

13 JUNE : Session 4

A1-A18		Tour 1 - Control 1
A1	10126	An Operational Data-Driven Malfunction Detection Framework for Enhanced Power Distribution System Monitoring – The DeMaDs Approach
A2	10478	DLR as the Tool for Providing Flexibility Services in the Distribution Network
A3	10562	Distribution Automation System Field Test in Jakarta MV Network
A4	10590	A Dynamic Voltage Controller For LV Grids Based On Flexible PV Systems And The Smart Metering Infrastructure
A5	10628	Developing Low-Voltage Operational Functionalities
A6	10751	Delivering The Benefits From A Common Disturbance Information Platform To Prevent Unplanned Outages
A7	10769	Automated Detection of Non-Compliance with DER Interconnection Requirements and the Laboratory Testing of an EDF developed solution
A8	10773	Economic Model Predictive Control for the Energy Management Problem of a Virtual Power Plant Including Resources at Different Voltage Levels
A9	11040	A Collaborative Engineering and Validation Framework for Smart Grid Automation Applications – The PowerTeams Approach
A10	11125	Automatic System for Evaluation of Lightning Events in Power Grid
A11	11156	From blackouts to flexibility: case study from Burkina Faso
A12	11180	5G-Based Fault location, Isolation, and Service Recovery
A13	11214	A secure Automation Solution to Provide Flexibility at Low-Level Grid – Middleware Services
A14	11284	First Practical Results Of Continuous Grid-Serving Power Control In Low-Voltage Network Via Novel Power Management Concept
A15	10958	Supervised Learning for Fault Classification Using Hybrid Training Datasets
A16	11293	AI To Detect Anormal Switching Operations
A17	11370	Intermittent Earth Fault Detection in Distribution Network based on the voting classification technique
A18	11384	Solving Issues Of The Distribution Network Of Harstad (Norway) In Real Time Using Machine Learning-Based Observability To Place Flexibility Orders

C15-C30		Tour 2 - Communication
C15	10115	Data hub based secure integration of DER Assets with Utilities, DSO and Retail
C16	10204	Innovative 5G Transmission For Anti-islanding Protection In MV Distributive Network
C17	10256	An Implementation of IEC 61850 for Microgrid Control
C18	10299	TLC Strategy For Power Distribution Grids
C19	10352	The Potential of Emerging Communications Technologies in Distribution Grid Management
C21	10725	5G Edge for Power System Applications
C22	10760	E-REDES' IEC61850 Specification for PAS Interoperability
C23	10816	Primary Substation Protection and Control System: Future Architecture Proposal
C24	10999	A 5G Communication-Based Wide Area Protection Concept for Enabling Resilient and Reliable Loss of Mains Protection
C25	11042	Validation Of MPLS-TP For Tele-Protection / Current Differential Protection Services Via Proof Of Concept
C26	11124	Building a Realistic Sampler to Emulate Communication Delays in PLC-Operated Low Voltage Networks
C27	11207	Four Problems for Digital Substations I wish to be solved
C28	11373	Concept And Implementation Of A Grid Simulation Framework Utilizing Containerized IEC 61850 Compatible IED
C29	11389	Low Voltage as the final frontier for Broadband over Power Line
C30	11506	Real Time Digital Simulation and IEC 61850 Standard: Interoperability Test Between OPAL-RT and Typhoon HIL Simulators

A19-B10 + M1-M6		Tour 3 - Control 2 / Communication
A19	10481	Optimised Operational Management Of Distribution Grids By Utilising Flexibilities Through Automation Of Electrical Assets Using A Multi-Agent-System Approach
A20	10602	A Real-Time Optimal Operation Strategy for Active and Reactive Power Sources in Smart Distribution Systems
A21	10736	Converter-Driven Stability In A Distribution Grid With High Penetration Of Inverter-Based Generation

A22	10815	Selfhealing – FLISR in Underground and Overhead Real the First Performance Results
M6	10955	A Study on the Fault Current Limiting and Interrupting Operation Technology of MVDC Systems Using a Protective Equipment
M5	11144	PMU-Based State Estimation and Fault Analysis in Active Distribution Grids: A Case Study for Kythnos Island, Greece
M4	11189	Equivalent DC Impedance of a Three-phase Impedance through an Inverter
M3	11218	Semi-Distributed Automatic Scheme for Self-Healing Implementation in Distribution System
M2	11248	Implementation Of An Advanced Remote Engineering Platform
M1	11306	An Edge-Fog Computing Approach For Advanced Distribution Management Systems For The Low-Voltage Network
B1	11318	Control Architecture and Algorithms for Isolated Microgrids
B2	11401	Demonstration of a Concept for the Data Management and Monitoring of Larger Scale DER Utilizing a Time-series Database
B3	10429	Distributed Ledger Technology for Monitoring Operations Carried out on the Embedded Generation Units
B4	10446	A Cyber-Physical Digital Twin Approach to Replicating Realistic Multi-Stage Cyberattacks on Smart Grids
B5	10612	Is the Cybersecurity Standard IEC62443 Applicable to Distribution Substations?
B6	10777	Secure and Resilient IoT and Cloud-Based Infrastructure for Electric Vehicles Recharge Systems
B7	10808	Root/Chain of Trust in Complex Energy Distribution Systems
B8	11181	Operational Considerations for Substation Security
B9	11197	Interoperability Raises Two Challenges: Cybersecurity & Maintenance
B10	11474	Performance Evaluations For The Configuration Of IEC 62351 Cybersecurity Profiles In Energy Telecontrol Scenarios

C31-D14	Tour 4 – Protection 1	
C32	10210	A Study on Automatic Fault Isolation of Closed Loop System in Power Distribution System
C33	10488	Estimation Of TOVs Due To Single Phase To Earth Fault By Means Validated Model By Comparison With Measurements From Real Fault Tests
C34	10519	A Robust Fault Location Method for MV Distribution Feeders
C35	10526	Fault Location Method for Medium Voltage Cables Using Measured Sheaths Current in the Presence of Renewable Energy Resources
C36	10788	Field Validation of a Novel Fault Location Solution Using Synchronized Phasor Measurements in Active Distribution Networks
D1	10951	Fault Location for Multi-Terminal Lines
D2	10974	Phase-to-Earth Faults Causing Inaccuracy of Distance Protection in Low Impedance Earthed Power Systems
D3	11304	High Impedance Fault Detection for MV Distribution Networks
D4	10266	Pilot Test of the Method Vdip for an Earth Fault Localization
D5	10401	Optimising the Safety, Reliability and Efficiency of rural distribution networks
D6	10504	Differential Voltage Grid Protection
D7	10647	Novel Touch Voltage-Based Earth-Fault Current Protection For Ensuring Dependability And Electrical Safety In Modern Compensated MV-Distribution Networks
D8	10655	The impact of Neutral Treatment and Earth Fault Protection on Resilience and Reliability of High Voltage Grid
D9	10744	Improved Method for Earth Fault Location in MV Distribution Networks with Compensated Neutral Grounding
D10	11172	Evaluation and Influences of Harmonic Earth Fault Currents
D11	11343	Improvement Of Cable Fault Performance Using A Ground Resistor In Series With An Artificial Neutral
D12	10344	Requirements For Generating Plants To Be Connected In Parallel With Distribution Networks – Focus On EN 50549 Series
D13	10717	A Validation of IED for Networked Distribution System
D14	11311	Protection System Analysis in Microgrids with DSO Static Generation

B11-B31	Tour 5 – Automation 1	
B11	10116	Standard IEC 61850 based real-time DER interface for The Netherlands
B12	10276	Success deployment of 6 digital substations in Vietnam 2020-21 – Return of experience
B13	10314	An Efficient Hybrid Control and Protection Strategy for Frequency Regulation of Low-Inertia Power System
B14	10473	Practical Review And Advancements In Testing Multi-Vendor Digital Substations
B15	10690	Frequency Droop Characteristic for Grid Forming Battery Inverters – Operation in Islanded Grids with the Infeed of Distributed Generation Systems
B16	11018	Alternative Low-Frequency Demand Disconnection (LFDD) Solutions for UK Distribution Network Operator Implementation
B17	11033	Decentralized Management of Distributed Energy Resources for Frequency Support – Finnish Pilot

B18	11078	Automated MV Switching Based On AMI Data
B19	10104	Generation of Synthetic Examples Using Generative Adversarial Networks (GAN) to Extend a Database of Fault Signals on Power Distribution Lines
B20	10191	Machine Learning Based Grid Optimization Algorithm for Real-time Applications
B21	10378	A Physical-Neural Network Approach For Residential Load Forecasting With Dynamic Load Control
B22	10450	Performance Evaluation of an Autoencoder State Estimator with Realistic Low Voltage Grids Reconstructed from Open Data
B23	10524	AI-Based Controller for Grid-forming Inverter-Based Generators Under Extreme Dynamics
B24	10597	Machine-Learnt State Estimation For Optimization In Low Voltage Distribution Grids
B25	11022	Object Detection Algorithms Applied On Low Voltage Grid Equipment
B26	11276	Edge Computing for Improving Energy Management in Smart Homes
B27	10156	Voltage Regulations Solutions for Low Voltage Distribution Network with Large PVs Integration: Performance Analysis with A Real Swiss Case
B28	10166	Analysis of Control Algorithms on Different Low-Voltage Grid Clusters
B29	10189	Detection of Neutral Loss in Distribution Networks Using Smart Meters Records
B30	10226	Optimized Provision of Local Ancillary Services With Sensitivity Factors Using Prosumer Flexibility
B31	10238	Evaluating State Estimation Performance On Distribution Circuits With High PV Penetration

