عنوان مقاله:

Synchronous Machine Parameters Estimation Using Genetic Algorithm Via Dc-Decay Field Tests at Ghom Power Plant

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خلاصه مقاله:

In this paper Dc-Decay procedure and its implementation for the determination of a synchronous machine parameters in the gas units of Ghom power plant is presented. time domain data are acquired from Dc-Decay standstill test measurements. The direct axis and quadrature-axis dynamic parameters are found by processing the step response of the synchronous machine at standstill position. Genetic algorithm approach is employed to identify the desired parameters. This test procedure reduces the required power and minimizes the testing time; but presents a limited precision because of the low flux level and standstill condition. The simulation results and their comparison with the actual measured signals show the accuracy of the derived models.

کلمات کلیدی:

DC-Decay Test, Genetic Algorithm Synchronous Generator, Parameter Estimation

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