

Conference Programme - Draft - Version 1 - 13 June



TUESDAY, 10 SEPTEMBER 2024	
PRE - CONFERENCE WORKSHOPS	
1.00pm	WORKSHOP 1
1.00pm	WORKSHOP 2
4.45pm -	Young Professionals Networking Event
5.30pm - 7.30pm	TECHNOLOGY EXHIBITION OPENING AND SOCIAL FUNCTION

WEDNESDAY, 11 SEPTEMBER 2024	
8.30am	REGISTRATION & TECHNOLOGY EXHIBITION OPENS
AUDITORIUM	
9.00am	CONFERENCE OPENING
9.15am	Minister's Address TBC
9.35am	Keynote 1
10.05am	Keynote 2
10.35am	Panel Session 1

11.05am MORNING TEA IN TECHNOLOGY EXHIBITION

	DOBSON 1	DOBSON 2 & 3	DOBSON 4	AUDITORIUM
	RESILIENCE	FLEXIBILITY	PROJECT DELIVERY	GRID DYNAMICS & PROTECTION
11.35am	Cyclone Gabrielle. What happens when 2m of water goes through your entire network. You rebuild it in 12 months. Willem Rawlins, Ergo Consulting & Peter Campbell, Pan Pac Forestry Products	Upper Clutha Non-Network Solution Part 1 - orchestrating flexibility services Renato Bitac & David Mulder, Aurora Energy	Kohirā Solar Farm: Design and Construction Challenges Peter Apperley, Lodestone Energy Ltd	Importance of Inverter De-coupling Protection for Grid Faults Naveed Ali & Hayden Nikolajenko, ElectroNet
11.50am	Commissioning and condition assessment of 11-33kV cable infrastructure ensuring it's capable of meeting the imminent decarbonising load profiles Trevor Lord, AVO NZ Ltd	Upper Clutha Non-Network Solution Part 2 Eric Pyle, Solarzero	The challenges of building utility scale distributed energy resources Graeme Ancell, WEL Networks & Darren O'Neil, Infatec	AUFLS Transition Project Security Studies and Models Connor McCarthy, Transpower NZ Ltd
12.05pm	Assessing Risk for Towers on floodplains and in river channels Tim Klingenberg & Rose Coulter, AECOM	Case Study: A Megawatt-Scale Energy-Responsive Data Centre: Leveraging Compute to Optimise Energy Assets and Accelerate the Energy Transition Sam Kivi, Grid Share Ltd	Design and Commissioning of New Zealand's first utility-scale Battery Energy Storage System (BESS) Joel Chen & Wayne Stronach, Infratec NZ Ltd	The Challenges of Protecting Transmission & Distribution Networks in an Increasingly Renewable World Mark Mundell & Kevin Friesen, Beca
12.20pm	Resilience of Substations for Future Flood Events Steve Gaskin, Ergo Consulting	Harnessing Distributed Flexibility for Societal Benefits Yogendra Vashishtha, EA Technology	Enabling Auckland's Transition to an Electric Ferry Fleet Wernher Roding, Beca & Nathan Cammock, Auckland Transport	Negative Sequence Current Contribution from Inverter Based Generation - How Will It Impact The New Zealand Power System? Rob Orange & Kirill Kudinov, Niko Engineering
12.35pm	Adapting to a changing climate - Developing Powerco's Adaptation and Resilience plan Kewen Kueh, Max Bowron & Ariki Tamou, Powerco Ltd	Harnessing Flexibility from EV Charging: Evolution of Innovation Projects in the UK Yogendra Vashishtha, EA Technology	Commissioning New Zealand's Largest Solar Project – Lodestone's Kohirā Solar Farm Nico Bosman, ElectroNet	Oscillatory Small Signal Monitoring of The NZ Grid – Mode Observations & Analysis Jessie Fahey, Transpower NZ Ltd
12.50pm	Session Presenters Panel Q&A	Session Presenters Panel Q&A	Session Presenters Panel Q&A	Session Presenters Panel Q&A

