Jorge Manoel da Silva Pinheiro

"Avaliação Computacional da Confiabilidade Pretérita e Preditiva de Sistemas de Energia Elétrica"

This Dissertation presents an integrated procedure for power system performance evaluation, encompassing both preterit and predictive risk assessment.

The post-operational analysis is restricted to a failure mode representing the system state in respect to load supplying continuity.

The predictive risk analysis is focused on the system steady-state behaviour, using the NH2 program. The influence of load uncertainties and independent power producers is also investigated.

Both techniques (preterit and predictive analysis) are applied to an actual large scale system (CERJ û Rio de Janeiro Electricity Company).