1. Record Nr.   UNINA9910270943903321

   Titolo   Dynamic vulnerability assessment and intelligent control for sustainable power systems / / edited by Professor Jose L. Rueda Torres, Professor Francisco Gonzalez-Longatt

   Pubbl/distr/stampa   Hoboken, New Jersey : , : Wiley : , : IEEE Press, , 2018
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                         1-119-21496-3

   Edizione   [First edition.]

   Descrizione fisica   1 online resource (451 pages)

   Disciplina   621.317

   Soggetti   Electric power distribution - Testing
                         Smart power grids

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico Monografia

   Nota di bibliografia Includes bibliographical references at the end of each chapters and index.

   Nota di contenuto   The role of wide area monitoring systems in dynamic vulnerability assessment -- Steady state security -- Probabilistic indicators for the assessment of reliability and security of future power systems -- An enhanced WAMS-based power system oscillation analysis approach -- Pattern-recognition-based approach for dynamic vulnerability status prediction -- Performance-indicator-based real-time vulnerability assessment -- Challenges ahead risk-based AC optimal power flow under uncertainty for smart, sustainable power systems -- Modelling preventive and corrective actions using linear formulations -- Model-based predictive control for damping electromechanical oscillations in power systems -- Voltage stability enhancement by computational intelligence methods -- Knowledge-based primary and optimization-based secondary control of multi-terminal HVDC grids -- Model based voltage/reactive control in sustainable distribution systems -- Multi-agent-based approach for intelligent control of reactive power injection in transmission systems -- Operation of distribution systems within secure limits using real-time model predictive control -- Enhancement of transmission system voltage stability through local control of distribution networks -- Electric power network splitting considering

frequency dynamics and transmission overloads constraints -- High-speed transmission line protection based on empirical orthogonal functions -- Implementation of a real phasor based vulnerability assessment and control scheme : the Ecuadorian wampac system.

Sommario/riassunto	Identifying, assessing, and mitigating electric power grid vulnerabilities is a growing focus in short-term operational planning of power systems. Through illustrated application, this important guide surveys state-of-the-art methodologies for the assessment and enhancement of power system security in short term operational planning and real-time operation. The methodologies employ advanced methods from probabilistic theory, data mining, artificial intelligence, and optimization, to provide knowledge-based support for monitoring, control (preventive and corrective), and decision making tasks. Key features: Introduces behavioural recognition in wide-area monitoring and security constrained optimal power flow for intelligent control and protection and optimal grid management. Provides in-depth understanding of risk-based reliability and security assessment, dynamic vulnerability assessment methods, supported by the underpinning mathematics. Develops expertise in mitigation techniques using intelligent protection and control, controlled islanding, model predictive control, multi-agent and distributed control systems Illustrates implementation in smart grid and self-healing applications with examples and real-world experience from the WAMPAC (Wide Area Monitoring Protection and Control) scheme. Dynamic Vulnerability Assessment and Intelligent Control for Power Systems is a valuable reference for postgraduate students and researchers in power system stability as well as practicing engineers working in power system dynamics, control, and network operation and planning.

2. **Record Nr.** UNISOBSOBE00015302

   Autore Buffon, Georges-Louis : Leclerc <comte de>

   Titolo Teoria della natura / Georges-Louis Leclerc de Buffon ; Introduzione, traduzione e cura di Giulio Barsanti

   Pubbl/distr/stampa Roma ; Napoli, : Theoria, 1985

   Descrizione fisica 210 p. ; 21 cm

   Collana I Segni ; 30

   Lingua di pubblicazione Italiano

   Formato Materiale a stampa

   Livello bibliografico Monografia

3. **Record Nr.** UNIORUON00236415

   Titolo Cambridge Journal of Economics / Cambridge Political Economy Society

   Pubbl/distr/stampa London ; New York ; Tokyo, : Academic Press

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   Descrizione fisica Trimestrale. Dal vol.18(1994) è bimestrale

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   Lingua di pubblicazione Inglese

   Formato Materiale a stampa

   Livello bibliografico Periodico