



Coalport Suite	
·	1.4 Low Carbon Technology - Distribution Generation
	Chair: Steve Cox (ENW) EFCC: The Future of Frequency Control: Lilian Macleod (NG SO)
	SAVE: Charlie Edwards (SSEN)
	Smart Street: Ben Ingham (ENW)
Atcham Suite	Q&A
Sponsored by	1.5 Innovation in Electricity Network Design
EA Technology	Chair:Ronny Grimaldo (NG SO)
	Minimising Electricity System Congestion Costs: Ronny Grimaldo (NG SO) Architecture of Tools for Load Scenarios (Atlas): Dr Rita Shaw (ENW)
	Open LV: Learning to date: Mark Dale (WPD) & Richard Potter EA Technology
	Q&A
	1.6 Reliability, Safety and Resilience
Wenlock Suite	Chair: Martin Lyster (SSEN)
	Transmission Fault Level Monitoring: Martin Lyster (SSEN) VISOR: GB wide Monitoring to improve visibility of dynamic system behaviour and enhance
	network resilience: Chris Halliday (SPEN)
	Light Tracker & Network Damage Reporter: Bill Barrett (SSEN) & Alan McMorran (OGS)  Q&A
Ironbridge	1.7 Storage and Transport
Suite	Chair: Richard Hartshorn (SSEN)
	Solar Storage: Learning from Integrated Battery Trials: Jenny Woodruff (WPD) & Christie Sims
	(British Solar Renewables) EV Buses and Taxis: Thazi Edwards (UKPN)
	Smart EV A new Standard managed electric vehicle charging
	Richard Hartshorn (SSEN) & Daniel Hollingworth (EA Technology)
	Q&A
Exhibition	1.8 Emergency & Incident Management
Theatre 1	Chair: Nicola Evans (WWU) LGSE: Adrian Symons (WWU)
meatre 1	Storm Recovery: Our Experience: Robin Tutcher (WPD)
40.40.40.45	Q&A
16.40 – 16.45	End of Day 1 – Refreshments and Exhibition
16.45 – 17.30	Complimentary Coaches to Conference Hotels
18.50 – 19.30	Complimentary Coaches depart Conference Hotels for the Telford International Centre
19.00 – 19.30	Pre-Dinner Drinks Reception (Ticketed event)
20.00 – 00.00	Conference Gala Dinner (Ticketed event)
00.10 – 00.30	Complimentary Coaches depart the Telford International Centre for Conference Hotels
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### Day 2 Thursday 7 December

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08.30 - 09	9.30	Registration, Refreshments and Exhibition
09.30 – 12	2.50	Gas Collaboration Zone, Exhibition Hall: Gas Showcase
09.30 - 10	0.50	Breakout Session 2 (running simultaneously)
Atcham St	uite	2.1 Low Carbon Transport
Sponsored b	by EA	Chair: Huw Sullivan (Cadent)
Technolo	ogy	Leyland (Cadent) and City CNG: Jamie McMaster (NGN) Richard Cook (Cadent)
	0,	Electric Vehicles: Part of the system: lain Miller (NPG)
		Electric Nation:EV Connections and Their Network Effects: Mark Dale (WPD) & Richard Potter
		(EA Technology)
		Q&A