1.05pm LUNCH IN TECHNOLOGY EXHIBITION

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DAY 1 CONTINUED				
WEDNESDAY, 11 SEPTEMBER 2024				
	DOBSON 1	DOBSON 2 & 3	DOBSON 4	AUDITORIUM
	CUSTOMER BEHAVIOUR & LOAD FORECASTING	NETWORK ARCHITECTURE	PEOPLE CENTRICITY	PROTECTION & CONTROL
2.30pm	Behavioural dynamics in residential demand response: An agent-based approach Baxter Williams, University of Canterbury	Untangling Complexity in Microgrid Optimisation: Methodology and Progressive Case Studies in Xendee Karl Van Staeyen, Worley NZ	The Future is here - Applying a People Centric Digital Approach to Deliver a Net Zero Electric Future Michael Boyle, Risk Mentor Pty Ltd	Moving Forward with Runback – Runback Scheme Principles and Applications for Connecting Generation at Speed Hamish Weir, Beca
2:45pm	Strategic Load Forecasting and Network Planning: Integrating Decarbonisation Energy Transition Trajectories Luqman Sahimi & Francis Cheng, Horizon Networks	Long Term Network Development Planning Michael Whaley, M W Consultants	Delivering a Net Zero Carbon Energy Future: Future Capability Perspectives Mark Lewis, Connetics Ltd	TiDL, is the wave of digital substations here? Jack Stainton, Ergo Consulting & Peter Knight, Network Waitaki
3.00pm	Network Planning to enable a decarbonised Future Mathias Brand, Unison Networks	Method for zone substation distribution voltage conversion Noah Biddle, Aurora Energy	Focusing on a sustainable future: Dedicated Controller Training Program Caz Haydon, Powerco Ltd	The Maraetai Circuit Overload Protection Scheme – Thermal Protection of Transmission Lines Thomas Richardson, Beca
3.15pm	Insights from a global powerhouse on the net zero gold rush and implications for New Zealand Brett Watson, Siemens Ltd, Australia	The Electrical Power System of the Future: DC systems' role in the Future Neville Watson, University of Canterbury	Engineers do their Best, Contractors do the Rest - Bridging the Gap between the Office and the Field Alexandra Mechen, Connetics Ltd	Towards Predictive and Autonomous AI-Powered Network Management: the crucial role of Centralized and Virtualization Protection and Control in Digital Substations Marco Nunes, ABB Switzerland
3.30pm	What do we understand about consumer value? Michelle Renton, Victoria University of Wellington	Optimizing Ring Feeder Management: Case Studies and Key Insights Charles Hua, Griffin Almand & Nathan Toma, Wellington Electricity	Solving Grid Connection: The power of collaboration Trent Tscheuschler, Fast Future Ltd	Using EMT Simulation in Reviewing Distance Protection Schemes of Inverter Based Resource (IBR) Connections Marc Marquez & Noel Nagoorsamy, APD Engineering
3.45pm	Session Presenters Panel Q&A	Session Presenters Panel Q&A	Session Presenters Panel Q&A	Session Presenters Panel Q&A
4.00pm	AFTERNOON TEA IN TECHNOLOGY EXHIBITION			
	DOBSON 1	DOBSON 2 & 3	DOBSON 4	AUDITORIUM
			ASSET MANAGEMENT	EV CHARGING
4.30pm	PANEL SESSION 2	PANEL SESSION 3	Risk-informed asset planning and maintenance with using spatial tools Tom Logan, Urban Intelligence Ltd	Successes of the Z Energy FAST DC EV Charger Rollout Matt Gazzard, ElectroNet
4.45pm			Extending Condition Based Risk Management with analytics, dashboards and scenario planning: A case study with Counties Energy Chris Knight, Counties Energy Ltd & Ben Sykes, Network Edge Services	Solving the grid problem for EV Fast Chargers Robert Turner, Red Phase Technologies Ltd & Vijay Hirani, Powerco
5.00pm			Long-term planning into uncertain future: Forming investment plan for emerging network needs Luqman Sahimi & Feng Wu, Horizon Networks	Techno-Economic Optimisation and Assessment of Electric Vehicle Charging Strategies for Electric Grids Muhammad Ali, The MathWorks Australia Pty Ltd
5.15pm	Panel Q&A	Panel Q&A	Session Presenters Panel Q&A	Session Presenters Panel Q&A
5.30 - 7.00pm	SOCIAL FUNCTION HELD IN TECHNOLOGY EXHIBITION			