D15-E8	Tour 6 - Protection 2	
D15	10284	Experimental Validation of a Novel Stator Interturn Fault Detection Method in Induction Motor
D16	10541	A Comparison Between Different Inertia Estimation Algorithms in Smart Grids Applications
D17	10729	Implementation and Test of Frequency Estimation Methods for RoCoF-based Load Switching in Islanded Grids
D18	10856	Distribution Network Fault Prediction Utilising Protection Relay Disturbance Recordings and Machine Learning
D19	10988	Hardware-In-The-Loop Investigation Of Distance Protection Algorithm In Grids With Dominant Decentralized Generation Units
D20	11038	A New Adaptive Auto Reclosure Approach With Secondary Arc Detection
D21	11382	Advancing the Capabilities of OpenDSS: A Directional Overcurrent Relay Feature for Modelling Modern Microprocessor Network Protector Operation Modes
D22	11383	EPRI Distribution Protection Analysis Toolkit
D23	10187	Experience Sharing : Self Powered Relays - Simulated Over Current Phase & Earth Fault Testing
D24	10435	Open Phase Fault Analysis in MV Distribution Grids with Resonant Grounding
D25	10551	A Study on the Protection Scheme for LVDC Distribution System in Commercial Buildings
D26	10582	HIL Testing and Future-Proofing of UFLS Schemes
E1	10646	Multidomain Considerations Of Secondary Maintenance Approaches To Ensure The Reliability Of Network Protection Systems
E2	10877	Performance Of A Digital Distance Protection Relay During Short Circuits In Presence Of A Converter Connected Grid
E3	10995	Challenge: Frequency Measurement In Different Applications
E4	11037	Key Performance Indicators (KPI) For The Testing Process Of An IED
E5	11128	Optimized Low Voltage Power Fuses For Current Requirements In Low Voltage Power Grids
E6	11200	Interconnected Grid Protection Systems - Reference Grid For Testing An Adaptive Protection Scheme
E7	11274	Secondary Wiring Checks by Combining Sawtooth Polarity Detection and Voltage Measurement
E8	11280	Functional Testing of Virtualized and Centralized Protection Systems

B32-C14	Tour 7 - Automation 2	
B32	10291	QUEST - An Overarching System Control Solution
B33	10296	GEMS: Development Of Automated Generator Dispatch For The Purpose Of Maximising Built Asset Utilization
B34	10303	Voltage Regulation in a LV Distribution Network (With Renewables, Storage Systems and Electric Vehicles) - An Optimization Formulation
B35	10880	Voltage Regulation in the LV Network with Variable Generation Based on Online Measurements from Smart Meters with the use of the On-Load Tap Changer
B36	11085	Load Modelling for Volt-var Optimization Control in Limited Network Visibility - a Case Study in Malaysia
C1	11173	Development of Local Autonomous Method for Power Distribution System with Battery Storage System
C2	11216	Architecture of Advanced Distribution Grid Voltage Control Method Utilizing Edge Computing Solution
C3	11419	Decentralized Grid Control Using Power Grid State Estimation

C4	11479	Development of Photovoltaic Power Generation Output Estimation Method Using Distribution System Sensor Information
C5	10249	Smart Meters for Grid State Identification with Use Case for Agent-based Local Energy and Flexibility Markets
C7	10305	Metric for Analysing Cooperative and Competitive Algorithms for Distributed Frequency Control in Microgrids
C8	10600	An Interoperability-by-Design Approach For Designing Smart Grid Solutions
C9	10603	Microgrid Control Strategy to Achieve Seamless Transition from Grid Connected to Islanded Mode
C11	10971	LV Automation Solutions for Resilient, Flexible and Optimized Smart Distribution Grids
C12	11058	Cognitive Data Fusion for Improving Flexibility in Smart Homes
C13	11368	Grid-Forming Control Modelling and Validation for Distribution Systems with Networkable Microgrids
C14	11480	The Smart Grid Lab in Hesse – Active Maximization of Annual Usage Time of Electrical Grids Using Flexibilities while Ensuring Data Security and Resilience at the same time

E9-E25	Tour 8 – Protection 3	
E9	10451	A Standards-Based Engineering Framework for Virtualized Protection, Automation, and Control Systems
E10	10656	Virtualised Centralised Protection and Control – Constellation Project Case Study
E11	10702	Real-Time Performance of Virtualised Protection and Control Software
E12	10855	Real-Life Pilot Of Virtual Protection And Control – Experiences And Performance Analysis
E13	11222	Challenges and Considerations for the Design and Implementation of a Centralized Protection and Control Solution for MV Networks
E14	11227	Software Defined Substation Automation
E15	10326	Conceptual Design of Special Protection Scheme for Enhancing Renewable Energy Integration
E16	10336	Evaluation Effects And Preliminary Designing Of Sheath Reactors For Mitigation Of Overcurrent Flowing Through The Earthed Elements Of Underground Cables Following Cross Country Faults On MV Network
E17	10527	Arc Flash Mitigation on Main LV Switchboards by Protecting HV/LV Transformers Using Circuit Breakers
E18	10550	Characterisation of Sequence Components of Islanded Microgrid with Low Fault Current
E19	10592	Generic Methodology For Protection Plan Analysis With Inverter-Based Grid Forming And Grid Feeding Resources
E20	10689	On-line and Adaptive Protection System to Resolve Load Blinding Protection Scheme Limits in Networks with Highly Integrated DERs
E21	10793	TVP Liquid Immersed Transformers Protection Against Fast Transients
E22	10824	Short-Circuit Currents Characterization for Future Converter-Based Power Systems
E23	10953	Investigating the Impact of Topology Changes and Distributed Renewable Generation on the Protection Behaviour at Medium-voltage Level
E24	11326	Centre of Angles based Remedial Action Scheme using Synchrophasor Measurements in SP Transmission Network
E25	11337	A New Approach To Protection In An Unconventional Distribution

13 JUNE : Session 5

F1-F21	Tour 1 – Risk Assessment and Asset Management 1 & Network Development 1	
F1	10370	Data-driven AI Network Analysis
F2	11202	AI Supported Analysis Of Faults Caused By Atmospheric Exposures In Medium and Low Voltage Grids For Evaluation And Development Of Asset Management Strategies
F4	11279	Identification of a Causal Weather-QoS Model for Analysis and Planning of Distribution Networks
F5	11076	Machine Learning-based Identification and Mitigation of Vulnerabilities in Distribution Systems against Natural Hazards
F6	10306	Six-Sigma Technique to Identify Resilience Events on Electrical Networks
F7	10794	Towards Resilient Electricity Distribution Systems in Africa
F8	11015	A Climate Change Adaptation Action Plan For The Electricity Sector: E-REDES Experience
F9	11457	Measuring the Power Grid Resilience: A Case Study Applied to Brazilian Distribution Companies
F10	10234	Case Study: Using A Probabilistic Calculation To Determine The Lifetime Costs Of Assets With Alternative Gas Insulation
F11	10347	Design to Shared Value Methodology Applied to Power Grid Technologies Adoption
F12	10908	MV Network Maintenance Planning Decision Support Tool Considering Flexibility Of DER
F13	10922	Distribution Asset Thermal Ratings with Evolving Load Profiles
F14	10383	Climate Adaptation Plan for Distribution Networks

F15	11356	Overhead Lines and Underground Cables Asset Management – Best Practices and Challenges
F16	11302	Integrated Physical And Probabilistic Modelling Of Low Voltage Cable Temperatures, Stress Cycles, And Damage
F17	10567	Increase Hosting Capacity through Voltage Control Devices Setting Optimization Technology
F18	10753	Smart Recharging Infrastructure for Companies' EV Fleets: Technical Realization and Load Balancing Potential
F19	10833	Optimised Approach to Grid Development under Consideration of Digital Solutions
F20	10837	Sizing Of A Power Electronics–Based Voltage Regulating Device To Support The Integration Of Photovoltaics And Electric Vehicles In LV Grids
F21	10860	Increasing Network Intelligence: Implementing Distributed Local Automation to Reduce Power Interruptions in Distribution Networks
H5	10975	Digitized Complex Project Management

I2-I23	Tour 2 – Network Development 2 & Distribution Planning 1	
I2	10509	Grid Futurability – Network Development Strategy
I3	10510	Primary Substation Open Standardisation Through Building Information Modelling (BIM) Implementation
I4	10657	Investment Planning For Electrification Of Transport In An Industrial Port
I5	10707	P2P Trading of RTPV Energy on Blockchain Platform
I6	10828	The Portuguese DAR(Distribution Automation Roadmap) Toward a More Demanding Electricity Grid
I7	10921	Leveraging Solar Energy Development To Achieve 100% Electrification Ratio In Nusa Tenggara Timur – Indonesia
I8	11048	Dimensioning And Sizing Of An Energy Storage For Ports When Considering Both Fast And Slow Load Variations
I9	11345	IANOS Project: Integrated Solutions to Decarbonise and Improve the Resilience of Electrical Power and Energy Systems in Geographical Islands
I10	11405	Systematic Application of Series Compensation in Distribution Networks with Control and Protection
I11	10455	Planning Principles for Hybrid AC/DC Underlay Grids in the Medium–Voltage Level
I12	10574	Economic and Technical Benefits of Integrated Power and Gas Grid Planning in Distribution Grids
I14	10398	ENeuron Project – Facilitating The Energy Transition In A Military Campus By Optimizing A Local Energy Community
I15	10440	Main–Grid Versus Renewable MicroGrid Energy Supply A Case Study of Isolated Rural Areas in the Sultanate of Oman
I16	10521	Planning Methods For DC Lateral Electrification In Rural Africa
I17	10764	Towards the Optimisation of a DC Nanogrid Considering Technical and Environmental Criteria
I18	10789	Self–sufficiency and Lifetime Improvement of Community BESS on an LVDC Backbone Compared to Individual BESS
I19	11001	MVDC Distribution System Application Scenarios and Economic Analysis
I20	11413	Optimal Planning of University Campus Microgrid with High Penetration of Renewable Energy and Storage: UCCS Campus Case Study
I22	11250	Experience In The Implementation Of Isolated Electrical Energy Generation Systems From Renewable Energy Sources– Solar Villages
I23	10570	A Comparative Study of Optimal Planning of Distribution Systems: AC/DC Architecture vs. Conventional Strategies

