Record Nr. UNINA9910299624603321 Autore Kezunovic Mladen Titolo Application of Time-Synchronized Measurements in Power System Transmission Networks / / by Mladen Kezunovic, Sakis Meliopoulos, Vaithianathan Venkatasubramanian, Vijay Vittal Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2014 3-319-06218-2 ISBN [1st ed. 2014.] Edizione Descrizione fisica 1 online resource (186 p.) Collana Power Electronics and Power Systems, , 2196-3185 Disciplina 621.319 Soggetti **Energy systems** Power electronics Control engineering **Energy Systems** Power Electronics, Electrical Machines and Networks Control and Systems Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Introduction -- State Estimation and Visualization -- Real Time Stability Monitoring -- Online Transient Stability Assessment -- Transmission Line Fault Location. Sommario/riassunto This book illuminates how synchrophasors achieve the monitoring, protection and control optimizations necessary to expand existing power systems to support increasing amounts of renewable and distributed energy resources. The authors descibe synchrophasor techniques that can provide operators with better resolution in capturing dynamic behavior of the power grid. The resulting insights support improved real-time decision making in the face of more generation and load uncertainty, as well as interruptions caused by random acts of nature and malicious attacks. Armed with the information in this cutting-edge resource, grid planners and operators

can make optimized, flexible, resilient power systems a reality...