

# **STUDY OF THE INFLUENCE OF POWER FLUCTUATION ON POWER TRANSFORMERS**

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## **ABSTRACT**

The study of the transformer in disturbed working mode and the identification of these disturbances and their origins have a particular importance for the choice and the dimensioning of the transformer; and even for the optimization of the exploitation of the electrical energy placed at the disposal of the consumer.

The aim of this paper is to study the behavior of the power transformers following brutal load variations by simulating the different electric parameters of the transformer during the increase or the reduction in power required by the receivers.

This study permit to identify and analyze the phenomena accompanying the change of operating condition in order to be considered in the selection of transformers characteristics in the event that these maneuvers will likely happen.

**KEY WORDS:** Simulation, Power Transformer, Disturbed Mode, Loads Variation.