



## Tools for Assessing the Robustness Variation of Power System against Voltage Dips

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**Abstract.** Electrical power system robustness is defined as the intrinsic capacity of an electrical power system to maintain assigned disturbance levels when external conditions change. In this paper the concept of robustness against is applied to the voltage dips, one of the most severe disturbances in power quality. Using graphical color schemes as immediate tools, improvements and/or degradations of the electrical power system robustness are assessed when structure modifications are implemented. The proposed tools are applied to real distribution systems.

### Key words

Power quality, power system reliability, power transmission, power distribution, voltage dips.

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