F22-G18	Tour 3 – Distribution Planning 2	
F22	10272	Flexibility as a Cost–effective Solution Applied to MV Lines Investment Deferral: Guidelines to Study and Pinpoint Opportunities
F23	10454	Flexibility Inside: How To Seamlessly Embed Flexibility In Dso Activity
F24	10144	Co–simulation Framework for the Provision of Flexibility Services for Distribution System Operators Using Electric Heating Systems
F25	10164	Planning Tool Of LV Network Of A MicroGrid Using Geographic Information Systems
F26	10192	Partitioning of Distribution System into Resilient Clustered Microgrids Using Complex Network Approach
G1	10251	Mitigating and Preventing Electricity Distribution Congestion and Constraints Through Energy System Integration: an Integrated Energy System Analysis at DSO level
G2	10292	Technical Benefit Assessment for Network Automation Plans
G3	10297	Nested Energy Management System to Improve the Resilience of Remote Interconnected Microgrids.
G4	10762	Assessing The Impact Of Uncertainties Impact On The Techno–economic Performance Of Microgrids
G5	10766	Distribution Network Spare Capacity Unlocking Strategy (scus) to Integrate Heterogeneous Flexibilities
G6	10845	Probabilistic Impact Analysis Of Residential Batteries Providing FCR And aFRR On Low Voltage Grid

G7	10929	Modeling PV Facility Side – Impacts and Recommendations
G8	10943	Understanding the Effects of EV Management and TOU Tariffs on Customers and Distribution Networks
G9	10959	Future Of Thermal Plants On Microgrids With High Renewable Share
G10	11016	Operation And Planning Services For Active Distribution Networks – A BD4OPEM Project Use Case: Spanish Pilot
G11	11030	Distribution Planning Tool using Flexible Strategies: Case Study in Spanish Pilot
G13	11066	Methods and Future Scenarios for Strategic Grid Development of Full Low and Medium Voltage DSO Supply Areas
G14	11231	The Benefits Of Smart4RES Predictive Analytics
G15	11391	Contributions to Energy Management of Single-Phase AC Microgrids Used in Isolated Communities.
G16	11406	Integrated Method for Distribution Grid Expansion Planning Considering Operational Strategies of Residential Technologies
G17	11462	Distribution System Planning with models of flexibility markets
G18	11456	Effects Of Demand Side Management Programs in Modern Distribution Planning – Challenges and Opportunities

I24-J4	Tour 4 – Network Development 3 & Distribution Planning 3	
I24	10512	A 2030 Snapshot of Public Smart EV Charging Stations
I25	10714	How Can Flexibility Support Power Grid Resilience Through The Next Level Of Flexibility And Alternative Grid Developments
I26	11273	Domestic Demand Shift Trial for Local Network Management and Distributed Generation Curtailment Avoidance
I27	10105	Innovative Digital Solutions That Enable Local Energy Communities to Provide Flexibility Services to the DSO: the Avacon Approach
I28	10159	Enabling Distributed Energy Resources to Participate in Wholesale Energy Market and Provide Flexibility Services
I29	10540	Conceptualization of Flexibility Solutions as an Alternative to Traditional Investment
I30	10692	Decision Support for Matching Flexibility Measures to Flexibility Needs in Power System Planning
I31	10695	How To Ensure Interoperability In Demand Response Systems: The Examples Of The European Projects H2020 GIFT And MAESHA
I32	10755	Generic Technology Models To Simulate Flexible Operation In Multi-Energy Cellular Energy Systems
I33	11133	Optimal Scheduling of Energy Storage System in Distribution Grids Using Service Stacking
I34	11501	Flexible Methodology for Battery Swapping Stations Planning Operation in Support of Distribution Grids
I35	10108	A Risk-Based Approach for Development Planning of Radial Distribution Networks
I36	10193	Causal Network Analysis To Study Evolution Of Distribution System With DER Integration
J1	10315	Correlation Analysis on the Application Potential of Voltage Regulating Distribution Transformers in Medium- and Low-Voltage Grids
J2	10874	System Integration For Enhanced Network Planning And Operation With A Focus On Customer Interaction
J3	10966	Integration Of Flexibility Solutions In The Multi-year Planning Of Distribution Grids With Large Amounts Of Renewable Energy Sources: Development Of A Decision-support Tool For The DSO
J4	10967	Restructured Active Distribution Network Planning Considering Agents' Investment Budget Uncertainty

G19-H16	Tour 5 – Distribution Planning 4	
G19	10354	Representing Topology Uncertainty For Distribution Grid Expansion Planning
G20	10346	SENS – Tool for Planning and Operation of Smart Distribution Networks
G21	10480	Assessment Of The Impact Of Future Electrification Scenario On An Urban Distribution Network
G22	10575	Decision Support Tool For The Development Of Power Distribution Networks Based On AI Planning
G23	10485	Techno-Economical Approach on Establishing Zero Down Time Area To Promote Premium Reliability in Super Priority Tourism Destination
G24	10506	New Approach into Material Supply Chain to Boost Industrial Capability
G25	10588	Increasing the Renewables' Hosting Capacity by Topology Optimization of Neighbouring Medium Voltage Grids
G26	10669	Integration of Environmental and Economical Impacts of Electricity Consumption in an Energy Community Based on Coalition Game.
H1	10593	A Novel DSO Approach In Proactively Upgrading The LV Distribution Network For Electrification Of Heat And Transport

H2	10636	Network Reconfiguration Under a Stochastic Optimisation Framework for Day-Ahead Operation Planning for Future Distribution Networks
H3	10891	Polygonal Optimisation Of Topologies For LV Network Schematics
H4	11425	Distribution Planning Model Requirements for Smart Community Integration
H6	10976	A Surrogate Model of Distribution Networks to support Transmission Network Planning
H7	10984	SILVERSMITH - An Investigation Into Low Voltage Network Management
H8	11026	A Study of Mid to Long-term Distribution Planning Based on PV Installation Forecasting
H9	11069	Large-Scale Grid Investment Strategy In Low-Voltage Networks
H10	11143	Study of Low-voltage Distribution Grid Connection Dimensioning Principles Considering Distributed Generation in Finland
H11	11162	Regionalised Approach to Heat Pump Allocations and its Impact On LV Network Reinforcement Requirements
H12	11329	Predicting Local Effects of Energy Transition Through Development of a Network Observation Tool
H13	11443	Enel Grid+: the Advanced Platform for Network Analysis and Planning
H14	11484	Efficiency Comparison of Programmed SAID in Investments in the Distribution System
H15	11491	Hosting Capacity Portal of All Voltages Levels
H16	11006	Hierarchical Large-Scale Distribution Grid Simulation Across Multiple Voltage Levels Using Smart Meter Data

J5-J25	Tour 6 - Distribution Planning 5	
J5	10174	Hosting Capacity for Electric Vehicles in Urban Medium Voltage Grids with Different Building Structure and Charging Strategies
J6	10464	Probabilistic Evaluation of Plug-in Electric Vehicles Impacts on the Steady-State Performance of a Distribution Network in Stockholm
J7	10630	The Impacts Of Electric Vehicles And Photovoltaics On The Substations Of A Medium Sized Swedish City
J8	10698	Analysis of Stochastic Load Behaviors on Fast Charging Stations Operational Planning and Business Model
J9	10704	Discharge Depth Control as a Solution for the Economic Viability of Vehicle-to-Grid Technology
J10	10768	Minimizing The Impacts Of EV Chargers On The Power Grid Thanks To An Optimizing Tool
J11	10906	Impact of Electric vehicle charging on Italian LV distribution network
J12	10961	Selection of Representative Urban Low-Voltage Grids for Electric Vehicle Integration Studies
J13	11005	Challenges and Needs for High Power Combined Charging of Ferries and Electric Vehicles - A Norwegian Scenario Case Study
J14	11082	A Planning Toolkit to Evaluate Shore-side Infrastructure Requirements for Electrified Water-based Transportation
J15	11161	Impact of EV Regionalisation on Network Reinforcement Requirements
J16	11165	Integration of a Multi-megawatt Charging Station in the Medium Voltage Network
J17	11220	Load Scheduling and V2G to Minimize Power Demand - Exploring Potential for Airport Parking Facility, Norway.
J18	11266	Load Demand and Grid Integration of Electric Ferries: A Case Study in the Three Major Italian Lakes
J19	11428	Smart Charging of Electric Vehicles Based on Scheduling Theory
J20	11445	Coordinated Deployment Of Electric Taxi Minibuses To Enhance Solar Photovoltaic Hosting Capacity Of Residential Networks
J21	11493	Model for Determining the Charging Time of Electric Vehicles in Fast Charging Stations
J22	10379	Efficient Integration of Electric Vehicles Through Optimal Charging and Reactive Power Support
J23	10449	MWOA for Optimal Integration of Hybrid Renewable Resources into the Distribution Systems for Techno-Economic Benefits
J24	10721	The Use of Distributed Energy Resources to Mitigate the Negative Imbalance Between Bulk Purchase Versus Distribution Tariffs in South Africa
J25	11025	A New Optimization Method Brings Distribution Grids Performance To The Next Level Thanks To Digital Transformation

H17-I1	Tour 7 - Methods and Tools 1	
H17	10161	Development Of A Model To Optimize The Energy Efficiency Of Residential Building And Their Impact On The Low Voltage Grid
H18	10295	Voltage Demand Relationship Modelling for Future Energy Scenarios
H19	10327	Use Of Linky Smart Meter Data To Enhance The Diversity Factor Assessment In Real Networks
H20	10453	Comparison of RMS and EMT Models of an Inverter-Based Generator with Fast-Frequency Response
H21	10496	Data-driven Assessment of Aggregated EV Charging Potential for Flexibility Procurement

