROS, M.I. ROS
- A1-105 Formaldehyde emissions in large rotating electrical machines root cause analysis, background and prevention  
I. BERGMANN, R. DRAPER, F. RAMSAUER, G. LEMESCH
- A1-106 Improvement of the voltage ride through capability of synchronous generators by excitation control  
L. ROUCO, C. GINET, K. CHAN, K. MAYOR, O. MALCHER, L. DHEZ-MAROTO, R. CHERKAOUI
- A1-107 Integration of a novel permanent magnet synchronous generator to utility grids using voltage sourced converter technology  
A. EDRIS, F. MCELVAIN, N. DANILOVIC, J. HELL, J. PINTER
- A1-108 Experience in development and operation of new types of turbogenerators with vector type excitation system for wide-range reactive power control  
YU.G. SHAKARYAN, I.A. LABUNETS, P.V. SOKUR, T.V. PLOTNIKOVA, N.G. SHULGINOV, V.A. DIY-ACHKOV, YE.V. TUZLUKOVA, N.D. PINCHUK, I.A. KADI-OGLI, V.YE ZINAKOV
- A1-109 Asynchronous generators as power systems' natural dampers  
K.R. ALLAYEV, G.M. FEDORENKO, V.I. POSTNIKOV, L.B. OSTAPCHUK

#### **PS2: Lifetime management**

- A1-201 Optical system for hydrogenerator monitoring  
J.B. ROSOLEM, C. FLORIDIA, J. SANZ
- A1-202 Turbine generator 760 MVA supervisory system  
M.R. SINISCALCHI, C.L.M. PRATES
- A1-203 Komati Unit 9 turbo-generator filter inspections after filtration runs  
K.S. NAIDOO, Z.D. JIYANE
- A1-204 Experience with continuous monitoring partial discharge testing in a predictive maintenance application of three similar hydro machines  
A. TABERNERO, B. BATLLE, O. MARTHNEZ, A. VILLARRUBIA, S. RODRIGUEZ, E. NAHARRO
- A1-205 Field experience in monitoring partial discharges in rotating machines  
J.C. CANO, I. BLOKHINTSEV, E. PEREZ
- A1-206 Detection of rotor winding shorted turns in turbine generators and hydrogenerators  
S.R. CAMPBELL, J. KAPLER, M. SASIC, G.C. STONE
- A1-207 Improvement and uprating of turbo generator of high DAM hydro power plant in Egypt  
M. AWAD, A. ZEIT, D. FADL
- A1-208 Challenges to test in factory a turbogenerator for an EPR NPP project  
P. COULON, M. LICHTENBERGER, V. FERNAGUT, H. DEBRUYNE, L. DAVID, O. NICOLAS, M. BERLAMONT
- A1-209 Investigation of nonlinear and non-stationary motor current signature analysis methods for fault diagnosis in electrical drives  
I.P. TSOUMAS, A.N. SAFACAS
- A1-210 An in depth analysis of the generators of a critical hydroelectric power plant  
E. ROBLES, R. CAMPUZANO, O. DE LA TORRE, J. RAMIREZ, F. FERREGRINO, J. GARCIA
- A1-211 Voltage endurance test over two different models of hydrogenerator stator bars due to different overhang configuration  
S. RODRIGUEZ, A. VILLARRUBIA
- A1-212 Experience with partial discharge (PD) monitoring system for hydro generators  
J. FUHR, F. JOLLIET, M. SCHULZ, M. WESTRICK
- A1-213 Inspection, repair and rewind experience on large, air-cooled, high voltage generators  
W.G. MOORE, A. KHAZANOV

*Копии докладов можно получить в редакции журнала.*