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DAY 2		THURSDAY, 12 SEPTEMBER 2024			
	DOBSON 1	DOBSON 2 & 3	DOBSON 4	AUDITORIUM	
	STRATEGIC ASSET MANAGEMENT	DISTRIBUTION PLANNING	ENVIRONMENTAL PLANNING	APPLYING TECHNOLOGY	
8.30am	Providing a Consistent View of an Asset: Establishing an Asset Management Data Standard for the New Zealand Electricity Sector Luke Petersen, Unison Networks & Jules Congalton, Asset Dynamics Ltd	Model-free dynamic hosting capacity & operating envelopes: A case study with Endeavour Energy Brendan Banfield, Gridsight & Albert Pors, Endeavour Energy	SF6 Free Alternatives for medium voltage secondary switchgear: Current and Future Trends Paul Bonavia, Lucy Electric Australasia Pty Ltd	A Hybrid STATCOM solution for Distributed Renewable Generation and Green hydrogen application. Rong Cai & Guo Li, Hitachi Energy	
8.45am	Aligning Business Strategy and Network Investments In An Uncertain World Ajay Anand & Feng Wu, Horizon Networks	Meshed Network Load Analysis for Winter Peak Load Management: A Case Study of Wellington Electricity Gordon Huang, Wellington Electricity	Contributing to Reducing the Carbon Footprint of Electricity Projects Through Route and Site Selection Processes Mike Robinson, Align	Go with the Flow Battery - A Long Duration Energy Storage Solution for Aotearoa Tate Bradley & Lindsay Robertson, WSP NZ	
9.00am	Unlocking Efficiency and Innovation: The Crucial Role of Data Governance and a Modern Data Platform in Orion's AI adoption Peter Jaksons, Orion Energy	Can customers self-serve 11 kV connections? Ian Cooper, EA Technology	Eco-Electricity: Tackling the SF6 dilemma in Power Generation and Distribution Sarah Grimes, Meridian Energy Ltd & Andy Parr, Orion NZ Ltd	Navigating Grid Stability: Commissioning Challenges and Insights from the Hamilton STATCOM Darryl Yorke & Lydia Smith, Transpower NZ Ltd	
9.15am	Conflicts of interest in the electricity sector during the transition to net zero carbon Geoff Parr, Electricity Authority	Enhancing Voltage Performance: With Dynamic Voltage Management Systems and Smart Meter Data Marc Gulliksen, Perception Consulting & Parash Acharya, WEL Networks	Assessment of transmission line routes for new Grid connection Arun Arora, MOTT MACDONALD	Hydrogen Firing in Combined Cycle Gas Turbine Power Plants: Unlocking the Potential for a Low Carbon Future Veerachamy Ponnuchamy & Deepthi Valsan, Worley Pte Ltd	
9.30am	Digitisation and electrification = Sustainability. But not without Cybersecurity. Nikki Saunders, Schneider Electric	Enhancing Grid Connectivity for Small Generators in New Zealand through ICCP as a Service Dylan Jenkins, PSC NZ Ltd	Cost effective SF6 gas pressure monitoring solutions to reduce SF6 gas emissions Andy McMahan, Transpower NZ Ltd	Reducing NZ Steel's carbon foot print and integrating efficiently with the Grid Kevin Friesen, Beca	
9.45am	Session Presenters Panel Q&A	Session Presenters Panel Q&A	Session Presenters Panel Q&A	Session Presenters Panel Q&A	
10:00am	MORNING TEA IN TECHNOLOGY EXHIBITION		AUDITORIUM		
10.30am			Keynote 3		
11.00am			Keynote 4		
11.30am			Keynote 5		
12.00pm			Panel Session 4		
12.30pm	LUNCH IN TECHNOLOGY EXHIBITION				

