Record Nr. UNINA9910144098103321 Handbook of power quality [[electronic resource] /] / edited by Angelo **Titolo** Baggini Pubbl/distr/stampa Chichester, England;; Hoboken, NJ,: John Wiley & Sons, c2008 **ISBN** 1-281-84089-0 9786611840891 0-470-75424-9 0-470-75423-0 Descrizione fisica 1 online resource (644 p.) Altri autori (Persone) BagginiAngelo B Disciplina 621.31 Soggetti Electric power transmission - Reliability Distributed resources (Electric utilities) - Reliability Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Handbook of Power Quality; Contents; List of Contributors; Preface; 1 Frequency Variations; 1.1 Frequency Quality Indices; 1.2 Frequency Measuring; 1.3 Load-Frequency Characteristics; 1.3.1 Influence of the Frequency Variation on the Actuation Motors: 1.3.2 Capacitor Bank and Harmonic Filters; 1.3.3 Transformers and Coils in the Power Network; 1.4 Influence of Frequency on Users' Equipment; 1.4.1 Influence of Frequency Variations on Asynchronous Motors; 1.4.2 Influence of Frequency Variations on Parallel-Connected Condensers and Coils 1.4.3 Influence of Frequency Variations on Series-Connected Condensers and Coils1.5 Governing of Turbine Speed: 1.6 Frequency Control in Power Systems; 1.6.1 Composite Load; 1.6.2 The Generation Characteristic; 1.6.3 The System Properties and Control Basics; 1.6.4 Frequency Control in an Islanding System and in Interconnected Systems; 1.6.5 Frequency Control: Primary, Secondary and Tertiary;

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Sommario/riassunto

Due to the complexity of power systems combined with other factors such as increasing susceptibility of equipment, power quality (PQ) is apt to waver. With electricity in growing demand, low PQ is on the rise and becoming notoriously difficult to remedy. It is an issue that confronts professionals on a daily basis, but few have the required knowledge to diagnose and solve these problems. Handbook of Power Quality examines of the full panorama of PQ disturbances, with background theory and guidelines on measurement procedures and problem solving. It uses the perspectives of both power