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THE ESTIMATION AND TIME EVOLUTION OF THE DISTORTION STATE IN PUBLIC ELECTRIC ENERGY REPARTITION AND DISTRIBUTION SYSTEMS

BY

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Abstract. Public repartition and distribution systems are responsible for supplying electrical power to home and third-party receivers and consumers located in a habitable area. The appearance of the distortion state in such distribution systems is inevitable in present technological conditions. In the paper are determined, based on records from 2000, 2005 and 2009, the specific parameters of the distortion state related to voltage and current, their evolving trend over a 5-year interval and 9-year interval, as well as their deviations from the norms imposed by our country's regulations. There are also presented the main steps and the technical means there can be taken for reducing the disruptive effects of harmonic pollution.

Key words: Time evolution; distortion state; harmonics; repartition networks.