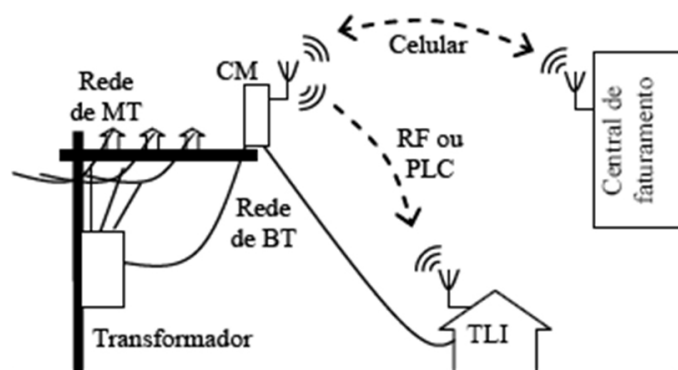


11PE171 The Evolution of Electrical Energy Measurement in BrazilAna Maria Ribeiro Franco¹⁰⁰, Rosane Moreira Debatin¹⁰⁰

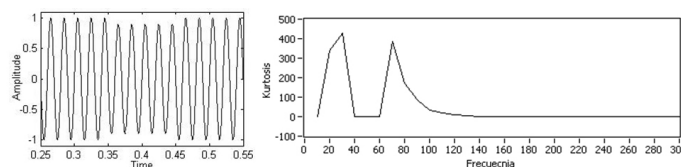
This paper shows that the increasing complexity of new equipment for the power grid, mainly transmitted through processes of additional software, is an important issue and needs to be quickly assimilated by the metrological controls to prevent the emergence of problems in the way of smart grid. This paper aims to describe all relevant aspects of this particular experience revealed in Brazil, discussing the real scenario and its challenges opposites.



Configuration SDMEE installed in Brazil

12PQ037 Detection and characterization of amplitude defects using Spectral KurtosisJose Maria Sierra-Fernandez¹⁰¹, Juan José González de la Rosa¹⁰¹, José Carlos Palomares-Salas¹⁰¹, Agustín Agüera-Pérez¹⁰¹

This paper describes a new procedure for analyze amplitude defects, based on Spectral Kurtosis (SK). It extracts the kurtosis of each frequency component, related to the amplitude evolution. The proposed procedure allows the identification and characterization of frequencies which amplitudes are constant or change suddenly will be identified. An amplitude defect involves a step in the amplitude level, and that affect to frequencies around 50 Hz, which originally are not present, and could be detected by the SK.



On the left graph is shown the defect introduced and on the right graph the SK result.