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DECOMPOSITION ANALYSIS OF ACTIVE POWER OSCILLATIONS IN THE IPS OF UKRAINE

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Abstract

A method is proposed and investigated for decomposition analysis of active power oscillations in the IPS of Ukraine using harmonic functions with exponentially changing amplitude to determine steady state stability level of EPS.. On the example of IPS section West-Winnitsa the analysis of possibility of low-frequency oscillations origin is executed, using numerical integration of non-linear EPS dynamics equations, for obtaining transient processes in EPS after small finite disturbance. References 6, figures 2, table 1.

Key words: approximation model, low-frequency oscillations, harmonic functions, electric power system, steady state stability.

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