H22	10517	Comprehensive Building Clustering as an Abstraction Method for Planning of Power Distribution Systems
H23	10651	Data Driven Photovoltaic Regionalization Approach for Distribution System Operator Supply Areas
H24	10737	Analysis Of The Renewable Energy Sources Generation Simultaneity In Croatia And The Impact On The Network Management
H25	10746	Validation of Gaussian Mixture LV Load Models using Measurements
H26	10765	Low Carbon Customers: Analysis of Loading of Domestic Electric Vehicle and Heat Pump Transformers in Ireland
H27	10790	The Impact of COVID-19 on Electricity Demand in Portugal
H28	10800	Autocalibration of a Bottom-up Methodology for Long Term Electricity Consumption Forecasting
H29	10821	Deployment Of Forecasting Tools In Diverse Demonstration Areas To Improve Energy Scheduling Of Microgrids
H30	10835	A Prediction Tool To Evaluate EV Charging Demand Based On Socio-Demographic Indicators
H31	11101	Post-Covid Customer Service Behavior Forecasting Using Machine Learning Techniques
H32	11183	Electric Vehicle Charging Measurements in the Nordic Environment – Charging Profile Dependence on Ambient Temperature
H33	11188	Forecasting For Electricity Grid Planning: Current Challenges And Future Improvements
H35	11241	Meteorological Benchmark Forecasts for Energy Management Systems
H36	11427	Support Vector Machine For Classification Of Households' Heating Type Using Load Curves
I1	11481	The Impact Of Forecasting Accuracy On The Economic Performance of Flexibility Provision

J26-L1	Tour 8 - Methods and Tools 2	
J26	10107	Large Scale Detection Of Voltage Level Violations In LV-grids Using Smart Meters
J27	10209	Quasi-Dynamic Line Rating Spatial and Temporal Analysis for Network Planning
J28	10501	Evaluation Of Dynamic Active Distribution Network Equivalents With Grid Forming Converters In The Context Of System Stability Studies
J29	10520	Bridging The Gap From Geographical To Electrical Modeling
J30	10827	Experiences With Ampacity Rating Calculations For Wind Farm Export Cable
J31	10382	Determining the Accuracy of Average Fault Rates in Assessing the Risks of Individual Circuits
J32	10846	FASIT, The Norwegian Reliability Data Collection System – Experiences And Utilitarian Values
J33	10873	Low-Voltage Topology Identification from Incomplete Smart Meters Data : Spain Experiment
J34	11305	Phase Identification using Smart Meter Data
J35	10371	Case-Based Probabilistic Load-Flow Calculation Considering The Correlative Interdependence Of Loads
J36	10397	Voltage Congestion Monitoring Through Machine Learning
K1	10348	Graph Computing Techniques for Power Flow Resolution Considering Real Distribution Networks
K2	10468	Power Grid Model: a High-Performance Distribution Grid Calculation Library
K3	10607	A Multiconductor Approach To Study Power Flows In Asymmetric And Unbalanced Electric Distribution Networks
K4	11054	Hosting Capacity Using Real Time-Series for PV, EV, Load and Background Voltage
K5	10301	Non-technical Losses Identification in Distribution Grids: A Hybrid Approach
L1	10836	Data-driven Techniques to Improve the Reliability of Low Voltage Electricity Networks Through Dynamical Evaluation of Non-technical Losses

14 JUNE : Session 1

A1-B9 + M1-M6	Tour 1 – Disruptive innovation, new usages and prospective	
A1	10335	Fault Ride Through Of DC Solid State Transformer In Medium Voltage DC Systems
A2	10403	Estimation Of The Parameters Of A LVAC Cable For A LVDC Grid Application
A3	10466	DC short-circuit Behaviour of LVAC Fuses
A4	10467	Impacts of Low Voltage Distribution Grid Resilience Constraints on AC/DC Converter Sizing
A5	10584	Hydrogen Filled DC Circuit Breakers for Electrical Vehicles Batteries
A6	10610	Development of Underground Cable for Low Voltage DC of 1MW Class
A7	10730	Study Of Surge Protection In MVDC Networks Using A Solid-State Breaker/Limiter
A8	10784	Silicon Carbide Enabled Medium Voltage DC Transmission Systems for Rapid Electric Vehicle Charging in the UK
A9	10897	Direct Current Circuit Breaker With Adjustable Current Injection
A10	11254	Tubular DC Breaker
A11	11264	Research Of Components For An Increase Of Transmission Capacity In Distribution Grids By Changing Existing AC Links Into DC Links
A12	10364	A Novel Power Electronic Meshing Solution for Radial Medium Voltage Distribution Networks
A13	11145	Hybrid Power Solution Modelling Based on Artificial Intelligence
A14	11251	Innovative Solutions for the Replacement of Underground Transformers
A15	11317	Lessons from the Installation and Commissioning of Novel Power Electronics for Active Response
A16	11469	Distributed Smart Soft Open Point
A17	11282	A Smart Meter Based Charging System for Public EV Charge Points
A18	10322	DC Electric Vehicle Charging Infrastructure – Methods for Periodic Verification
A19	10998	MADELAINE – A Multi-Adaptive and Cost-Efficient DC Charging System for EV Car Parks
A20	10395	Validation Tests of Battery Based Mobile Generators for Islanding Operation During Works on the Distribution Grid
A21	10502	A Generic and Scalable Dynamic Model for Stationary Battery Energy Storage Systems
A22	11050	Requirements For Large Scale Battery Storages In Low Voltage Grids – Lessons Learned From A Smart Grid Project.
M6	11504	Battery Energy Storage System with Second Life EV Batteries
M5	11045	Recent superconducting cable installation in Chicago paves the way for a Resilient Electric Grid (REG) system
M4	11059	Superconducting Systems, a New Tool for Railway Power Grids
M3	10369	Improvement Of Thermal Performance Of Medium Voltage Circuit Breakers By The Implementation Of Heat Pipes
M2	10641	"Improvement of Lightning Resistance for Distribution Facilities"
M1	10648	Modelling the Potential of Enhanced Capacity Transformers for Optimizing Material Efficiency and Asset Utilization
B1	10954	Improving the Earth Electrode of Pole Mounted Transformers_
B2	11435	Evaluation Of Novel Corrosion Protected Aluminium Earth Wire For Use In Underground Cable Networks
B3	10586	Evaluation And Research Trends On Controlled Switching And Transients Mitigation
B4	10649	World's First Enhanced-Cooled Dry-Type Transformer For Wind Off-Shore
B5	10713	Innovative Distribution Automation for Low Voltage Networks to accomplish the new challenges arising from the energy transition
B6	10763	Smart Secondary Substation development and demonstration under FLEXIGRID project
B7	10865	Automated Shunt Reactors For MV Feeders Upper Voltage Constraints
B8	11029	Distribution Smart Transformer with an Innovative OLTC Switching Technology for LV Grid Real Time Operation
B9	11291	Capacitive Transfer System Cable for Efficient Power Delivery in a 33kV Distribution System

C7-D3	Tour 2 – Diagnostics and sensors for asset management	
C7	10206	FORM: A Novel Principle for DLR
C8	10484	Influence of Low Power Transformers (LPVT) on the Results of VLF Diagnostic Tests on Medium Voltage Cables
C9	10537	Fault Location System for MV Distribution Underground Network
C10	10867	Real Time Live Line High Voltage Measurement of Instrument Transformer's Ratio and Phase Displacement Errors
C11	11000	Low-Voltage Network Point Measurement And Monitoring
C12	11289	Realising the Benefit of Short-Term Post-Fault Ratings using Smart OHL Sensors for Increased DER Integration
C13	11433	Insight In The MV-grid With Low Effort Accurate RMU Retrofit Measurement To Accelerate Hosting Capacity And Energy Transition.
C14	10120	Failure Prediction for Circuit Breakers: Vibration and Trip Coil Current Feature Extraction for Machine Learning Applications
C15	10231	IoT Sensors To Increase Resilience Against Critical Weather Events
C16	10380	TNB Distribution Network's Asset Management Strategy Future Outlook through Advanced Asset Analytics
C17	10447	Innovant Densimeter for GIS Tank, Insensitive to Temperature Variation

C18	10687	On-line Monitoring Condition of On-load Tap Changer of Power Transformers
C19	10937	Asset Management Prepared Smart Secondary Substation
C20	11366	TNB Experience in The Use of Smart Meter For Real Time Monitoring on The Thermal Performance of In-Service Distribution Transformer
C21	11397	Monitoring of Gas Evolution of Power Transformers Integrating Nanotechnology and Intelligent Techniques
C22	10235	Concept Of A Partial Discharge Analysis By Applying Specific Digital Twins
C23	10400	New Approach for Online Detection of Partial Discharges in Cable Systems via VDS Ports
C24	10434	Low Cost, High Performance Monitoring System for Renewable Distribution Systems
C25	10470	Sensitivity Evaluation of Partial Discharge Measurement Method for XLPE Cable Joint
C26	10723	Improvements on the Automatic Assessment of the Reliability of Distribution Grids Through Online Condition Monitoring
C27	11014	Partial Discharge Measurement of Polymer Insulator under Artificial Contamination
C28	11140	Deploying Intelligent PD Monitoring Solutions In Distribution Grid
C29	11171	Smart Bushing PD Sensor Testing for Switchgear Application
C30	11331	Partial Discharge Characterization Through Innovative Continuous Monitoring of Medium Voltage Substation
C31	11338	Advanced Switchgear Diagnostics Through PD Monitoring Correlated With Environmental And Operating Parameters
C32	10186	System Issues & Mitigations - Reclosers Installations Experience From Developing Countries
C33	10533	Acquisition And Evaluation Of The Breakdown Voltage As A Result Of The Layout And The Statistical Spread Of Vacuum Gaps
C34	10679	Vacuum Interrupter With Rmf Contacts: Arc Movement Observation And Modelling To Master Electrical Endurance
C35	10699	Diagnostic Techniques Of MV Cable Joints Under Different Environmental Conditions
C36	10719	The Impact Of The Joint Pending Time On Its Support Regarding Its Electrical Properties
D1	10830	A Review of Medium Voltage Vacuum Interrupter BIL Performance
D2	11027	Field Experience of On-site Cable Testing of 66 kV Offshore Array Cables
D3	11052	Diagnostic Tools (DGA) for Resilient Transformers with Aramid-Based Insulation Systems

