

ANN for Subsynchronous Resonance Detection

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Abstract

Artificial Neural Networks (ANNs) are being advantageously applied for power system problems. They possess the ability to establish complicated input-output mappings through a learning process, without any explicit programming. In this paper, two ANNs for Subsynchronous Resonance (SSR) analysis are presented. The designed ANNs measure the possibility of SSR occurrence. The effectiveness of this approach is tested by experimenting it on the first bench mark model proposed by IEEE Task Force on SSR.

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