

Dear Readers,

We kick off the June issue of our digital magazine with two key thoughts in mind, and if we were to use keywords to describe them, they would be Retirement and Data.

Let's look at data and the implications it has for Transformer. Technology and for Power Systems Technology, our new platform that will support our widened focus on the entire power systems industry (visit [PST webpage](#) and [PST LinkedIn page](#)). The key to understanding the reliability and operational functionality of an asset or assets in a system is to have as much real time and actionable information as possible - and information requires data. While this issue is about monitoring and diagnostics, in truth it is about the acquisition of data. Last year, a major northeast utility hired more data scientists from college than they hired electrical engineers. That speaks volumes about how important data is and will be for the power industry.

DGA monitors for transformers are not that new, but the widespread application of them from simple hydrogen monitors to more complex nine-gas monitors has become the industry norm, with most OEMs offering them as standard equipment. What is new is the use of all that data in the decision-making process as to whether a piece of equipment is in imminent failure, and how to prepare for two things: growth in the demand for more electricity and the aging of transformers.



In August we add Power Systems Technology to our offerings, alongside Transformer Technology, as well as new stand-alone digital services like our Webinar, Spotlight and Showcase offerings.

At the recent IEEE PES T&D conference in New Orleans, I had the pleasure of interviewing 38 thought leaders, focusing on what they saw as the future for the power industry in North America and Europe. (visit [IEEE PES Interviews page](#)). Nearly every one of those I interviewed mentioned that the demand for more power, led by a revolution in EV transportation along with other mitigating factors, was going to increase over the next decade. Growth in demand, whether you believe it to be a 30% increase, or a 100% increase, will lead to new infrastructure and new infrastructure leads to the need for information. Where and when to replace old, aging assets also adds a new challenge, one which excites those of us who have been part of the power industry for decades.

Many of these incredibly robust assets, especially transformers, are well beyond their expected life, and with lead times increased to six months for smaller units and up to 60 months for major generation units - driven mostly by increased demand, but also by supply chain and labor shortages - these are the two specific challenges that all transformer OEMs I interviewed mentioned. The industry relied on these aging assets for longer than expected, but now is the time to use information from good data for life-cycle management. While not all actions being taken by these OEMs will fix the issues in the short term, they will bring more potential and stability in the future. And it is very likely that most major transformers will have monitors installed at the factory.

PST

**POWER SYSTEMS
TECHNOLOGY**



That leads me to the second keyword: Retirement. While continuing to serve as co-leader and Technical Director for APC Media, I have retired as the President of the Electric Power Reliability Alliance (EPRA), an organization I helped found in 2018. While I will continue with the drive to create more safety and reliability in industrial and commercial applications as a Fellow of EPRA, I will no longer serve as the formal leader. It has been a tremendous blessing to have founded EPRA and I will support the work of so many committed practitioners who are developing our certification program, the Certified Electrical Reliability Professional (CERP). Retirement also means spending more time with my new granddaughter, Maya, our first, and serving APC Media and IEEE as we deal with all the challenges facing the power industry.

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Our August digital magazine will focus on **Substation Solutions** the following sub-themes:

- Role of thermography and ultrasound for testing
- The Art of Partial Discharge testing
- New & Advanced Technology

While we already have some key Technical Advisory Board (TAB) members lined up for articles or interviews, I would love to hear from you if you are interested in adding to the Body of Knowledge that you believe will advance the cause of power system asset reliability or life cycle management. We always welcome new content and new contributors to our growing TAB.



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