

TRANSFORMERS MAGAZINE

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Dear Readers,

Not long ago, a book related to transformers came to my hands, with one of the opening remarks stating that to date, fundamental transformer technology hasn't seen a significant change since transformers were first invented more than a century ago. Although this type of a statement is something that we hear and read about regularly in conference papers etc., this time it made me think about the things that have changed about transformers since their first days, and those that remained the same.

This year we are marking the 100th anniversary of IEEE Transformers Committee. This jubilee was celebrated in March at the Spring Meeting in Pittsburgh, USA, where participants could learn more about the number of standards the committee has produced over the century, and see historical photos of transformers displayed on posters and in the brochure the committee prepared for this occasion. All of this again made me think about the statement from the beginning of this editorial.

Comparing visually those first transformers to today's modern transformers (for example, 1,100 kV DC transformers, see Transformers Magazine Vol. 5, Issue 1, p. 8), a dramatic evolution of technology can be seen. More importantly, the application of transformers has expanded from local distribution of electricity, used mainly for lighting, to all those applications that we see today with transformer being used everywhere, even under the sea.

We could debate, of course, about what remained the same and what has changed in transformer design,

manufacturing and application, but what I see as a major similarity is the motivation to use transformers for global distribution of electricity, with the highlight on 'global'. More than a century ago, Nikola Tesla came up with an idea to develop a wireless power system. Today, there is the idea of the Internet of Energy. Both of these concepts depend on transformers – they play a vital role. It is probably true that no one can say for certain if the modern concept of global distribution of electricity will be more successful than that of Nikola Tesla, but it is good



Wardenclyffe Tower (1901–1917), also known as the Tesla Tower, was an early experimental wireless transmission station designed and built by Nikola Tesla in Shoreham, New York, in 1901-1902.

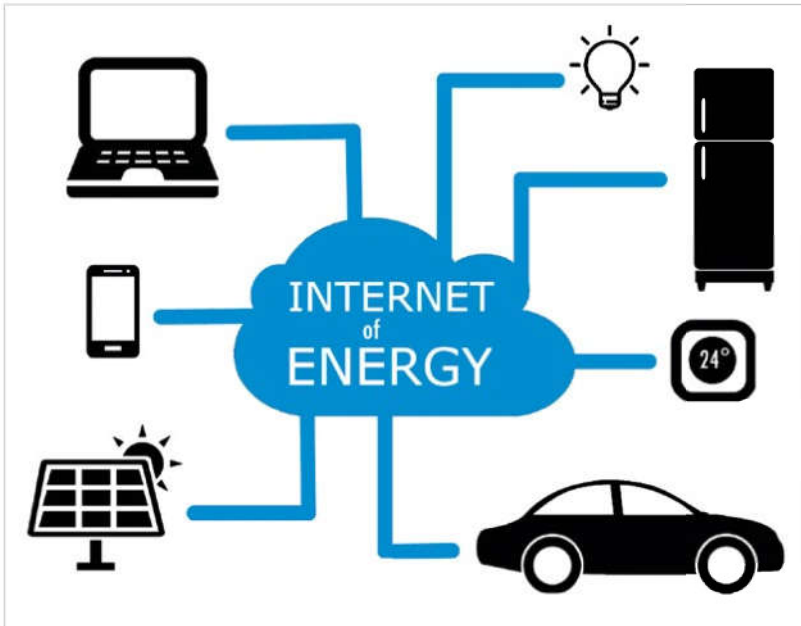


Illustration of the concept of the Internet of Energy

to see that it still inspires innovation in transformer technology, and I hope it will continue to do so.

This edition of Transformers Magazine brings articles dealing with some of

the topics and technologies related to the internet of energy, as well as an array of other articles dealing with new developments, technologies and their applications across different fields of the transformers industry.

In two featured interviews, we talk to chief managers whose companies operate globally helping end users to advance their manufacturing process, and inspection and maintenance practices. In addition to our three regular columns, in this issue we introduce a new column covering issues and field experiences in transformer maintenance.

The edition also includes papers on transformer connectivity, shunt reactor technology, transformer insulation, testing and condition assessment, vacuum tap changer technology and more.

Inviting you to join the circle of authors who have published with Transformers Magazine, I wish you a joyful reading!

Mladen Banovic, Editor-in-Chief

Transformers
MAGAZINE

Think about the environment while developing, manufacturing and operating transformers.