

**INVESTIGATIONS OF THE INVARIANCE OF THE OUTPUT OF
A COMPLEX ELECTRIC SYSTEM BASED ON THE
TECHNOLOGY OF EMBEDDING SYSTEMS**

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ABSTRACT

In this paper, consider the application of embedding technology for the study of the invariance of the output of complex controlled electrical systems under small perturbations, as stationary deterministic multidimensional dynamical systems. The regulator synthesis technique based on the modern matrix theory is presented. The results of the synthesis of the regulator of the model of a multi-machine electrical system are obtained, which allow analyzing the influence of the parameters of the electric system regime.

KEYWORDS: *Electric System, Regulator Synthesis, Technology of Embedding Systems, Invariance, Canonizer & Zero Divisors*

Received: Sep 19, 2018; **Accepted:** Oct 01, 2018; **Published:** Oct 22, 2018; **Paper Id.:** JEEERDEC20181