

UIE working group Power Quality

Voltage Dip Immunity of Equipment and Installations



TUTORIAL

Introduction

(Part 1)

The First International Conference on Smart Grids, Green Communications and IT Energy-aware Technologies

ENERGY 2011

May 22-27, 2011 - Venice/Mestre, Italy



Today's Agenda

- Voltage Dip Characteristics
- Equipment and Processes
- □ Immunity Testing
- Economics
- Statistics and Classification
- Immunity Objectives



Scope of the Working Group

☐ Immunity of Equipment and Installations

- Only Voltage Dips
- No Other Mitigation Methods

□ Recommendations to the Stakeholders

- Equipment manufacturers
- Network operators
- Industrial installations
- Standard-setting organisations
- Regulators



About the working group

History

- ☐ First meeting: April 2006
- ☐ Last meeting: January 2009
- ☐ Report ready: July 2009
- ☐ ...available as:

CIGRE TB 412: April 2010

- □<u>www.e-cigre.org</u>
- □<u>www.uie.org</u>

Report Chapters

- A description of voltage dips
- Equipment and process immunity
- ☐ Immunity testing and characterization
- Economics
- Statistics
- ☐ Immunity classes and application
- ☐ Future work



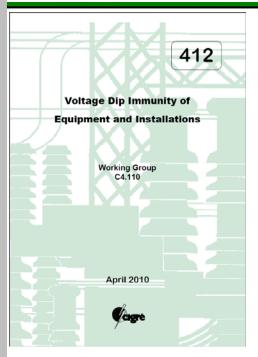
Continution of the Work...

UIE Working Group 2

- □ Dissemination of the results from JWGC4.110
- ☐ Extending the global voltage-dip database
- Creating a tutorial on voltage-dip immunity
- Power-quality aspects of smart grids







The report can be obtained in electronic format for free from:

www.uie.org;

a hardcopy can be purchased from www.e-cigre.org CIGRE/CIRED/UIE Joint Working Group C4.110

Voltage Dip Immunity of

Equipment and Installations

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