POSIBILITIES OF SURVEY AND SHAPE THE CONSUMPTION FROM THE ELECTRIC ENERGY DISTRIBUTION SYSTEMS

BY

*GH. GEORGESCU, **V. VARVARA and *B. NEAGU

Abstract. In our country, through the opening the electric energy market, it was intended to remove the natural monopoly and to vertically integrate the energetic sector, replacing it with competitive mechanisms that allow the consumers the possibility of choosing, in a free way, the supplier. In this context, the survey and the outline of the load curves represent an essential instrument for substantiating the strategy of developing the infrastructure of the zonal distribution providers, of optimizing the structure and the running states of these installations, of managing the electric energy consumption a.s.o. To generate profiles or typical load curves valid for the whole population, it is proposed an alternatively approach, which allows a smaller importance to the pre-established classification, leaving to the procedure the liberty in extracting as much as many consume categories as result to be necessary, in the limit of a pre-established limit. Such a procedure belongs to self-organizing algorithms or non-surveyed learning. In the paper, with respect to the daily load profiles, it was used the SOFMs (Self Organizing Features Maps) algorithm applied on Kohonen neuronal networks.

Keywords: self-organizing algorithms, non-surveyed learning, load curves.