Dear Readers,

Again Transformers Magazine brings you a wide range of technical articles and two columns.

In his column Carlos Gamez reviews the most important factors that determine a transformer’s longevity and explores which actions a transformer owner, operator and maintainer can take in order to manage and, as much as possible, extend the life of the important and expensive assets.

Omar Ahmed and Anne Goj analyse the activation of two mechanical depressurisation devices, the transformer protector and the pressure relief valve during an internal arc on a 400 MVA three phase transformer. Authors performed computational simulations to study the dynamic pressure evolution and static pressure build up inside the tank.

Michel Duval presents challenging findings regarding the widely accepted criterion for end of life for paperInsulation of paper DP of 200 being too high, and that it could be decreased to about 100 or even lower. In this way, the life of transformers could be extended by several years without increasing their risk of failure due to the mechanical condition of paper, thus significantly reducing capital investment costs needed for their replacement.

Johan Lindström and Michael Försth describe fire safety issues related to pits for collection of oil in the event of an oil leak from a transformer. Pits are conventionally filled with rocks. There is, however, no well defined test method that quantifies the fire performance. Authors presented a test with test results for an alternative system with profile planks instead of rocks.

Zhan Yangang introduces the readers to another auxiliary judgment method for core type transformer - low voltage single-phase excitation, explaining how to perform the test and what should be done to achieve the correct results.

I hope you will find something interesting in this issue and that reading it will be a pleasurable experience.

Mladen Banovic, Editor in Chief