

# Conference Programme - 12 June 2023



## TUESDAY, 27 JUNE 2023

1.00pm - 4.00pm	SITE TOURS - MEET TRANSPORT AT TE PAE
PRE-CONFERENCE WORKSHOPS - TE PAE	
DOBSON ROOMS, GROUND FLOOR	
9.00am - 3.45pm	<b>The Future is Flexibility - First Steps, FlexTalk</b> We are looking to bring together discussions on the flexibility space
1.00pm - 4.00pm	<b>CIGRE Workshop</b> Information Systems and Telecommunication
4.00pm - 5.30pm	<b>Cyclone Gabrielle - Learnings on Resilience</b> No registration needed
5.30pm - 7.30pm	TECHNOLOGY EXHIBITION OPENING AND SOCIAL FUNCTION

## WEDNESDAY, 28 JUNE 2023

7.00am	DIVERSITY, EQUITY & INCLUSIVITY BREAKFAST - DOBSON ROOMS
8.00am	REGISTRATION & TECHNOLOGY EXHIBITION OPENS
AUDITORIUM	
9.00am	MIHI WHAKATAU
9.10am	CONFERENCE OPENS & WELCOME
9.20am	Hon, Dr Megan Woods, Minister of Energy & Resources
9.30am	Dr. Jessica J. Bian, IEEE (PES) President
10.00am	<b>Rolf Bienert, OpenADR Alliance</b> International use of OpenADR (Europe) and upcoming version 3

### 10.30am MORNING TEA IN TECHNOLOGY EXHIBITION - SPONSORED BY TRANSNET

	DOBSON 1	DOBSON 2 & 3	DOBSON 4	AUDITORIUM
	<b>GENERATION</b>	<b>ENABLING DER</b>	<b>VALUE DECISION MAKING</b>	<b>DESIGN METHODS</b>
11.00am	Circularity for Solar PV: A Sustainable Net Zero Energy Future <b>Megan Jones, Circular PV Alliance</b>	The importance of increasing flexibility in New Zealand's energy transition <b>Luke Cartmell-Gollan, Simply Energy</b>	Improving Powerco's investment decision making maturity – putting value first <b>Kathryn Gillum &amp; Michael O'Brien, Powerco</b>	Enabling self-service connections – GB Innovation experience <b>Ian Cooper, EA Technology</b>
11.30am	Innovative ideas for small hydropower <b>Brian Leyland, Leyland Consultants</b>	Assessing the feasibility of connecting 100's of industrial loads to New Zealand's power system, supporting the acceleration of decarbonisation <b>Kane Morison, Ergo Consulting &amp; Kanchana Marasinghe, EECA</b>	Asset Replacement Decision Making in Future Networks Populated with Distributed Energy Resources <b>Yogendra Vashishtha, EA Technology</b>	Substation GPT – Automated design solutions for an electricity system to support decarbonisation <b>Cameron Chapman, ElectroNet Consulting</b>
12.00pm	Sustainability in Transformers: Towards a Low Carbon Power Grid <b>Gabriel Barrientos, Hitachi Energy</b>	Step changes in load connections and planned supply capacity increases <b>Andrew Beddard, Transpower</b>	Identifying the optimal locations to improve network reliability and reduce customer interruptions – A UK example <b>Ian Cooper, EA Technology</b>	Site Selection Considerations for Modern Greenfield Substations <b>Wilhelm Bisschoff, ElectroNet Consulting</b>