B10-C6	Tour 3 - Context evolution driving development and studies on components	
B10	10332	Adoption Of Recycled and Bio-Based Material For Power Distribution Cables Manufacturing To Achieve A Significant Reduction In CO2 Emissions.
B11	10469	Alternative Solutions Considered by Enedis to Reduce Electrical Equipment Carbon Footprint Within the Framework of a Global Environmental Approach
B12	10795	Life Cycle Assessment Of SF6 vs. Pure Air Medium Voltage Equipment
B13	11056	A Simplified Tool For The Life Cycle Analysis Of A Medium Voltage Switchgear
B14	11116	What Should DSOs Focus On For Reducing The Impacts On Climate Change When Developing And Operating Electricity Networks? A Case Study Of The Power Distribution Network In A Rural Area In Central Norway
B15	10242	C4F7N and C5F10O Gases Used as Substitution of SF6 Have Neurotoxic, Mutagenic and Teratogenic Effects on Rats/Mice
B16	10250	Symmetry Breaking Due to Capacitive Ground Coupling in a Vacuum Interrupter
B17	10557	Influence of Magnetic Fields to the Arc in a Polymer Materials Pipe
B18	10868	Avoiding Uncertainties on Safety and Reliability in 24kV SF6 Free Secondary Distribution Switchgear
B19	10890	Environmental Issues of SF6-Free Gas Insulated Switchgear
B20	10894	Natural Origin Gases & Vacuum Interrupter - A Reliable and Sustainable Alternative to SF6 Medium Voltage Gas Insulated Switchgear
B21	10994	Analysis of Long-Term Effects During Development of SF6-free Gas Insulated Switchgears
B22	11483	Life-Expectance Evaluation for SF6-free Switchgear using C4-FN Mixtures
B23	10225	Enel's Circular by Design Approach for Grid Components
B24	10325	Adoption of Recycled Fiberglass Distribution Network Components. Background, Pilot Projects and Future Developments.
B25	10745	Secondary Material Analysis
B26	10774	Standardized Rules For Environmentally Conscious Design And Assessments Of Electrical Equipment

B27	10212	Pro-Active Approach To Mitigating Bird Mortalities On Distribution Networks
B28	11175	Improve Operator Safety and Protect Wildlife in Overhead Distribution Networks
B29	11234	Analysis Of The Exposure Of Workers To Electric And Magnetic Fields During Maintenance Works On Distribution Overhead Power Lines
B30	11372	20 Years Of Birdlife Protection At E-REDES
B31	10253	Secure Power Supply Of MV Grids - Neutral Isolated - By Means Of GE Directly Connected To Medium Voltage
B32	10652	"End-To-End Testing" of Enedis' Smart Equipment for Secondary Substations
B33	11223	Fast-tracking Licencing Of Temporary Lines And The Use Of Mobile Maintenance Kits With MV Aerial Bundled Cables
B34	10211	Assessment of Breakdown Voltage for Low Density Polyethylene Cables Using Nano Aluminium Dioxide Filler
B35	10271	Connection of Medium Voltage Cables with Conductor Temperatures up to 110 °C – Design of a "temperature Sink"
B36	10294	Adoption Of High Capacity Low Sag Conductors On High Voltage Power Lines
C1	10309	On the Adhesion Efficiency of the PE/resin and PVC/resin Interfaces for Low Voltage Joint Applications
C2	10596	Sustainable Power Transformers: Enel Grids use of natural ester insulating fluid in large power transformers
C3	10642	Solving the Problem of Wooden Poles Ignition due to Insulator Contamination - In Theory and Practice
C4	11126	Non Intrusive Repair Of a Belgrade Fluid Filled Cable With a Self-healing Dielectric Fluid
C5	11350	Polymeric Composite Crossarms as an Alternative to a Traditional Metallic Solution on E-REDES Medium Voltage Overhead Networks
C6	11472	Hardware of Aerial Distribution Networks, for Use on the Seashore, Corrosion Resistant, Corona Discharges and Leakage Current

D4-E11	Tour 4 - Data, models and prediction for components	
D4	10114	Statistically Validated Lifetime Assessment and Health Index Using Survival Analysis Stratifications
D5	10237	Profitability Of Condition Monitoring In The Electric Distribution Grid
D7	10339	New Tool For The Improvement Of Maintenance And Expected Life Monitoring Procedures Of Surge Arresters Installed On Overhead MV Lines
D8	10595	Distribution Transformer Ageing: Possible Load Increase on an Actual Use Case
D9	10685	Rethinking Data Requirements For The Reliability Assessment Of Medium Voltage Cables
D10	10700	Predictive Maintenance On Overhead Medium Voltage Network Using Transient Faults Data
D11	10805	Fault Activity Trajectory Estimation – Time To Fuse Blow
D12	10834	Failure Statistic for Medium Voltage Cable Systems in Denmark
D13	11167	Lifetime Extension Options for Electrical Equipment
D14	11215	Implementation of Asset Condition Models at E-REDES: What Comes Next?
D15	11246	Power Transformer Life Extension By An Optimized Mid-life Maintenance
D16	11270	Optimizing the Life-Span of (Smart) Transformers: A Review on Smart Services
D18	10611	Monitoring And Rating Of The Low Voltage Grid Utilization
D19	10743	Online Automated System for Incipient Fault and Failure Detection of Distribution Apparatus Using Waveform Disturbances
D20	11517	Vibration-Based Extraction of Switching Times for Circuit Breaker Monitoring Using Machine Learning
D21	10173	Influence of Circuit Breaker Mounting on its Lifetime
D22	10939	Green Design with Amorphous Metal for Dry Type Distribution Transformers
D23	11083	Cyclic Loadability Of Entire HV/MV-Substations
D24	11094	Inrush-Currents of Series Combination of Transformer with in-phase Regulation and Phase Shifting Transformer at the Interface between Transmission and Distribution Networks
D25	11108	Thermal Performance For Three-Windings Transformers With Axially Stacked Windings
D26	11182	Simulation Study and Field Experience from Switching of Transformer with Minimal Inrush Current
E1	11272	Synchronous Circuit Breaker For Transient Suppression In Distribution Network: VD4-CS Pilot
E2	11407	Core Vibration Modelling for Secondary Distribution Transformers
E3	11437	Zero-Sequence Blocking Transformers For Use In MV Distribution Systems – Design Comparison Of Single-Core Vs Multi-Core Designs

E4	10133	Real And Virtual Testing Of The Future Electrical Power Systems
E5	10392	Digital Twins Used For Condition Assessment Of Transformer Fleets – The Challenges of turning Data into Reality
E6	10660	Enel Grids Network Digital Twin®: The Foundation Layer Of Integrated Suite For Distribution Systems Design
E7	10778	How To Build Catalogue Data For Digital Twins Of High-Voltage Switchgear
E8	10505	Cost Efficient Management Of Digital Secondary Substations, On The Example Of The Process Interface And Detection Unit (PIDU)
E9	11164	Virtualization and Management Technologies of Smart Substations
E10	11257	Cyber Security Of An Industrial IoT Gateway Device – A Threat Model View And Security Aspects
E11	11341	Standardization of Smart Distribution Substations in Cologne

14 JUNE : Session 3

F1-F17	Tour 1 – Strategies and Management	
F1	10109	Hosting Capacity Improvement in Low Voltage Distribution Networks: A Risk-based Approach
F2	10168	Reallocation of Step Voltage Regulators in Distribution Networks to Overcome the Effects of Load Growth
F3	10330	V2X Integration in Self-Consumption Energy Management System
F4	10358	Integration Of Battery Aging Model In Ancillary Services And Self-consumption Combined Strategies.
F5	10375	The Next Generation of ADMS Functions for Predictive Management of DER
F7	10427	A Virtual Energy Storage System to Compensate for the Uncertainty in Distributed Renewable Generation
F8	10460	A Novel Evaluation Method of Virtual Power Plant Effect on Distribution Networks Using Fuzzy Logic
F9	10461	Assessment of the impact of Hybrid Distributed Generation / Batteries Energy Storage Systems on DSO Operational Planning
F10	10471	Scalable Uncertainty Aware Ancillary Services Procurement Tool For Active Distribution Systems
F11	10489	Grid Serving Charging Control of Electric Vehicles
F12	10598	Investigation of Grid-Serving Flexibility Provision by Electric Vehicles in a Distribution Grid
F13	10731	Model Predictive Control for Smart Grid Charging of Autonomous Electric Vehicle Fleet using Local Renewable Energy Generation
F14	10771	Optimal Management of Flexibility Services at LV Distribution Grid Level
F15	10818	Flexibility Coordination Mechanism Between A Distribution System Operator And A Virtual Power Plant Involving Wind Parks And A Battery Energy Storage System
F16	10878	Using Light Electric Vehicles For V2G services in the Arctic
F17	10511	Balancing PV Generation In Low Voltage Grids With Limited Data

H18-I2	Tour 2 – Operation Center	
H18	11089	Dynamic Operation of MV Grids Based on Losses Optimisation
H19	10216	Reactive Power Forecasting At The Transmission-Distribution Interfaces Using Physics Based Machine Learning
H20	10394	Optimizing DER Reactive Power Setpoint For DSO Operational Planning For MV Grid
H21	10732	Techno-economic Estimation of Reactive Power Related Additional Losses in Wind Farms During Reactive Power Supply
H22	10124	Expansion of the Distribution Network Capacity by Monitoring low voltage Capacitors due to Changes in Topology
H23	10188	Low Voltage Grid “Flex-efficiency”: Automated Low Voltage Switchgear
H24	10349	Load And Generation Forecast On Substation Level
H26	10389	Evaluation of Transit Power Flows in High Voltage Distribution Grids using Fuzzy Logic
H27	10405	Real-time Circulating Currents Calculation In The Distribution Management System
H28	10986	Advanced Concept of Efficient Use of Transformers Leveraging the Dynamic Thermal Rating Technology
H29	10987	Data Driven Analytical Model Optimizing Grid Capacity Utilization

