

## ABOUT THE POWER FACTOR CALCULATION IN NETWORKS THAT OPERATE IN NONSYMMETRICAL CONDITIONS

BY

VIOREL VARVARA

Most of the distribution networks run in nonsymmetrical states, because during operation can't be realized, for a long period of time, the condition that the equivalent three-phase receiver to be symmetrical. In the following, it is analysed a radial network at which is connected an equivalent nonsymmetrical, star connected, receiver. Adequately modeling the receiver, there can be studied different situations of operation, such as: fault conditions, short circuit on a phase or two; important unbalances, which determine very different charges on the three-phases; different ways of treating the neutral, inclusive the situations of neutral insulated or grounded.

There are made some considerations about different possibilities to compute the power factor in nonsymmetrical conditions for the sinusoidal steady-state.