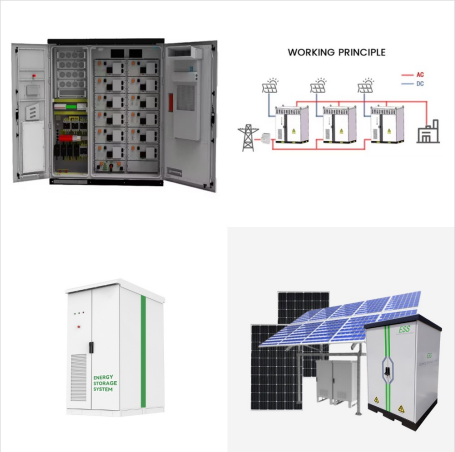

Multistage expansion planning for active distribution networks under demand and Distributed Generation uncertainties Carmen Lucia Tancredo Borgesa,???, Vin?cius Ferreira Martinsb a Federal University of Rio de Janeiro (UFRJ), P.O. Box 68504, CEP 21941-972, Rio de Janeiro, Brazil bBrazilian Energy Research Company (EPE), Av. Rio Branco 1, CEP 20090-003, Rio de ???

Author links open overlay panel Tiago S. Amaral a c, Sergio Gomes Jr. a b, Carmen L.T. Borges c. Show more. Add to Mendeley. In this paper, the proposed methodology for bulk power system reliability assessment using small-signal stability can be didactically classified as an extension of adequacy assessment, although it is common in

This paper presents a methodology for optimal distributed generation (DG) allocation and sizing in distribution systems, in order to minimize the electrical network losses and to guarantee acceptable reliability level and voltage profile.

DR CARMEN BORGES RELIABILITY POWER SYSTEM

DOI: 10.1109/ISC255366.2022.9921957 Corpus ID: 253122801; Efficient Methods to Calculate the Reliability of Energy Systems with Correlated Renewable Sources @article{Tebexreni2022EfficientMT, title={Efficient Methods to Calculate the Reliability of Energy Systems with Correlated Renewable Sources}, author={Ivo S. L. Tebexreni and Carmen L. T. ???

The multiple objectives optimization algorithm applied in the model takes into account the costs of reliability, losses, power imported from transmission, and network investments. {Vinicius F. Martins and Carmen L. T. Borges}, journal={2012 IEEE Power and Energy Society General Meeting}, year={2011}, pages={1-1}, url={https://api

Reliability Simulation Model Incorporating Renewable Energy Sources . Professor Carmen Lucia Tancredo Borges. Federal University of Rio de Janeiro. Abstract . The power system reliability assessment aims to evaluate the adequacy of the system in attending the energy demand, being subject to failures of its components and energy unavailability.

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NETTO AND BORGES FIGURE 7 TABLE 1 11 of 15 Sketch of the whole system System differences brief summary Attribute Whole System Degraded System Power lines 125 121 Transformers 85 82 Load, MW 16 547 15 143 Two different configurations of this case are presented: In the first, the system has no circuits?? under maintenance (whole system); in the

RELIABILITY prouds itself of being global contributor of clean and efficient energy by providing quality power systems. Our strong R& D team continually develops enhanced Power Electronics Systems to meet demand of harsh Environmental Conditions and Critical Industrial Applications in addition to ever demanding Commercial Users critical power requirements.

The reliability indices calculated at step 3 correspond to estimates of the expectation of different evaluation functions F(x6), obtained for N system state samples by: C.L.T. Borges et al. / Electric Power Systems Research 57 (2001) 149???155 N E([F] = 1 % F(x k) Nk = 1 (2) The Monte Carlo simulation accuracy may be expressed by the

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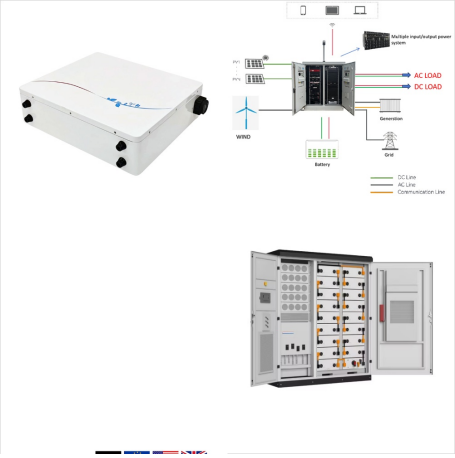

Carmen L.T. Borges (S"97, M"99) obtained the BSc in 1984 from the Rio de Janeiro State University (UERJ) and the MSc (1991) and DSc (1998) from the Federal University of Rio de Janeiro (COPPE/UFRJ), Brazil. She is a professor of Electrical Engineering at the Federal University of Rio de Janeiro since 1996. Her general research interests are in the area of ???

This paper presents a model for evaluating small hydro power plants (SHPP) generation availability that can be applied to generation systems reliability and to generation planning studies. The model considers the uncertainties of rivers inflows and generation units operation. The river inflow is modeled as a stationary stochastic process by a multiple states ???