H30	11071	Congestion Anticipation and Preemptive Resolution in Distribution Networks Using Grid Internal and Redispatch Measures
H31	11103	Essential Aspects of Operational Risk Assessment and its Application: Issues and Challenges
H32	11190	Challenges in Proactive Congestion Management in Distribution Grids – Practical Findings from the flexQgrid Project
H33	11409	“Energy Package” as a Tool to Reduce Environmental Footprint and Withhold Grid Capacity Limit at Harbour Areas
H34	10377	E-REDES's New Method To Identify Non-optimal LV (Low Voltage) Grid Reconfiguration After Outages and Planned Maintenance Actions
H35	10749	Improved Load and Generation Forecasting for Extended Day-Ahead Estimates in the Nordic Grid
H36	10761	Geolocalized Photovoltaic Energy Prediction Methodology using Machine Learning
I2	11339	Rethink Grid Management – Challenges, Use Cases And Design Principles For The Next Generation Of Grid Operation Systems

F18-G6	Tour 3 – Strategies and Management	
F18	10992	Operational Strategies for Maximising the Value of Customer Flexibility
F19	11109	Optimal Cross-Voltage Operation of Active Distribution Networks Considering Flexibility and Production Schedule of an Industrial Customer with Various Business Models
F20	11148	Demonstration for New Type SVR Using Commercial Distribution System with DERs
F21	11177	Optimal Scheduling of EVs Route Considering Integrated Power and Transportation System
F22	11179	Performance Evaluation and Operational Logistics in Energy Distribution Utility Fleet Electrification
F23	11224	Vision For Smart Grid Interoperability: Standards Based Integration Of E-Mobility, Prosumer, And Grid
F24	11260	Modeling Active Grid Operation In A Testbed For Cyber-Physical Systems
F25	11292	C-HIL Environment for Parameter Optimization of Grid Friendly Charging Control
F26	11342	Investigation of Stacked Applications for Battery Energy Storage Systems
G1	11344	Enhanced Virtual Power Plant Design And Implementation Lessons
G2	11348	An Integrated Approach for Energy Management Optimizations in Customer Premises
G3	11423	Challenge of Integration BESS on Distribution Active Network Management Scheme
G4	11451	Operation of Electrical Vehicle Recharging Station with a Photovoltaic System to Reduce the Impact on the Distribution Network
G5	11463	An Improved GA-based Approach for Reduced Non-discriminatory Renewable Energy Curtailment
G6	11520	Transactive-based Control of Electric Vehicle Charging Stations Considering Network Congestion

I3-I23	Tour 4 – Operation Center	
I3	10177	Islanding Detection with Universal Grid-forming Inverter-based Generation
I4	10492	Placement of Virtual Inertia in Islanded Distribution Networks With High Penetration of Inverter-based Resources
I5	10779	Automated Emergency Power Supply For Drinking Water Supply By A Hydro Power Plant In Islanded Grid Operation
I6	10307	On Dynamic Behaviour of Active Distribution Grids during Flexibility Provision
I7	10529	Pilot Application of a Rule-Based TSO-DSO Coordination Concept in Switzerland
I8	10532	Short-Circuit Currents Information Exchange Between DSO and TSO, an Approach From the Portuguese Demonstration of the OneNet Project
I9	10668	Robust Determination of Reactive Power Potentials from Subordinate Networks in Close-to-Real-Time Operation
I10	10320	Holistic Emergency and Crisis Management of an Austrian DSO
I11	10997	"Development of Support System for Restoration of Power Outage in Distribution Facilities"
I12	11105	Management of the Distribution System Operation During the Crisis – Earthquakes in Republic of Croatia in 2020.
I13	10333	Suppling Of Portion Of MV Network During Blackout Periods Involving Generators Of Grid Users
I14	10573	Fitness-check for Power Plants in Distribution Networks for Black Start and Regional Islands
I15	10585	Calculating Probability of Critical System States by Using Bayesian Distribution System State Estimation
I16	10734	Simulating the Voltage Stability in a Power System Network using OpenModelica and Comparing the Results with PowerFactory
I17	11093	High-level Resilience Strategizing Using Data-Driven Inputs

I18	11408	Black Start In Distribution Grids Through Solid-State Transformer
I20	10534	Towards a Control System Simulator Based on a Digital Twin for Cyber-Physical Power Systems
I21	10415	Analysis and Insights from Reactive Power Measurements of Low Voltage Users
I22	10667	Field Validation of Distribution System State Estimation Based on a Limited Number of Measurement Devices
I23	10624	Modelling of a Heat Network Infrastructure to Investigate the Stability of a Gas-independent, Sectoral-coupled Multi-energy System

G7-G23	Tour 5 - Strategies and Management	
G8	11455	A Methodology for the Evaluation of Congestion Induced Costs in Distribution Grid Operation
G9	10134	An Automated System for Overhead Line Inspection with Traveling Wave Measurement and Unmanned Aerial Vehicles
G11	10359	Detection of Weather Induced Events on Overhead Power Lines
G12	10390	The Use Of Digital Data For A New Innovative Quality Level Of Asset Management For Transformer
G13	10448	Thermal Monitoring of Medium Voltage Switchgears: Testing in Operation Environment
G14	10456	A Digital Twin for MV Switchgear Condition Monitoring Data
G16	10797	Wireless Self-powered Monitoring System for Underground Cable Joints: a Real Use-case
G17	10853	Single Point Lidar Technology For Ground Clearance Measurement In Medium Voltage Overhead Lines With The Deployment Of Unmanned Aerial System (UAS) In TNB Distribution Network Division
G18	10945	Increased Electrical Transmission And Resilience Of Distribution Systems By The Use Of Optical Fibre Systems
G19	11065	A Platform For Real-time Monitoring And Detection Of Conductor Integrity Related Health Hazards In Distribution Networks
G20	11118	IoT enabled System for High Voltage Disconnecter Advanced Asset Management
G21	11176	Partial Discharge Diagnostics on Medium-Voltage Switchgears - Measurement Methods and Benefits
G22	11442	GridDrone: Use of Drones to Perform Thermographic, Distance Measurement and Visual Inspection of the HV and MV Aerial Network
G23	11460	Optimized Deployment of Online Partial Discharge Monitoring Solutions for Branched MV Networks

I24-J3	Tour 6 - New Use Cases & Special Applications	
I24	10772	How Disruptive Artificial Intelligence Solutions Can Enhance Safety Of Field Operations In The Electrical Sector
I25	11454	Electrical Safety Performance Assessment of MV/LV Distribution Substations
I26	11327	Extended Reality in Power Distribution Grid: Applications and Future Trends
I27	10265	Power Flow Analysis of Multi-Terminal Medium Voltage Bipolar DC Distribution Networks
I28	10273	Electrical Energy Flexibilities' Prediction and Validation of a Real Non-Residential Building Through Methods of Machine Learning
I29	10274	Smart Metering And Grid Data Services : French Experience And International Perspectives
I30	10290	Benefits for the Distribution Network from the Installation of Synchronized Edge Devices
I31	10372	Digital Twins Handling : The Real Deployment Stakes!
I32	10479	Decentralized Smart Charging of Large-Scale EVs using Adaptive Multi-Agent Multi-Armed Bandits
I33	10490	Energy Charging of a fleet of electric vehicles based on Reinforcement Learning
I34	10672	An Experience Of Detection And Classification Of Quality-Of-Service Problems In MV/LV Distribution Substations Using Artificial Intelligence: Senegal Case Study
I35	10676	Digital Twin Based on CIM CGMES for Smart Grid and Data Based Use Cases
I36	10754	Detecting Power Outages In Low-Voltage Networks From Telecommunications Networks Data
J1	11003	Distribution Network Reconfiguration Strategy with Soft Open Point using GA and PSO
J2	11429	Near Real-Time Topology Estimation in LV Network with PLC Smart Meters

J3	11449	Application of Graph Theory in Urban Infrastructure Analysis
----	-------	--

G24-H17 Tour 7 - Strategies and Management

G24	10148	On-line Medium Voltage Panel & Transformer Maintenance
G25	10884	The New Condition-Based Maintenance of MV Cable Lines Supported by Diagnostic Data
G26	10983	Data Analytics For Pruning Optimization Around Power Lines
H1	11060	The Implementation of Linear Asset Management As A Framework Solution In Distribution Electricity Network in Indonesia
H3	11357	How To Control The Vegetation In Overhead Lines? – Analytics4Vegetation
H4	11371	Platform for Traceability and Inspection Management Through the Use of Artificial Intelligence Techniques
H5	10353	Determination of the Topology of Low-Voltage Distribution Grids using Cluster Methods
H6	10366	Phase Identification of Single-phase Users in a Distribution Network
H7	10458	LV Grid state estimation using local flexible assets: A Federated Learning approach
H8	10741	Validating Real LV Feeder Models Using Smart Meter Data: A Practical Experience From Project EDGE
H9	10968	Techno-economic Comparison Of Reactive Power Control Modes For Distributed Generators For Voltage Regulation In LV Grids
H10	11035	Distribution Smart Transformer Pilot Experience for LV Grid Real Time Operation
H11	11049	DeepGrid: Bringing the Operational Awareness to the LV Grid
H12	11127	Performance Analysis of a State Estimator for Low Voltage Unbalanced Grids Using Different Advance Metering Infrastructure Technologies
H13	11184	E-REDES Adopt New Monometallic Technology and Predictive Algorithm to Minimize and Predict LV Neutral Loss Failures Detection
H14	11261	Use of Voltage Regulation on HV/MV Substations to Increase Hosting Capacity in the LV Grid
H15	11268	Simulating Integration Of New Flexibilities And DER In A Low-Voltage Grid
H16	11336	Demand Response Using Remote Modification Of Smart-Meters' Subscribed Power To Protect Low-Voltage Feeders In Ouagadougou, Burkina Faso
H17	11398	Linear State Estimation in Distribution System Using Smart Meter Data

