IMPORTANT DATES	
Deadline for paper summaries	June 15, 2005
Communication of acceptance to authors	August 15, 2005
Deadline for full papers	December 30, 2005
X SEPOPE	May 21 – 25, 2006

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INSTRUCTIONS TO AUTHORS

A paper must correspond to one of the Preferential Subjects. It must contribute to technical progress and not only merely quote earlier publications.

An abstract must be drawn up for each paper proposal. The abstract – 500 words minimum – must closely reflect the various points developed in the paper.

The name and address (e-mail included) of the main author must appear on the abstract.

It should be noted that are considered only electronically submitted abstracts to the following address:

abs_xsepope@cepel.br

LOCAL ORGANIZING COMMITTEE

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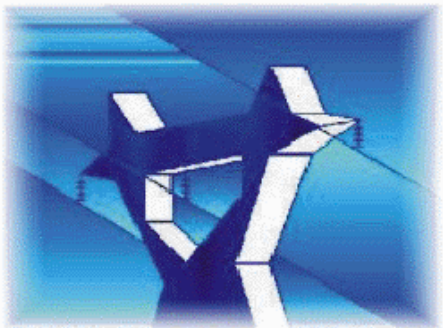
CALL FOR PAPERS

X SEPOPE
Symposium of Specialists in Electric Operational and Expansion Planning

May 21 – 25, 2006
Florianópolis, SC – Brazil



X SEPOPE

IEEE Conselho Brasil Eletrobrás A energia que movimenta o Brasil. CEPEL

GENERAL REMARKS

The X SEPOPE – Symposium of Specialists in Electric Operational and Expansion Planning, sponsored by CIGRÉ-Brasil, will take place in Florianópolis, State of Santa Catarina, Brazil, in May 2006. SEPOPE has become a truly international forum for technical and scientific discussions on planning and operation of electrical power systems, which takes place every two years in interesting cities of Brazil. The last edition of this conference, the IX SEPOPE, took place in Rio de Janeiro, May 2004, with over 600 people attending.

SEPOPE preferential subjects are always in tune with the relevant issues in the international electrical power systems scenario, embracing selected topics from all six CIGRÉ Study Committees (C1 to C6), though the major focus remains on subjects mostly associated with C1 and C2. Topics of interest include means to prevent blackouts and reducing their impact; managing energy shortages and electricity market reduction with associated financial losses; regulatory and energy market issues; as well as methodologies for generation/transmission expansion planning. Electric grid impacts caused by renewable energy sources, dispersed generation, and harmonic loads are also topics of interest.

The ample scope and relevance of the issues to be discussed in the X SEPOPE will provide a valuable opportunity for extended learning and interchange among professionals from utilities, regulatory boards, planning agencies and system operators, manufacturers, universities, consultants and research centers. As in previous editions of SEPOPE, there will be a parallel exhibition of advanced products and services directed to the electrical energy system sector.

The Technical Committee therefore urges contributors to examine the preferential subjects listed in this folder and submit exciting, high-quality papers.

The date and place for our next meeting are already established: May 2006, in Florianópolis, Santa Catarina. Florianópolis is a lovely insular city, with excellent infrastructure, high technology industries, and one of the best universities in Brazil. Your family will love to enjoy its 42 white sand beaches and acclaimed seafood restaurants. See you there!

Nelson Martins

Technical Committee Chairman

PREFERENTIAL SUBJECTS

SYSTEM PLANNING

(1) **Power System Planning**: new methodologies and planning criteria; expansion planning for generation and transmission considering uncertainties; long, medium and short-term planning. Ensuring compatibility between generation and transmission expansion plans. Integration between energy planning and power system planning considering the impact of the natural gas industry. Risk analysis, cost/benefit analysis and system reliability criteria; market forecasting. Optimal operation of hydrothermal systems and energy supply security.

(2) **Challenges Faced by Power System Planners due to the Rapid Growth of Interconnected Power Systems**: technical, economical and institutional aspects; benefits of transnational electric interconnections due to hydrological diversity and regional energy surplus; EHV transmission as a vector for generation expansion and related commercial aspects.

(3) **System Environmental Performance**: new legislation and methodologies for assessing and monitoring environmental impacts, considering conventional or renewable sources of energy and different transmission alternatives. Hydroelectric developments considering multiple uses of water dams; other electrical energy sources, including nuclear power and clean coal technology.

THE NEW MODEL

(4) **The New Restructuring of the Electrical Sector**: government policies and project financing of generation/transmission developments; system expansion in federal and privately owned utilities. Renewable sources, diversification of the energy sources, rural electrification and universalization of electricity supply. Challenges faced by the National System Operator regarding the services provided, including ancillary services, Grid Code and applied tariffs. The regulatory agencies, their work scope and responsibilities. The strategic role of state owned generation and transmission companies. Lessons learned from past energy crises and blackouts and policies for their mitigation. Challenges faced by the recently created Brazilian Energy Research Company (EPE).

SYSTEM OPERATION

(5) **Interconnected System Operation**: short, medium and long-term operational planning of large interconnected systems. Maintenance based on reliability aspects. New methods and tools to help striking the balance between energetic security and electric security. Demand side management and load control for price and system security; advances in system automation. Outage scheduling based on risk assessment. Experience with state estimators, optimal power flow, dynamic security assessment and operator training simulators in modern control centers.

(6) **Power Quality**: power quality issues, involving shared responsibilities among suppliers, operators and consumers. Costs and revenues related to power and energy quality. Monitoring harmonic distortions and voltage sags. Electromagnetic compatibility issues and methods for reducing technical and commercial energy losses.

(7) **Power System Dynamics and Control**: impact of Independent Power Producers on system reliability. Stability issues related to new regional and international interconnections. Advances in automatic generation control and coordinated voltage control; dynamic security and voltage security assessment. Criteria, special protection schemes and advanced controllers to ensure adequate system performance in the presence of modern natural gas power plants, large wind generation farms and dispersed generation.

(8) **System Protection Schemes and Wide-Area Dynamic Monitoring Systems**: advances in monitoring, protection and control to arrest and mitigate the impact of large disturbances. Modern schemes and efforts for the rapid restoration of major load centers following blackouts. Implementation of wide-area monitoring systems and experience in the post-mortem analysis of disturbances to identify the causes of major events and reinforcements needed to improve system security.

ELECTRICITY MARKET

(9) **Re-organization of the electricity market**: impact of market models in the expansion of the electrical system and required legislation. Investment opportunities, open access issues, energy pricing and risk management.

TECHNOLOGY ADVANCES

(10) **Developments in AC/DC Technologies**: capacity enhancement of existing corridors, emphasizing the experience with High Surge Impedance Loading (High SIL) lines. Recent applications of HCDC and FACTS to increase the flexibility, controllability and security of power systems. Practices and equipment for reducing technical and commercial losses in both interconnected systems and isolated systems, remotely located. Reduction of short-circuit currents.

(11) **Impact of new forms of generation**: new renewable forms of generation and dispersed generation. Impact of wind farm penetration on interconnected systems.

(12) **Advanced Computation Techniques applied to Power Systems**: advanced tools for the improvement of power system operation and planning studies.

(13) **Experience with R & D Policies**: the research funding by the national regulatory agencies and other government/private bodies; strategic research on sustained development projects and public welfare. Experience with national and multinational collaboration among universities, industry and research centers. Experience with science, technology and innovation as an R & D policy.