

## Applying Wavelet Transform to Ferroresonance Detection and Protection

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**Abstract :** Non-synchronous breakage or line failure in power systems with light or no loads can lead to core saturation in transformers or potential transformers. This can cause component and capacitance matching resulting in the formation of resonant circuits, which trigger ferroresonance. This study employed a wavelet transform for the detection of ferroresonance. Simulation results demonstrate the efficacy of the proposed method.

**Keywords :** ferroresonance, wavelet transform, intelligent electronic device, transformer

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