Coalport Suite	2.2 Smarter Systems for Gas Chair: Sarah Williams (WWU) Project CLOCC: Anne-Marie Liszczyk (NGGT) Enhancing Traffic Management with 3D Planning: Stephen Long (CADENT) Smart Pressure Sensor: Martyn Pallant (WWU) Q&A
Pattingham Suite	2.3 Active Network Management and Asset Monitoring Chair: Quentin Mabbutt (National Grid) GRAID: David Hardman (NGGT) & Wez Little (Synthotech) RAINMAN: Fiona Irwin (SSEN) & Paul Milburn (EkkoSense) FITNESS: The story so far: Christopher Patterson (SPEN) (Q&A)
Newport Suite Sponsored by SGN	2.4 Low Carbon Technology – Decarbonising Gas Chair: Andy Lewis (Cadent) 100% Hydrogen: Mark Wheeldon (SGN) HyDeploy & Bio SNG Commercial: Navdeep Kahlon (CADENT) H21: Adam Madgett & Chris Barron (NGN) Q&A
Exhibition Theatre 1	2.5 Gas Network Technology Chair: John Pickering (NGN) System Two Assess and Seal robot: John Pickering & Wez Little (NGN) Robotics Roadworks: Oliver Machan (SGN)
Wenlock Suite	2.6 Innovation in Improving Electricity Losses Chair: Paul Jewell (WPD) ENA Technical Losses WG: Impact of Low Carbon Transition on Losses: Jim McOmish (SPEN) & Gillian Williamson (WSP) Losses Investigations and Voltage System Reduction: Understanding and Improving Losses: Chris Harrap (WPD) LV Network Losses: Frank Clifton (SSEN) & Dr. Jorge Acosta (TNEI) Q&A
Exhibition Theatre 2	2.7 The Big Gas Challenge (WWU/CADENT/NGN) Tasmin Kashap (NGGT) Lucy Mason (WWU) Martin Lord (Cadent) Wayne Smith (NGN)
Beckbury Suite Sponsored by CGI	2.8 Views from Academia Chair: Randolph Brazier (ENA) Redesigning Markets for Ancillary Services: Prof. Michael Pollitt (Uni. of Cambridge) Risks and Opportunities in Decarbonising Heat and Transport: Keith Bell (Uni.of Strathclyde) Energy Systems Integration research: Challenges and opportunities: Dr Sara Walker (Newcastle University) Benefits of Flexibility in the UK power system by 2030: Marko Aunedi (Imperial College London)
10.50 – 11.25	Refreshments and Exhibition
11.00 – 11.20	<b>Exhibition Theatre 2:</b> Fugro: Optimised Management of Substations Using 3D Real World Models: <b>Michiel Prak</b>





11.30 – 12.50	Breakout Session 3 (running simultaneously)
Exhibition Theatre 2	3.1 Overground and Underground Utilities Chair: Liz Sidebotham (NPg) Scoping the DSO Future: Dr Liz Sidebotham (NPG) Angle – DC: The UK's first DC link using existing distribution network assets: Kevin Smith (SPEN) NeSTS: Tim Sammon (SSEN) Q&A
Beckbury Suite Sponsored by CGI	3.2 Cyber Security and Big Data Chair: Oliver Machan (SGN) Artificial Intelligence: Richard Waine (NGGT) & Jan Mohelman (Tractable) Time Series Data, Nexus, CIM:Big Data and its Use: Jenny Woodruff (WPD) Leveraging Big Data for Improved Energy Forecasting: Kevin Tilley (NG SO) Q&A
Atcham Suite Sponsored by EA Technology	3.3 Energy System Modelling & Future Planning Chair: Roger Hey (WPD) Network Equilibrium, FlexDGrid, Carbon Tracing: Advances in System Modelling: Jonathan Berry (WPD) Redefining Failure: Mark Kowalski (WRC), Wayne Smith (NGN) & Craig Mauelshagen (BMA) Real Time Networks: Alexander Webb (SGN) (Q&A)
Pattingham Suite	3.4 Active Network Management and Asset Monitoring Chair: Tom Neal (NGGT)) KASM: Alex Jakeman (UKPN) & Dr Hsiao-Dong Chiang (Big Wood Systems) Celsius: Damien Coyle (ENW) Dumfries and Galloway Smart Zone: Gerard Boyd (SPEN) Pipeline Depth of Cover: Paul Ogden (NGGT) & Daniel Finley (ROSEN)
Wenlock Suite	3.5 Reducing Emissions Chair: Adam Madgett (NGN) KESS: Ian Marshall (WWU) Low Carbon Preheat: Adam Sadler (NGN) Selective Catalytic Reduction: Adrian Jones (Costain) & Philip Smith (PESL) Q&A
Newport Suite Sponsored by SGN	3.6 Breakthroughs in Network Technology Chair: Gus McIntosh (SGN) Healthy and Safety Monitor: Richard Hynes-Cooper & Simon Twigg (NGN) TRALC3/TermITE -Transformer ratings enhancements: Gordon Wilson (NGTO) How MIDEL 7131 understanding can reduce costs and benefit your customers: James Buckley (NGTO) Smart Paints: Nancy Thomson (SGN)
Exhibition Theatre 1	3.7 Cables Chair: Keith Dennis (SSEN) TOUCAN – Using to thermography to locate LV underground cable faults: Kevin Dennis & Phil Clarke (SSEN) SUSCABLE2: David Ruthven (SPEN) & Gary Stevens (GnoSys) Self-Healing Cables: Dr.Chris Goodhand (NPg) & Maxi Faridi (UKPN)
	Q&A





