Phenomenon of 10kV bus voltage resonance

Due to the 34th resonance at the 35kV bus at the distance of 26.3km from the main transformer, the 34th harmonic current and voltage amplification phenomenon in the 10kV bus and...

Abstract: Ferromagnetic resonance often occurs in distribution networks with ungrounded neutral points due to transient impacts. Under different parameter combinations, fundamental resonance, frequency ...

The peak ferroresonant voltage can be much larger than the system voltage causing both voltage and thermal stress issues. Sustained operation of surge protection (arresters) can lead to failure.

Ferroresonance, or nonlinear resonance, is a rare type of resonance in electric circuits which occurs when a circuit containing a nonlinear inductance is fed from a source that has series capacitance, ...

Recently, there are increasing interest in studying the ferroresonance phenomenon, due to the various problems it causes to power quality and the destruction of network parts, insulators ...

We describe the power system and associated protection, the failure mechanism, the ferroresonance phenomenon, corrective actions, and lessons learned. Contents: 1. Description of the ...

The results show that when eliminating the single-phase ground fault, it is easy to cause the frequency division resonance of the system, and the use of these two measures can effectively ...

A strange phenomenon occurred in a 35kV substation for several consecutive days: the 10kV bus voltage fluctuated irregularly between 6.5kV and 11.3kV, causing the reactive power ...

The phenomenon of ferroresonance is of particular concern during capacitor voltage transformer (CVT) or coupling capacitor voltage transformer (CCVT) transients, and can cause noticeable deviation of ...

Ferroresonance phenomena in distributing networks with an insulated neutral caused by electromagnetic measuring voltage transformers and connecting cables are studied.

Phenomenon of 10kV bus voltage resonance

Web: https://www.csc-energia.com.pl