### 12.30pm LUNCH IN TECHNOLOGY EXHIBITION - SPONSORED BY TRANSNET

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## DAY 1 CONTINUED

WEDNESDAY, 28 JUNE 2023

	DOBSON 1	DOBSON 2 & 3	DOBSON 4	AUDITORIUM
	<b>DEMAND FLEXIBILITY</b>	<b>LV/CLOSE TO CUSTOMER</b>	<b>STAKEHOLDER ENGAGEMENT</b>	<b>SYSTEM PROTECTION</b>
1.30pm	Resi-Flex – Incentivise flexibility from residential consumers by exploring commercial mechanisms with flexibility stakeholders <b>Evie Trolove, Orion NZ Ltd &amp; Scott Scrimgeour, Wellington Electricity</b>	Upgrades and Planning and the Impacts of Decarbonisation on Hospital Electrical Networks <b>Brendon Clarke, AECOM</b>	Resource Management Reform: Planning for electricity infrastructure and resilience under the Spatial Planning Bill and Natural and Built Environment Bill <b>Mike Robinson, Align Ltd</b>	The use of Residual Current Devices for protecting Power Electronic Equipment <b>Prof. Neville Watson, University of Canterbury</b>
2:00pm	Australian Dynamic Electric Vehicle Charging Trial: 2 Years Later <b>Seamus Allan, Dynamic Ratings</b>	LV cable renewal forecasting - how near is that wall of wire? <b>Andre Cuppen, Powerco</b>	Electricity Authority – Our Vision, Strategy and road map to achieving Security and Resilience with a changing Power System <b>Sheila Matthews, Electricity Authority</b>	Impact on Conventional Protection Relay Settings on a Hybrid Network <b>Naveed Ali &amp; Hayden Nikolajenko, ElectroNet Consulting</b>
2.30pm	Smart Charging of Electric Vehicles Considering Both Peak Demand Reduction and Customer Satisfaction <b>Aleida Powell, Deta</b>	Collaboration the Key to DER <b>Ben Williams, PowerNet</b>	Do Renewables Actually Reduce Carbon Emissions? An Overview of the Emissions Trading Scheme and How We Contribute to Net Zero <b>Kieran Kennedy, ElectroNet Consulting</b>	IEC61850 GOOSE and Sampled Values for Protection Replacement Providing Main and Backup, Arc Flash, Bus Zone and CB Fail Protection <b>Stephen Hirsch, Orion NZ Ltd</b>
3.00pm	EVSE and EV charging efficiency and OCPP compliance <b>Dr. Sadeeshvara Silva, University of Canterbury</b>	Data-driven network planning: using smart meter data to manage transformer loading, hosting capacity and validate LV topology <b>Brad Smith, Gridsight</b>	Two Stages MCDM-GIS Analysis of Optimal Solar Site Selections: A Case study for Hawkes Bay <b>Rizki Rahayani &amp; Prof. Nirmal Nair, University of Auckland</b>	Advanced Auto-Reclose Techniques for the New Zealand Transmission System <b>Maik Ufferhardt, Tesla Consultants</b>

3.30pm AFTERNOON TEA IN TECHNOLOGY EXHIBITION - SPONSORED BY TRANSNET

	DOBSON 1	DOBSON 2 & 3	DOBSON 4	AUDITORIUM
	<b>ENERGY STORAGE</b>	<b>DER &amp; NETWORK PLANNING</b>	<b>FUTURE CAPABILITY</b>	<b>POWER QUALITY/EARTHING</b>
4pm	Can supercapacitors change the road map of renewable energy and DC Microgrids? <b>Prof. Nihal Kularatna, University of Waikato</b>	Harmonising Transmission-Distribution Frameworks for Grid Connection of Inverter Based Generation <b>Nasser Faarooqui &amp; Soumen Betal, ElectroNet Consulting</b>	Kaimahi Ora: Developing an integrated approach to workplace mental health and wellbeing at Orion <b>Taraia Brown, Orion NZ Ltd</b>	Proactive PQ for Improved Grid Performance <b>William Howe, Electric Power Research Institute - Epri &amp; Robin Pittwood, Powerco</b>
4.30pm	Distributed batteries providing reserves <b>Eric Pyle, Solarzero</b>	Is New Solar Technology the Answer for a Net Zero Carbon Energy Future? <b>Emma Lloyd, Connetics Ltd</b>	The Electricity industry caused me to stumble into a new cultural perspective <b>Ray Young, PSC NZ Ltd</b>	Future direction of harmonic allocation in NZ <b>Dr. Muhammad Ramzan &amp; Dr. Victor Lo, Transpower</b>
5pm	Fires, Explosions and Arc Flash. Learnings from Battery Energy Storage installations around the world <b>Jim Webb, ElectroNet Consulting</b>	Connection Guidelines for Wellington Electric Train Network <b>Nicholas Merrington, Wellington Electricity</b>	Importance of practical experience for graduate engineers <b>Kirill Kudinov, Connetics Ltd</b>	Jettysoned Earth Potential Rise - A Manapouri Shock Investigation <b>Patrick Coombe, ElectroNet Consulting &amp; Luke Reisima, Meridian Energy</b>