This paper aims to investigate the influence of photovoltaic (PV) generation on reliability evaluation of distribution systems. Two PV generation models are used to predict the output power injected into the grid, taking into account the main relevant environmental variables, the irradiance and ambient temperature. Issues that directly affect the output power, such as ???

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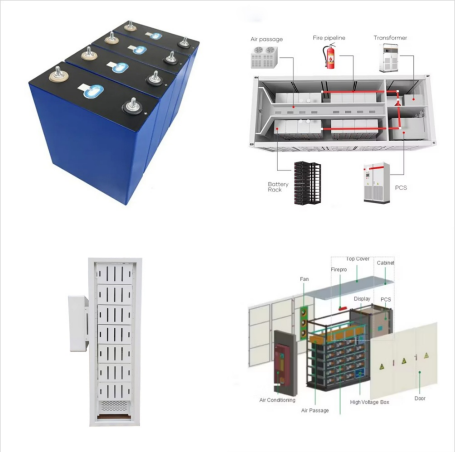


Further, improvement in reliability of the whole power system network introduced, but, recently solar-wind energy system is beginning to present good reliability in comparison with diesel

This paper presents a method suited for the purpose and presents details of a reliability evaluation study on a power system with solar cell generators and test results indicate the viability of the method.

(DOI: 10.1109/TPWRS.2016.2585619) This paper proposes a model that represents statistically dependent time-varying quantities, such as loads, wind power generation, and water inflows, and can be applied to evaluate power systems composite reliability by Non-Sequential Monte Carlo Simulation (MCS). This proposal is based on nonparametric stochastic models, ???

DR CARMEN BORGES RELIABILITY POWER SYSTEM

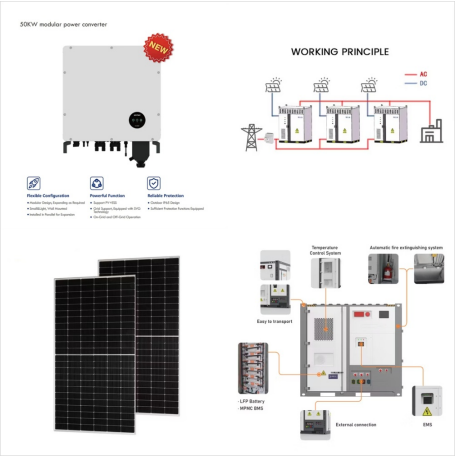
Keywords???distribution system; FPA; reliability; voltage profile; wind-based DG. I. INTRODUCTION Alongside the population growth in the world, the need for a source of electrical energy is higher, so the need for higher power capacities as well and the system must be reliable. Therefore we need a good and reliable electric power system

A powerful approach for power systems com- posite reliability evaluation is to use Monte Carlo simulation (MCS) methods. Carmen Borges. Aceito sob recomenda??o do Ed ns. Prof.Dr. Jos? Luiz R. Pereira 94 1 INTRODU??O ???

DOI: 10.1016/J.IJEPES.2006.02.003 Corpus ID: 109845539; Optimal distributed generation allocation for reliability, losses, and voltage improvement @article{Borges2006OptimalDG, title={Optimal distributed generation allocation for reliability, losses, and voltage improvement}, author={Carmen Lucia Tancredo Borges and Djalma M. Falc{~a}o}, journal={International ???

DR CARMEN BORGES RELIABILITY POWER SYSTEM

Representation of Wind and Load Correlation in Non-Sequential Monte Carlo Reliability Evaluation. Carmen L. T. Borges, Julio A. S. Dias The IEEE-PES honored Dr Billinton by initiating the Roy Billinton Power System Reliability Award in 2010. Dr Rajesh Karki obtained his B.E. degree in electrical engineering from the Regional Engineering



@article{Almeida2021MultiareaRA, title={Multi-area reliability assessment based on importance sampling, MCMC and stratification to incorporate variable renewable sources}, author={Daniela B. Almeida and Carmen Lucia Tancredo Borges and Gerson Couto Oliveira and Mario V. F. Pereira}, journal={Electric Power Systems Research}, year={2021}, volume

This paper develops a detailed formulation to model energy storage systems (ESS) and renewable sources for power system operation considering 24-hour period. The model is formulated and evaluated with two different power systems ???

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Power system reliability evaluation measures the system's ability to properly and continually supply the demand under uncertain conditions. The large penetration of wind power generation, which is an intermittent energy source, introduces some major challenges for maintaining the system reliability level.

The objective is to minimize network power losses, better voltage regulation and improve the voltage stability within the frame-work of system operation and security constraints in radial distribution systems.

Carmen Borges. 2000. See full PDF download Download PDF. Keywords: Power Systems, Reliability Evaluation, Monte Carlo Simulation, Parallel Processing, Cluster Computing 0 Artigo submetido em 12/08/99 1a. Revis?o em 19/01/2000; Aceito sob recomenda??o do Ed ns. Prof.Dr. Jos? Luiz R. Pereira 94 1 INTRODU??O O objetivo b?sico da