Abstract

Neutral current and neutral voltage in three-phase four-wire distribution system is a big concern in power system. Various non-linear loads specially the switch mode power supply types loads inject harmonic current in neutral. The variations of neutral current and neutral voltage are analysed. Measurements taken from Electrical Machine lab of National Institute of Technology, Agartala are presented to determine the extent of neutral current and neutral voltage problem. The results show the effect of harmonic distortion in neutral conductor.

- B. E. Kushare, A. A. Ghatol and Mrs. T. N. Date, "Power Quality survey of 33KV Indian Industrial Supply System: Results and Remedial Actions", 2007.
Neutral Current and Neutral Voltage in Three Phase Four Wire Distribution System of a Technical Institution


**Index Terms**

Computer Science

Power Systems

**Keywords**

Neutral voltage, neutral current, non-linear loads, harmonic distortion, power quality, technical institution, variable power supply