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DAY 2 CONTINUED

THURSDAY, 12 SEPTEMBER 2024

AUDITORIUM

EEA AWARDS PRESENTATION

2.00pm	EEA AWARDS PRESENTATION			
	DOBSON 1	DOBSON 2 & 3	DOBSON 4	AUDITORIUM
	BIG DATA	MANAGING ASSETS	PUBLIC SAFETY & LV NETWORKS	GRID CONNECTION
2.30pm	WEL DSO 2.0 – Network Benefits of Enabling Real-Time Metering and Data Access David Coates & Matthew Whitmore, WEL Networks	Revolutionizing Automation: The Potential of Drone in a Box Technology Peter Allen, Orion NZ Ltd	WEL DSO 2.0 - Solving the Real World Challenges Lingsong Zheng, WEL Networks	Market Integration of New Zealand's first utility-scale Battery Energy Storage System Hamish McKinnon, Transpower NZ Ltd & Darren O'Neill, Infratec
2.45pm	Intelligent Asset Inspection: A Machine Learning Approach to Identifying Defective Stay-Wires and Exploding Potheads in Power Networks Andreas Astrom & Carlos Ulloa-Canales, Northpower	Enhanced Network Asset Risk Management with Data-Driven Resilience Risk Modelling Ying Wang, Consulink & Patrick Berry, Electra	Low voltage network capital requirements from gas-to-electricity and EV uptake Allan Miller, ANSA & Scott Scrimgeour, Wellington Electricity	To filter or not to filter: Power Quality insights from New Zealand and the Australian NEM Vimeshan Pillay, APD Engineering
3.00pm	The sea of data: Orion's approach to leveraging large datasets for enhancing network management Practices Yuyin Kueh, Orion NZ	Powerco's Approach in Enhancing Asset Health Assessment for Overhead Conductors Waseem Awan, Danneilea Richardson & Vatsal Gajjar, Powerco	Developing and Proving Fault and Pre-fault Detection, Localisation, and Location Methodologies for LV Overhead Line Networks. Louise Guthrie, EA Technology	Grid Execution Insights from Vestas Wind Technology - Looking Beyond Connection Application Acceptance Josh Malcolm & Emilie Feasey, Vestas Australian Wind Technology Pty Ltd
3.15pm	Sustainable Low Voltage Grid Management: A Maturity Model for Electric Distribution Companies (EDBs) Chris Law, Future Grid	The Journey of Aerial Asset Inspections Aaron Radford, Counties Energy & Allen James, Preformed Line Products	Enhancing LV Network Management through grid edge Computing and LV Monitoring Solutions Louise Guthrie, EA Technology	Embedded Generator Connection Studies Luke Tough, Transpower NZ Ltd
3.30pm	How Counties Energy are Managing Thermal Hosting Capacity with Smart Meter Data Ben McCoy, Gridsight & Adrian Nadan, Counties Energy	Earthing Safety Limits Calculator Patrick Coombe & Philip Boys, ElectroNet	Enhancing public safety through learning from our incidents Rachel Wansbone & Rachel Whittaker, Northpower	Challenges and Potential Solutions for Grid-Connected Converters in Type-IV Wind Turbines Integrated with AC Systems Hailong Wang, Vestas NZ Wind Technology
3.45pm	Session Presenters Panel Q&A	Session Presenters Panel Q&A	Session Presenters Panel Q&A	Session Presenters Panel Q&A
4:00pm	CLOSE OF CONFERENCE IN AUDITORIUM			



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