

Power quality issues and power electronics

Harmonics in the distribution network have become an area of keen interest for utilities, power consumers and academic researchers due to its potentially disruptive impact on economy. This interest has lead to the development of a large number of standards that contain the problems as well as technological solutions to meet the specifications of the standards. In this paper, we discuss the genesis of power quality problems due to growing use of power electronics equipment in processing power and impact of harmonic current generated by them on the distribution network. The power quality standards are discussed and technological solutions are evaluated in detail.