

Dear readers,

The October edition of Transformer Magazine considers how we interpret available information, whether we are assessing a transformer's condition, planning maintenance or deciding where to invest. More data can help, but better decisions depend on understanding what that data actually tells us, what it does not tell us, and when we need to look deeper.

From transformer condition to market trends, this edition explores how better interpretation can lead to better decisions

These questions are particularly relevant in the light of the Industry Navigator conference in Vienna, from 6 to 8 October. The industry continues to invest heavily in expansion while dealing with constraints in components, skills and project delivery. Individual signals can look reassuring or concerning in isolation, but understanding how they interact gives us a much better basis for deciding what comes next.

That idea also runs through many of the contributions in this edition. We open with Hitachi Energy's look at powering the future of rail mobility, followed by our interview with Paolo Miolo of CESI. Both provide perspectives on an industry in which technologies, applications and requirements continue to evolve.

In the Industry Trends column, we draw on Industry Navigator research conducted since 2018 to examine what transformer diagnostics and monitoring can teach us about interpreting change at industry level. The 2026 research covers more than 260 variables, which allows individual findings to be viewed within a broader picture. A full order book, for example, reflects both genuine equipment demand and how far ahead customers feel they need to place orders. Announced manufacturing capacity is equally difficult to interpret without understanding how much additional output will actually become available to customers. Just as in transformer diagnostics, a signal may tell us that something is changing without explaining why.

Several technical contributions approach the same challenge from different directions. Siemens Energy looks at transformer fire risk and the development of a new safety benchmark, while Bhaba Das and Marius Grisaru continue their discussion of online dissolved gas analysis, showing how baselines and trends can help distinguish developing changes from conditions that require action. In the interview with Mélissa Djarmouni from Sentric Safety Group, the focus is on how tighter timelines and more complex systems are changing expectations. Huaming extends the reliability discussion beyond the transformer itself, considering how supply security and service strategy affect equipment throughout its lifecycle.

The distinction between what an asset appears capable of doing and what it can reliably deliver is also central to Oleg Roizman's column on transformer loading capability and rating. Optics11 approaches the question from another direction, examining how continuous partial discharge monitoring can provide additional information for transformer asset management. In both cases, the value lies not simply in having a measurement, but in understanding how it should influence a decision.

Bushings are a good example of a component where technical requirements and supply-chain constraints now go hand in hand. Lead times for bushings have risen dramatically in recent years, making availability a growing concern for transformer manufacturers and utilities alike. Against that background, Hitachi Energy presents its AirRIP® flex AF 800 kV dry bushing, while Megger examines how scheduled oil testing and continuous monitoring work together to assess transformer insulation.

This edition demonstrates that engineering and business decisions often face the same basic challenge: signals are useful only when they are interpreted in context. Whether we are looking at dissolved gases, hot spot temperatures, loading capability, market demand or manufacturing capacity, the important question is not simply what the number says, but what is driving it and what action should follow.

That is also the discussion we will continue in Vienna. Industry Navigator gives us an opportunity to combine research with the experience of people across the value chain and to examine not only where the industry stands today, but what the signals are telling us about what may come next.



With best regards,
Dr Mladen Banović
Editor-in-Chief

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