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THE ACTIVE POWERS FLOW IN NETWORKS RUNNING IN DISTORTING AND NONSYMMETRICAL STATES

BY

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Abstract. In cities, the consumers supplied by a distribution network have a diverse structure, such as hotels, restaurants, commercial areas, block of flats, lighting, a.s.o. Beside other causes, this fact determines the operating state to be nonsymmetrical because the impedances on the three phases can't be equal all the time. The appearance of the distorting state in such kind of networks is also inevitably in the actual technological conditions, because lighting, TV-sets or computers are known as distorting elements. The paper analyzes a network that supplies equivalent receivers grouped in three main categories, symmetrical receivers, nonsymmetrical and distorting receivers pointing the active powers flow on harmonics and symmetrical components.

Keywords: distorting state, nonsymmetrical state.