

FOR IMMEDIATE RELEASE

Hitachi ABB Power Grids launches open and scalable ecosystem for digitalization of transformers

The manufacturer-agnostic, TXpert™ Ecosystem to enable millions of dollars in savings through greater flexibility, efficiency and resilience in electricity networks

Zurich, 21 September, 2020 – Hitachi ABB Power Grids is delighted to launch the TXpert™ Ecosystem for digitalization of transformers. The ecosystem is designed to drive data-driven intelligence and decision making in the operations and maintenance of transformers and power grids. It is a complete suite of products, software, services and solutions that work together and have the capability to integrate with new and existing digital equipment from other manufacturers.

“Building on deep experience, we have pioneered the scalable TXpert™ Ecosystem to bring together customers, partners and industry peers on an open platform developed on strict cybersecurity standards, enabling simple steps in their digitalization journey”, said Bruno Melles, Managing Director, Transformers business unit at Hitachi ABB Power Grids. “By giving transformers the knowledge and intelligence derived from designing and servicing thousands of transformers it will help to reduce costs and risks, optimize operations, extend life-expectancy and enhance environmental performance, enabling a sustainable energy future”.

Powering informed decisions and saving millions of dollars

As per a recent CIGRE report⁽²⁾, the top three locations of faults in transformers are its windings, tap-changers and bushings. The TXpert™ Ecosystem provides options to mitigate all of these. For example, failure of bushings can lead to transformer tank rupture and explosions, resulting in millions of dollars in repairs and settlement costs for a utility, while the cost of replacing a high-voltage bushing would be a few percentage points of this⁽³⁾. Using TXpert™ Ecosystem solutions for digital asset management of bushings, the real-time status of the bushing health can be monitored and corrective action taken before failure probability becomes high.

About the TXpert™ Ecosystem

At the heart of the ecosystem is the TXpert™ Hub from Hitachi ABB Power Grids – a data monitoring and diagnostics device that also provides connectivity. Designed as an open platform, it is capable of integrating multiple sets of data from TXpert™ Ready sensors from diverse manufacturers, simplifying the digitalization of transformers in compliance with modern communication and stringent cybersecurity standards. Data and intelligence from the TXpert™ Hub can be accessed locally and if required from cloud-based solutions.

TXpert™ Enabled transformers can be augmented with Asset Performance Management (APM) solutions from Hitachi ABB Power Grids. As an enterprise level software solution, the APM can be used for individual, multiple or large fleets of transformers.

Supporting customers putting the data generated from TXpert™ for smart decision making, associated remote and advanced services can provide virtual site management, life assessments, robotic inspections and transformer care service agreements.

Customers can flexibly deploy the ecosystem in new transformers or in transformers of their existing fleet from Hitachi ABB Power Grids and other manufacturers, with customized TXpert™ solutions as per their specific requirements.

Hitachi ABB Power Grids supports the UN's Sustainable Development Goals (SDGs) and the TXpert™ Ecosystem will contribute to facilitating access to affordable, reliable, sustainable and modern energy for all.

Hitachi ABB Power Grids has been pioneering transformer technology for over a century, collaborating with global committees in setting technology standards and protocols. Enhanced by Hitachi's proven record in advanced digital technologies, Hitachi ABB Power Grids is creating customer value through intelligent solutions for electricity networks.

About Hitachi ABB Power Grids Ltd.

Hitachi ABB Power Grids is global technology leader with a combined heritage of almost 250 years, employing around 36,000 people in 90 countries. Headquartered in Switzerland, the business serves utility, industry and infrastructure customers across the value chain, and emerging areas like sustainable mobility, smart cities, energy storage and data centers. With a proven track record, global footprint and unparalleled installed base, Hitachi ABB Power Grids balances social, environmental and economic values. It is committed to powering good for a sustainable energy future, with pioneering and digital technologies, as the partner of choice for enabling a stronger, smarter and greener grid. <https://www.hitachiabb-powergrids.com>

Notes to the editor

1. While several power utilities have been early adopters of digital technologies, using pioneering technology for grid management and operations since the 1970s, these have been implemented largely in a fragmented and disconnected mode. As per a report from the IEA⁽¹⁾, the sector is now at the cusp of a digital revolution, ready to adopt these solutions on a wide scale based on advancing technology, falling costs and ubiquitous connectivity. The analysis shows that digitalization has the potential to drive potential of savings in the power sector alone by up to \$80 billion annually, while security and privacy risks will need to be mitigated. This includes the potential to lower operational and maintenance costs by five percent, lower network losses by five percent and extend the life of network assets by ten percent. Digitalization & Energy, Report by International Energy Agency, 2017
2. Transformer reliability survey, CIGRE Working Group A2.37, 2015
3. Sensing and Measurement, Report by Navigant Research (Now Guidehouse Insights), 2018

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Information contained in this news release is current as of the date of the press announcement, but may be subject to change without prior notice.