5.30 - 7.00pm SOCIAL FUNCTION HELD IN TECHNOLOGY EXHIBITION - SPONSORED BY ORION NZ LTD

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THURSDAY, 29 JUNE 2023				
	DOBSON 1	DOBSON 2 & 3	DOBSON 4	AUDITORIUM
	<b>NET ZERO CUSTOMER</b>	<b>DER &amp; NETWORK PLANNING</b>	<b>INFORMATION AS ENABLER</b>	<b>ASSET PERFORMANCE</b>
8.30AM	Engaging consumers, enabling DERs and realising flexibility - a decade of practitioner insights in Aotearoa <b>Jamie Silk, Climate Navigator</b>	Understanding the engineering implications of very high levels of customer rooftop PV: a case study of a utility <b>Russell Watson, Northpower</b>	Getting Improved Value from PQ Data – Near- and Real-time Analysis Techniques <b>William Howe, Electric Power Research Institute - Epri</b>	Winding set tightening of service aged transformers <b>Danie Oosthuizen, Genesis Energy &amp; Dr. Wade Enright, Viva Technical Solutions</b>
9.00am	Case Study - Delivering a Net Zero Carbon Energy Future in the workplace and business <b>Goran Stojadinovic &amp; Phillip Hogg, TransNet NZ Ltd</b>	Impact of integrating solar farms on a zone substation's transformer tap changer life span in MV distribution networks <b>Mufid Altorok, Ergo Consulting</b>	Information Governance – The Missing Link in Asset Management <b>Dr. Jules Congalton, Asset Dynamics Ltd</b>	ISO55001 Asset Management Certification – what's the big deal? <b>Eric Wolters, Powerco</b>
9.30am	Enabling Decarbonisation Project in the South <b>Matthew Ting, Mark Zwies &amp; Eric Sng, PowerNet Ltd</b>	Timing is Everything - Mitigating Connection Risks through Strategic Grid Studies <b>Brad Henderson &amp; Emilie Feasey, ElectroNet Consulting</b>	Will you create a Future Fit Digital Network? <b>Pete Armstrong, EA Networks</b>	Are our switchrooms environments killing our equipment? Experiences with failures of cast-resin components in 36 kV Indoor switchboards <b>Kewen Kueh, Powerco</b>
10.00am	N-security for electric boilers – a method for expediting the decarbonisation of process heat in New Zealand <b>Steven Wallace, Simply Energy</b>	Network Planning in a Changing World <b>Jonathan Chen, Counties Energy</b>	Data-driven DSO with incomplete data: how to use & incrementally improve your network data to maximise value immediately <b>Hugh Chan, Gridsight</b>	'Slipping away' – an Asset Management approach to managing slope stability risks to Transmission Structures <b>Brendon Gardner, Transpower</b>
10:30am	<b>MORNING TEA IN TECHNOLOGY EXHIBITION</b>		<b>AUDITORIUM</b>	
10.50am	Margaret Cooney, Chief Customer Officer, Octopus Energy NZ			
11.20am	Prof. Lachlan Blackhall, Entrepreneurial Fellow and Head, Battery Storage and Grid Integration Program, Australian National University			
11.50am	James Kilty, Chief Executive, Powerco Ltd			
12.20pm	EEA Awards Ceremony			
12.40pm	<b>LUNCH IN TECHNOLOGY EXHIBITION - SPONSORED BY TRANSNET</b>			
	DOBSON 1	DOBSON 2 & 3	DOBSON 4	AUDITORIUM
	<b>ENABLING DER</b>	<b>WORK DELIVERY</b>	<b>EVENT RESILIENCE</b>	<b>USE OF TECHNOLOGY</b>
2.10pm	Learnings from Renewable Energy Zone developments in Australia <b>Mark Lampard &amp; Jackie Saunders, AECOM</b>	Delivery of a CPP, 5 years on <b>Karen Frew &amp; Ryno Verster, Powerco</b>	Securing electric utility technology systems in today's hostile threat landscape <b>Warwick Glendenning, PBA Consulting Ltd &amp; Boris Wilkitzki, Computer &amp; Network Solutions Ltd</b>	Substation Robot Leading Change in Asset Management at Tuai <b>Alvin Li &amp; Steve Williams, Transpower</b>
2.40pm	Development of a Largescale Renewable Energy Microgrid Case Study <b>Robert Sawrey &amp; Harshal Patel, BECA</b>	Collaboration: The Key to Success - Transpower's new Grid Services Contracts <b>Dr. Nikki Newham, Transpower</b>	Is your project considering climate change temperature rise? It's impact and if to mitigate it now? <b>Colin Pearson, BECA</b>	Optimizing Asset Location Capture: Strategies for Improved Efficiency <b>James Roberts &amp; Peter Elliot, Orion NZ Ltd</b>
3.10pm	Case Study: Consumer response to pricing signals and tariffs for electric vehicles <b>Rob Speirs &amp; Tom Rose, Evnex</b>	Giving a new life to interisland HVDC Pole 2 in supporting New Zealand's renewable future <b>Stephen Butler, Transpower</b>	Delivering Security and Reliability of Supply to our Customers <b>Andrew Twaddle &amp; Marlene Marx, Wellington Electricity</b>	Stop using your imagination: How LiDAR Technology is changing the way we design substations <b>Logan Cane, ElectroNet Consulting</b>
3:40pm	<b>CLOSE OF CONFERENCE IN AUDITORIUM</b>			