J4-J17 Tour 8 - New Use Cases & Special Applications

J4	10343	An Innovative Toolbox for the Optimal Design and Operation of Integrated Local Energy Communities
J5	10515	Implications of Forecast Uncertainty on the Optimal Operation of Renewable Energy Communities
J6	10883	Coupling Optimal Energy Management and Allocation through Keys of Repartition in Energy Communities
J7	10895	EV Charging Microgrid: Electrical and Operation Modeling of Energy Management
J8	10900	The Lac-Mégantic Microgrid: A Shared Vision of Energy Transition and the new role for Microgrid Control
J10	11017	Demonstrating Interactions of Distribution Network and Local Energy Communities Operating in Hierarchically Autonomous Control Architecture Paradigm
J11	11147	Impact of Charging Stations on Voltage Quality - Island and Grid Operation of Real Installation
J12	11359	Frequency Response Of A Microgrid Under The Influence Of Enhanced Spatial And Orientational Smoothing Of Photovoltaic Output
J13	11459	Assessment of Battery Energy Storage System Operating Modes in a Microgrid for EV Charging
J14	11503	Electrifying East Nusa Tenggara with Smart Microgrid - Study Case on Semau Subsystem
J16	10920	DR Business Model Suggestion Applying IoT Solutions with Mesh Network Technology Based on IEEE 802.15.4
J17	11046	An Impact of Electrical Distribution Networks on the Operation of AC 25 kV Railway System

15 JUNE : Session 2

A1-B8		Tour 1 – EMC, Earthing and Safety
A1	10197	Transient overvoltages caused by four pole Miniature Circuit Breakers (MCB) in three-phase circuits
A2	10213	Medium Voltage Cable Network in the Mountains – Verification of the Earth Potential Rise Voltage by Calculation
A3	10199	Impact of MCB Transient Overvoltages on Household Appliances
A4	10288	Evolution Of Earthing Impedance
A5	10289	Impact of Protective Multiple Earthing (PME) in TN-C Earthing Schemes in Public Low Voltage Networks
A6	10334	Influence Of Current Flowing On The Sheaths During The Standard Conditions And Preconditioning Of Hot Spots Of Joints
A7	10356	The Benign Earthing System: A New Method to Classify the Earthing of Substations
A8	10368	Application of Artificial Neural Networks for Overhead Distribution Lines Magnetic Flux Density Estimation
A9	10443	Earth Resistivity Tomography Simulations Over An Earthing System
A10	10444	The First Outlook on The Implementation of Groundless Lightning Arrester in Indonesia, Case Study: East Nusa Tenggara Province, Indonesia
A11	10463	Effective Lightning Mitigation Method on Unshielded Distribution Line by Using High Charge Ratings Externally Gapped Line Arresters (EGLA)
A12	10503	Sensitivity Of Household Appliances To Supply Voltage
A13	10536	Practical Comparison Of Earth Impedance Testing Methods
A14	10640	Steady-State Zero-Sequence Currents in a Transmission System: a Parameter Analysis
A15	10680	Evaluation of High Harmonic Components in the Residual Earth Fault Current with Regards to the Earth Potential Rise and Personal Protection
A16	10683	Methodology For The Evaluation By Simulation Of Electromagnetic Fields In Live Working Areas In Substations
A17	10849	Realistic Maximum Touch Voltages in Global Earthing Systems
A18	10899	Floating Neutral Detection Using a 2S Form Meter: Large Distribution Lines With Multiple Houses And Rooftop PV Effect
A19	10935	Solar Farm Earthing – Not Just an Extra-large Substation – Special Requirements Met by Risk-based Design and Focused Testing
A20	10942	Switching Overvoltages Caused by Shunt Reactor Switching and Mitigation Methods
A21	10944	Investigations Of 3D Meshed Earthing Systems
A22	10947	Does Transformer Inrush Challenge Future Grids? – Laboratory Insights
B1	10978	Development of Measuring a Combined Impedance of Ladder Networks Using Unbalanced Current on Neutral Line in 4-wire Distribution System
B2	11021	Earthing Design of EV Charging Substations in Fuel Stations – UK Requirements and Experience
B3	11024	Managing Impressed Voltages Near High Voltage Installations – UK Requirements, Common Problems and Solutions
B4	11028	A New Algorithm to Estimate Uniform Soil Resistivity For Earthing Design Calculations
B5	11067	Effect of Time Delay of High-speed Autoreclosing on Variable Frequency Drives and Other Loads
B6	11347	Radiated Emissions from an Electric Railway: Review of Methods and Measurements mainly from 9 kHz to 150 kHz
B7	11431	Investigating The Impact Of External Fields On The Accuracy Of LPVTs
B8	11448	Evaluation On Safety Of People On Ground Generated Voltages In Unconventional Networks.

B9-B32		Tour 2 – Equipment Related Power Quality Aspects
B9	10665	A Practical Method for Improving Low Voltage Ride-Through Capability of Inverter-based AC Microgrid
B10	10131	Analysis of Harmonic Current Injections of Electric Vehicles
B11	10157	Harmonic and Supraharmonic Emissions of Fast Charging Infrastructure – Field Measurements in LV Grids
B12	10176	Minimization Strategies Of Harmonics in Microgrid Connected Wind-Driven PMSG

B13	10181	Advanced Techniques For Troubleshooting Solar Arrays And Generator Connections
B14	10196	Power Quality Impact on Light Intensity and Flicker Sensitivity of LED Lamps
B15	10200	Comparing Methods to Mitigate The Effect of Grid Voltage Sag And Frequency Variation on The Operation of Variable Speed Drives
B16	10229	Requirements For Grid Supporting Inverter In Relation With Frequency And Voltage Support
B17	11333	Planning And Operation Of An Intelligent Voltage Regulator For PQ Improvement In PV-Rich Power Distribution Systems
B18	10483	Analysis and Modelling of Temporary Overvoltage Events and Comparison with OVRT Requirements
B20	10538	Electric Vehicle Charging Stations and their Impact on Power Quality
B21	10556	Managing Distribution Network Stability with Penetration of Distributed Energy Resources
B22	10591	A Study on the Application of Power Electronics Technology in Secondary Substation to Improve Power Quality
B23	10617	A Case Study on the Introduction of Power Electronic Technology for Stabilization of Power System and Development of Phase Converter of Power Distribution System
B24	10659	Psophometric Indices Analysis for Waveform Distortion from Rolling Stocks in Electrified Traction Systems
B25	10742	A Four-Leg Converter Control Scheme for Current Imbalance Compensation in Microgrids
B26	10893	Modeling of Power Cables for Measurement Calibration and PLC Simulation up to 20 MHz
B27	10969	A Classification Of Grid Forming Converter Control And Its Application To Improve Power System Stability And Resilience
B28	11088	Supraharmonic In Low-Voltage Distribution Grids. Analysis Of the Specific Case Of The Interleaved Boost Converter
B29	11225	Impact of Changing Frequency Standards on Grid-connected PV and Battery Inverters in the German Low Voltage System
B30	11233	Accurate Power Control of Grid forming Power Converters for Improving Large-Signal Stability
B31	11464	Analysis of Transmission Line Modelling in the MATLAB/Simscape Software Package.
B32	11518	Dynamic Reactive Power Compensation For Improved Mining Production

B33-C27	Tour 3 - System Related Power Quality Aspects	
B33	10121	Harmonics in the Transmission and Distribution Grid and their Relation to Geomagnetically Induced Currents
B34	10130	Case Studies of Estimation of Harmonics in partly monitored Residential Networks
B35	10142	Transfer of Supraharmonics through a MV/LV Transformer
B36	10179	Comparative Study of Unipolar and Bipolar Industrial DC Microgrids Through Linear Power Flow
C1	10202	The Impact of a Bi-directional V2G Electric Vehicle Charging Station to the Frequency Dependent Grid Impedance (10 – 150 kHz)
C2	10270	Continuous Non-invasive Resonance Detection in Residential Low-Voltage Networks
C3	10428	Impedance Characteristics at Socket Outlets in Residential and Commercial Buildings in the Frequency Range 2-150 kHz
C4	10431	Operation of Micro Sources and Impact of High Penetration on Low Voltage Distribution Grid
C5	10513	Harmonic Distortion in Microgrids in Islanded Operation
C6	10531	A Case Study on the Changes in Short Circuit Power to Analyze the Impact on Voltage Dips
C7	10587	Verification of Tool for Allocation of Harmonic Current Emissions Considering Frequency-Dependent Impedance
C8	10633	The Beat Phenomenon and Flicker Caused by the Difference in Switching Frequencies between Two Grid-connected Inverters
C9	10638	Modelling of Voltage Unbalance in Large Real Medium Voltage Distribution Networks
C10	10658	Survey of Harmonic Distortion Measurements from Customer Grid Supply in Trains
C11	10662	Large Scale Flexibility Requirements for Voltage Control in Low Voltage Distribution Network Analysis
C12	10674	Probabilistic Estimation of Harmonic Distortion in Non-Radial Distribution Network
C14	10703	Analysing Electric Vehicle Charging Power Quality in Large-Scale Charging Sites – A Data-Driven Approach
C15	10787	Frequency-Dependent Impedance Identification For LvdC Pq Analysis
C16	10831	Analysing The Impact Of Operating Strategies Of Active Customers On Flicker And Voltage Unbalance
C17	11079	Modeling and Simulation of the Impact of a Fast Charging Infrastructure on Harmonic Disturbance Levels

