TRANSFORMERS MAGAZINE

EDITORIAL BOARD

Editor in Chief: Mladen Banovic, PhD; PUCARO Elektro-Isolierstoffe GmbH; Croatia mladen.banovic@transformers-magazine.com

EXECUTIVE EDITORS

Michel Duval, PhD; Hydro Quebec; Canada Jean Sanchez, PhD; EDF; France Jin Sim; Jin Sim & Associates, Inc.; USA Juliano Montanha; SIEMENS; Brazil Craig Adams; TRAFOIX; Australia Arne Petersen; AP Consulting; Australia

Art Director: Momir Blazek Photo: Shutterctock.com Language Editor: Mirna Harwood

ADVERTISING AND SUBSCRIPTION

Marin Ante Dugandzic +44 20 373 474 69 marin.dugandzic@merit-media.com

TRANSFORMERS MAGAZINE

Transformers Magazine is published quarterly by Merit Media Int. d.o.o., Setaliste 150. brigade 10, 10 090 Zagreb, Croatia. Published articles don't represent official position of Merit Media Int. d.o.o. Merit Media Int. d.o.o. is not responsible for the content. The responsibility for articles rests upon the authors, and the responsibility for ads rests upon advertisers. Manuscripts, photos and other submitted documents are not returned.

Subscription rate: \$76 (1 year, 4 issues)

Digital Edition: \$34 (1 year, 4 issues)

Online Edition: Free of charge for registered users

www.transformers-magazine.com

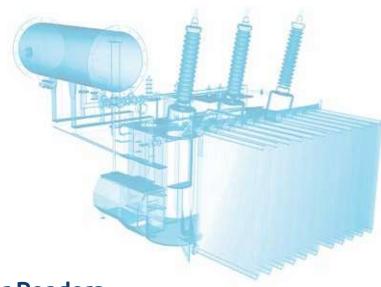
REPRINT

Libraries are permitted to photocopy for the private use of patrons. Abstracting is permited with credit to the source. A per-copy fee must be paid to the Publisher, contact Subscription. For other copying or republication permissions, contact Subscription. All rights reserved.

Publisher: Merit Media Int. d.o.o.
Setaliste 150. brigade 10,
10 090 Zagreb, Croatia
Contact: +385 91 222 8820 Croatia
Contact: +44 20 373 474 69 UK
VAT number: HR09122628912
www.transformers-magazine.com
Bank name: Zagrebacka banka
Bank identifier code: ZABAHR2X
Bank IBAN: HR8023600001102375121
Director: Marin Ante Dugandzic

www.transformers-magazine.com

EDITORIAL MESSAGE



Dear Readers,

gain 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 paper insulation 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.

Wallace Binder's column 'Trends in transformer failure analysis' reports on recent progress on standardisation projects, describes some failures which have evolved recently, and identifies many things that are not found in the IEEE Guide for Failure Analysis.

In his article Talha Ali Qasmi demonstrates different protection schemes and protective devices used to protect transformers, their need and importance to disconnect the transformer from the grid as quickly as possible because the damage is proportional to the fault time.

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

