

TRANSFORMER RELIABILITY & PERFORMANCE

- AN INTERACTIVE WORKSHOP

25th March 2020 | Melbourne, VIC

Venue: Grand Hyatt Melbourne
123 Collins St, Melbourne

Session times: 8:15 am till 5:10 pm

Local & International Speakers and Experts

Registration: Go to [Workshop Registration](#)
Who should attend? Presentations will appeal to all industry sectors involved with the transformers - including asset owners, engineers, operators, inspection and maintenance personnel, contractors and suppliers



	Session	Speaker
8:15am	<i>Welcome and Opening – Organisers Ross Willoughby (Convener AU A2) & Kerry Williams</i>	
Session 1: 8:30am – 10:00am	Tutorial - Parts of CIGRE TB771 - Advances in DGA Interpretation	Ms Suparta Bhumiwat, KEA NZ
	Tutorial from WGA2:62 International Transformer Reliability Survey and Updates on Australian Transformer reliability statistics	Dr Dan Martin, ETEL Transformers & WGA2:62
10:00am	<i>Morning Tea</i>	
Session 2: 10:25am – 12:35pm	Specifications - recent Transpower purchase specification enhancements for new power transformers to improve long term reliability	Michael Jordanoff, Transpower NZ
	Transformer specifications - Improving reliability through specification, design and construction	Lagath Ganepola, Powerlink QLD
	Transformer testing - static and dynamic winding resistance measurements & the importance of demagnetising the core. Topic includes Dielectric Response	Dr Wenyu Guo, OMICRON
	Impulse testing - lightning impulses in service vs the FAT & impulse testing for Tx reliability under stresses of lightning strikes and switching operations	Dr Yi Li, National Measurements
12:35pm	<i>Lunch</i>	
Session 3: 13:15pm – 15:45pm	Tutorial - Understanding and mitigating corrosion – CIGRE TB 765	Joe Tusek, Verico
	Lessons learned from 16 transformer refurbishments and risks discovered during refurbishment. Difficulties encountered are discussed. Pre and post work comparisons. Investment planning and future risks	Robert Li, TransGrid
	Refurbishments - improving the maintenance reliability of existing power transformers with on-going refurbishment / replacement programmes for bushings, tap changers and oil	Michael Jordanoff, Transpower NZ
	Improving the reliability of transformers by OLTC retrofit & Voltage Regulating Distribution Transformer - Update on 2019 in service trials and outcomes.	Dr Thomas Smolka, Reinhausen Australia
15:45pm	<i>Afternoon Tea</i>	
Panel Session 16:00pm – 17:00pm	Open Discussion Panel Session facilitated by Ken Budin and with: Ms Suparta Bhumiwat, Michael Jordanoff, Lagath Ganepola, Joe Tusek, Robert Li and Dr Thomas Smolka	
17:00pm	<i>Closing Address</i>	



Delegates are encouraged to consider the following thought provokers and then pose their questions for the OPEN DISCUSSION PANEL SESSION:

- 1. What should an Asset Manager be doing (or not doing) to manage their transformers and reduce the risk of failure?**
Thought provokers: Cost of maintenance vs risk of failure, testing regimes, spares management etc. What factors are used to determine end of life? Is do nothing an option? Is consideration given to; the skills of maintenance service providers (in-house or outsourced), quality of equipment, work practices and how such matters are assessed?
- 2. Which tests should be performed on a transformer and how often should asset condition be determined?**
Thought provokers: Testing regimes, On-line vs Off-line, too much testing vs too little? How are test results interpreted and assessed?
- 3. When it comes to refurbishment, life extension and replacement what are the key considerations for an Asset Manager?**
Thought provokers: Is run to fail an option? Which drivers help us decide to maintain, refurbish, repair, or replace a transformer? What consideration is given to the environmental impact of failures and the disposal of materials at the end of life?

Note: Attendees are encouraged to bring additional questions and issues for discussion and if desired, can send any questions that they want raised by the Chair to: anc@cigreaustralia.org.au

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