Coalport Suite	3.8 Modelling, Charging and Billing Chair: Huw Sullivan (Cadent) Flexible Energy Simulator: Chris Clarke (WWU) Future Billing Methodology: David Chalmers (Cadent) Value of Lost Load: Kate Quigley (ENWL) Q&A
12.50 - 13.50	Refreshments and Exhibition
13.00- 13.45	<b>Exhibition Theatre 1</b> : Keele University – Academic Sponsor: Research Challenges in IoT and Data Analytics for Smart Energy: Professor Zhong Fan
13.00 – 13.45	Exhibition Theatre 2: Chair: Peter Lang (UKPN)
	Quality of Supply:NIA Portfolio: Peter Lang (UKPN)  Foresight LV Cable Management: Iain Miller (NPG) & Chris Lowsley (EA Technology)
	Tolesignt LV Cable Management. Tall Miller (MFG) & Chils Lowsley (LA Technology)
13.50 – 15.10	Gas Collaboration Zone, Exhibition Hall: Gas Showcase
13.50 – 15.10	Breakout session 4 (running simultaneously)
Newport Suite Sponsored by SGN	4.1 Innovation Strategy Consultations Chair: Randolph Brazier (ENA) & Matt Hindle (ENA) Presentation of Draft Strategies - Tamsin Kashap (NGGT) & Chris Goodhand (NPg) Additional Panel Members: Lucy Mason (WWU) Adam Madgett (NGN) Ian Cooper (UKPN) Mark Herring (NGSO) Q&A
Pattingham Suite	4.2 Reliability, Safety and Resilience Chair: Thomas Charton (NGTO) Digital Substation: Virtual Site Acceptance Testing & Training: Thomas Charton (NGTO) Active Resilience: Iain Miller (NPG) Network Constraint Early Warning System: Initial Smart Meter Data Integration Platform: Jim Whyte & Ciaran Higgins (SPEN) Q&A
Atcham Suite Sponsored by EA Technology	4.3 Dealing with Faults Chair: Steve Cox (ENW) Respond – Active Fault Management: Paul Marshall (ENW) Powerful-CB: Laura Daniels (UKPN) & Fault Forecasting: Caroline Acton (Met Office) SINE Post: Fault Location through Power Quality Measurements: Mourad Khaddoumi (SPEN) Q&A
Wenlock Suite	4.4 Breakthroughs in Network Technology Chair: Mark Waldron (NGTO) World-first use of g3 as low-carbon alternative to SF6: Mark Waldron (NGTO) Improved Statistical Ratings, Superconducting Cables, SF6 Alternatives Developments and Advancements of Existing Assets: Yiango Mavrocostanti (WPD) LV Connect and Manage Connection and Control of LCTs: Mikhail Prokhnich (WPD) & Samuel Jupe (Nortech Management Ltd)
Beckbury Suite Sponsored by CGI	4.5 Active Network Management and Demand Side Response Chair: Nigel Turvey (WPD) Alternative Connections & ANM Roll Out: Steven Gough (WPD)





	Flexible Connections Gavin Stewart (SSEN) Domestic DSR: The Meter and Beyond: Jim Cardwell (NPg) Energywise: Dr Giulia Privitera (UKPN)
Coalport Suite	4.6 Overhead Line Optimisation Chair: Jonathan Berry (WPD) Airborne Inspections: Advancements in Network Inspections and Safety: James Bennett (WPD) Lidar: Stewart Reid & Matthew Thomas (SSEN) Wind exposed overhead lines research to extend asset life: Jon Hennah (NGTO) Q&A
13.50 – 14.50	<b>Exhibition Theatre 1: Network Integration of Electric Vehicles</b> : Intro and Chair:Mark Dale (WPD): Power Quality & Network EV Emissions: Simon Ebdon (RINA), Network Monitoring and EV Detection for Network Operators: Paul Beck (Lucy GridKey) & Chris Hole (TTP) Q&A
13.50 – 14.40	Exhibition Theatre 2: Engaging communities in network innovation: Merlin Hyman (REGEN)  Our transition to Distribution System Operator: Lynne McDonald (UKPN) & James Johnston (Open Utility)
15.30 – 15.45	Complimentary shuttle buses depart to Telford Rail Station