Practical Aspects of (What is and what is not) Ferroresonance

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Ferroresonance is an important issue in transmission and distribution systems. It may result in equipment failure and service interruption that could be very costly and reduce system reliability.

However, very often ferroresonance is incorrectly blamed for failures in the T&D systems, when there is no expert analysis available and/or when there exist little information about the failure.

The proposed Working Group will undertake the following endeavors.

- A comprehensive survey of ferroresonance issues in the literature.
- Provide an explanation of ferroresonance that is accessible to practicing engineers and researchers alike.
- Document a comprehensive set of system configurations where ferroresonance is possible. Specifically address the likelihood of ferroresonance in terms of parameters and operating conditions, and address mitigation methods.
- Document other scenarios involving overvoltages and harmonics that are NOT due to ferroresonance. In terms of operating conditions, circuits, and parameters, differentiate between ferroresonance and these other problems
- The Working Group will provide a special publication on the subject, which will be an important contribution to the power engineering community.

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