

Paper 09: Switching Events and Ferroresonance: Field Experience and Solutions

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Abstract:

This paper is meant to study the possibility of the ferroresonance phenomenon in a 34.5 kV substation. Frequent PT fuse failures occurred during switching events, resulting in substantial production losses. A three-phase model of an EMTDC program was developed to simulate switching scenarios and propose mitigation actions. The case study revealed that ferroresonance is the direct cause, prompting the proposal of different actions to resolve the problem. These actions include short-term as well as long-term action plans.