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Altri autori (Persone)	CarpinelliGuido VerdePaola <1966->
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Soggetti	Electric power systems - Quality control Electric power system stability - Measurement Electric power failures - Economic aspects Electric utilities
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Power Quality Indices in Liberalized Markets; Contents; About the authors; Preface; Acknowledgements; 1 Traditional power quality indices; 1.1 Introduction; 1.2 Background concepts; 1.2.1 Power quality disturbances; 1.2.2 Power quality disturbances and electromagnetic compatibility; 1.3 Power quality disturbances: indices and objectives; 1.3.1 Waveform distortions; 1.3.2 Slow voltage variations; 1.3.3 Unbalances; 1.3.4 Voltage fluctuations; 1.3.5 Mains signalling voltages; 1.3.6 Voltage dips (sags); 1.3.7 Transient overvoltages; 1.3.8 Rapid voltage changes; 1.4 Conclusions; References 2 Assessing responsibilities between customer and utility 2.1 Introduction; 2.2 Waveform distortions and voltage unbalances: indices based on a single metering section; 2.2.1 Indices based on harmonic impedances; 2.2.2 Indices based on powers in non-ideal conditions; 2.2.3 Indices based on comparison with an ideal linear load; 2.3

Waveform distortions and voltage unbalances: indices based on distributed measurement systems; 2.3.1 The global index; 2.3.2 The cost of deleterious effects index; 2.4 Voltage fluctuations 2.4.1 An approach based on the correlation between flicker level and load power2.4.2 An approach based on Gaussian probability functions; 2.4.3 Summation law-based approaches; 2.4.4 Voltage-based approaches; 2.4.5 Voltage and current-based approaches; 2.4.6 Power-based approaches; 2.4.7 A simplified approach; 2.5 Voltage sags; 2.5.1 Disturbance power and energy approach; 2.5.2 Slope of the system trajectory approach; 2.5.3 Resistance sign approach; 2.5.4 Real current component approach; 2.5.5 Distance relay approach; 2.6 Voltage transients; 2.7 Conclusions; References

3 Advanced methods and nonstationary waveforms3.1 Introduction; 3.2 Discrete time waveforms and windowing; 3.2.1 Hanning windowing; 3.2.2 Result interpolation; 3.2.3 Synchronized processing; 3.2.4 Desynchronized processing; 3.3 Short-time Fourier transform; 3.3.1 Theoretical background; 3.3.2 STFT-based indices; 3.4 Wavelet transform; 3.4.1 Theoretical background; 3.4.2 Wavelet-based indices; 3.5 Parametric methods; 3.5.1 Theoretical background; 3.5.2 Parametric method-based indices; 3.5.3 Some comparisons between DFT-based methods and parametric methods; 3.6 Time-frequency distributions 3.6.1 Theoretical background3.6.2 Time-frequency distribution-based indices; 3.7 Transient waveform distortions (bursts); 3.7.1 Theoretical background; 3.7.2 Burst indices; 3.8 Conclusions; References; 4 Quantifying the quality of the overall supply voltage; 4.1 Introduction; 4.2 Global indices based on a comparison between ideal and actual voltages; 4.2.1 The normalized RMS error; 4.2.2 The normalized three-phase global index; 4.2.3 The voltage quality deviation factor; 4.3 Global indices based on the treatment of traditional indices; 4.3.1 The global indicator 4.3.2 The unified power quality index

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## Sommario/riassunto

Power Quality (PQ) indices are a powerful tool for quickly quantifying PQ disturbances. They also serve as the basis for illustrating the negative impact of electrical disturbances on components and for assessing compliance with the required standards and recommendations within a regulating framework. Within these pages lies a comprehensive overview of both the traditional PQ indices in use today and new indices likely to be used in the future. Key features of this book include:a special focus on the metrics for quantifying PQ disturbances;a complete review of methods and indic

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2. Record Nr.	UNINA9910483943303321
Titolo	RoboCup 2012: Robot Soccer World Cup XVI / / edited by Xiaoping Chen, Peter Stone, Luis Enrique Sucar, Tijn van der Zant
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2013
ISBN	3-642-39250-4
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (XII, 392 p. 183 illus.)
Collana	Lecture Notes in Artificial Intelligence, , 2945-9141 ; ; 7500
Disciplina	629.892
Soggetti	Artificial intelligence Computer networks User interfaces (Computer systems) Human-computer interaction Software engineering Automatic control Robotics Automation Computer vision Artificial Intelligence Computer Communication Networks User Interfaces and Human Computer Interaction Software Engineering Control, Robotics, Automation Computer Vision
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Robot hardware and software -- Perception and action -- Robotic cognition and learning -- Multi-robot systems -- Human-robot interaction -- Education and edutainment -- Applications.
Sommario/riassunto	This book includes the thoroughly refereed post-conference proceedings of the 16th Annual RoboCup International Symposium, held in Mexico City, Mexico, in June 2012. The 24 revised papers presented together with nine champion team papers and one best

paper award were carefully reviewed and selected from 64 submissions. The papers present current research and educational activities within the fields of Robotics and Artificial Intelligence with a special focus to robot hardware and software, perception and action, robotic cognition and learning, multi-robot systems, human-robot interaction, education and edutainment, and applications.

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