C18	11081	Assessment of Harmonic Emission Level of Customer Installations Considering Actual Level of Cancellation
C19	11084	Analysis of the Propagation of Distortion in the Frequency Range 2–150 kHz using Iterative Harmonic Analysis
C20	11117	Evaluation of Harmonic Transfer Between Transmission and Distribution Network Based on Measurements
C21	11141	Opportunistic Impact Of Simultaneous EV Charging On Stochastic Hosting Capacity
C22	11166	A Study on VRE Grid Connection Code for LVDC System
C23	11186	Solar PV Battery Storage Estimation For Overvoltage Mitigation Using Measurement Data
C24	11191	Harmonic Resonances Analysis Methods in Power Distribution Networks
C25	11239	Determination Of Frequency–Dependent Impedances Of Large 110 kV Grids
C26	11353	Analysis of the Voltage Unbalance Phenomenon in a Three-phase Two-wire Distribution System
C27	11450	Investigation of Supraharmonic Emission from a Microgrid

C28–D21 Tour 4 – Standards, Measurements, Regulations and Advanced Data Analysis

C29	10269	Assessment of Technical Feasibility of Non-Invasive Measurement of Grid-Side Harmonic Impedance on Low-Voltage Networks
C30	10318	Explainable AI-based Intelligent Approaches for Power Quality Prediction in Distribution Networks Considering the Uncertainty of Renewable Energy
C31	10324	Deep Learning Graphical Tool Inspired by Correlation Matrix for Reporting Long-term Power Quality Data at Multiple Locations
C32	10367	Power Quality Benchmarking
C33	10374	Determining Faults Cause Based On Disturbance Records From PQ Monitors
C34	10417	Deep Learning for Power Quality with Special Reference to Unsupervised Learning
C35	10433	Power Quality Survey in Industrial Zones in Alexandria
C36	10493	Monitoring Voltage Quality in Sweden
D1	10525	System Strength Measurement, Testing and Validation
D2	10566	Innovative High-Power Exiting Inverter for Frequency Dependent Grid Impedance Measurements
D3	10578	Techniques to Generate Test Waveforms for Power Grid Measurement Methods up to 150 kHz
D4	10581	Evaluation of the Light-QP Measurement Method for Extended Measurements
D5	10618	Impact of Reserve Market Participation on Power Quality of Flexibility Resources and Local Electricity Networks
D7	10733	Harmonics Analysis for Distribution Systems of Urban Areas in Japan
D8	10747	Applying Machine Learning To Power Quality Signals To Detect Component Failure Signatures And Prevent Unplanned HV Outages
D9	10866	Harmonic Phasor Measurement Technology from DC to 500 kHz with Time Resolution of a Single Line Cycle
D10	10879	Supraharmonics Assessment: Methods Comparison Based on a Used Case in a Metalworking Shop
D11	10993	UK Grid Disturbances Measurements From 9 kHz To 150 kHz On A Low Carbon LV Network
D13	11087	Automated Load Control Detection Using Power Quality Data And Machine Learning
D14	11206	New Interharmonic Subgroup Concept for Quantifying and Limiting Distortion in Distribution Networks: Further Developments and Experimental Validation
D15	11269	Artificial Expansion of Power Quality Datasets using Generative Adversarial Networks
D16	11286	Applicability of IEC derived Voltage Unbalance limits in the US Power System: A case study
D17	11328	Multimode Synchronous Resonance Detection in Converters Dominated Power System using Synchro-waveforms
D18	11334	New Approaches for Quantifying Impact of Power Quality Disturbances
D19	11360	Performance Evaluation of Instrument Transformers in Power Quality Measurements: Activities and Results from 19NRM05 IT4PQ Project
D20	11362	Impact Analysis Of Severe Weather Events In The Rest Of The Year KPI
D21	11515	Power Quality Monitoring–Based Distribution Network Characteristic Analysis Using Machine Learning

15 JUNE : Session 6

F1-F23		Tour 1 – Customer 1
F1	10112	Challenges And Opportunities When E-Mobility Is Incorporated In Argentinian Scenarios
F2	10117	Pilot Project where a Battery Energy Storage System is used for Fast Frequency Reserve
F3	10122	Assessment Of The Significance Of Features For The Identification Of Domestic Appliance
F4	10143	Advanced Electrical Energy Storage Technologies And Their Applications On Customer Side
F6	10230	Viable LINK-based Energy Community: Increasing Flexibility and Resilience of Electricity Infrastructure
F7	10233	Method for Determining the Impact of Local Energy Markets on the Distribution Grid Expansion
F8	10236	End-use Sector Coupling To Turn Customer Plants Into Prosumers Of Electricity And Gas
F9	10254	Nation-wide Projection of Motivators and Consumer Willingness for Direct Load Control Demand Response in Finland
F11	10313	Traceability of power generation in a Multi-Energy Virtual Power Plant using Blockchain
F12	10321	Identification and Characterization of Inverters used for PV Generation and Storage Systems
F13	10345	On the Role of Industrial Kitchens in sustainable Energy Systems: The NexIK Vision
F14	10376	The EUniversal Portuguese Demonstrator: From MV-LV Coordinated Identification Of Flexibility To Activation Through The UMEI
F15	10388	The Interest of Energy Communities in Urban Areas – from a DSO's Perspective
F16	10421	Gamification an Innovative Approach to Reduce Electricity
F17	10487	Multi Objective Optimization Of Flexibilities In Ski-Resorts – CO2, Power Peaks, And Day-Ahead Market
F19	10572	Tariff Development for Smart EV Charging for Households
F20	10589	Reducing Power Peaks In Low-Voltage Grids Via Dynamic Tariffs And Automatic Load Control
F21	10609	Coordination of Community Electricity Markets and Distribution Network Operation
F22	10613	Flexibility Settlement For Congestion Management: Two Practical Studies
F23	10681	Study of Electrical Consumption Flexibility Offered by HVAC System Based on Rooms Thermal Modelling – Tertiary Building Case Study

H24-I4		Tour 2 – DSO 1
H24	10136	The Use Of Virtual Reality In The Training Of Employees In Electricity Distribution Companies
H25	10185	Risk Management to avoid the Safety accidents
H26	10215	Real Time Quality Monitoring Of Electrical Distribution Network Affected By Heatwaves: A Data-oriented Approach
H27	10228	Assessment and Visualisation of Extreme Weather Impacts and Climate Change Risks on Distribution Network Operation
H28	10260	Electric Energy Distribution – Control of NTL (Non Technical Losses)
H29	10280	Assessing Gender Equality in the Distribution Sector
H30	10323	Optimal Strategies for the Management of Electric Power Distribution Systems Considering Diversified Age Structures of the Electrical Equipment and Their Economic and Technical Implications
H31	10340	Estimation Of Impact Of Extreme Weather Conditions On Distribution Asset And Improvement Of Operational Procedures Supported By Evolved Tools
H32	10386	Asset Owner Perspective on Managing Growth and Reinvestment Needs
H33	10422	Extreme Weather and Power Distribution System Resilience
H34	10462	Climatological Changes And New Applications For System Grid Operators
H35	10482	A Framework for Dynamic Risks and Resiliency Assessment of Critical Infrastructure a Case Study on Power Distribution Transformers
H36	10499	Technical And Economic Grid Reinforcement Analysis For The Danish DSO Networks
I1	10500	Resilience of the Energy System to Climate Change
I2	10522	Non-firm Grid Connections For Low-Voltage Generators: A Case Study

I3	10625	Quantitative Approach of A Novel Disaster- Based Vulnerability Index in Distribution System By Utilizing Geographical Information System Study Case in Palu After Disaster
I4	10844	Hierarchical Forecasting for the Management of Distribution Grids

F24-G19	Tour 3 - Customer 2	
F24	10716	Grid Performance Optimization Supported By An EV Charging Dynamic Price Formation Model
F25	10728	E-REDES Technical-Commercial Forum - a New Approach to Address Technical Complaints Involving Client Damages
F26	10752	A DSO View On Implementing Residential Customer Flexibility In Rural Communities
G1	10775	Preferences in EV's Smart Charging - Customer Survey
G2	10786	Resilience Services from Battery Storage Degradation
G3	10829	EV Charging Evaluation Using Real-world Datasets: A Case Study Of Energy Consumption, Peak Power, Self-consumption And Self-sufficiency
G4	10840	Flexible activation for grid purposes - Experiences from a Norwegian pilot
G5	10903	Smart Transformer as an Energy Community Service Node and Integrator of Local Resources
G6	10928	Incentive Design for Hybrid ESS Considering Additional Services based on Monte-carlo Simulation
G7	10936	Integrating Digital Building Flexibility through Sub-aggregator Business Model
G8	10952	Optimal Scheduling of Flexible Residential Loads Under Demand Response Programs Considering User Comfort
G9	11051	Grid-Friendly Renewable Energy Communities Using Operating Envelopes Provided by DSOs
G10	11053	Environmental And Financial Impact Assessment Of Off-Grid Microgrids Using Energy Storage And PV
G11	11098	Enabling Heavy-Duty Charging Infrastructure in a Capacity Constrained Grid
G12	11099	Review of Emerging Advanced Smart Charging Flexibility Business Models
G13	11152	Exploring The Opportunities Of Sector Coupling - The Conflicting Interests Of Urban And Rural Energy Systems
G14	11196	Industrial Flexibility Options: Impact And Usage As A Service In The High-Voltage Level
G15	11235	Demonstration Of A Whole Energy Systems Accelerator
G16	11307	Green Fleet Project
G17	11320	Use Of Performance Indicators To Encourage Proactive User Behaviours In Renewable Energy Communities
G18	11346	Business Models For Virtual Power Plants And Their Impact On Economic Operation
G19	11489	Effects of Tariff Structures to the Revenue Streams of Local Energy Systems

I24-J4	Tour 4 - Network Development 3 & Distribution Planning 3	
I5	10852	Why DSO Involvement In Energy Community Planning Is Expedient
I6	10916	How Energy Efficiency Business affects Power System and New Business Model Suggestion from DSO
I7	10970	Developing An Electricity Network For Net Zero
I8	10973	All Models Are Wrong, But Some Are Useful: An Exploration Of Validity And Confidence
I9	10979	Solutions to Manage Local Flexibility Services for the Distribution Grid in the Energy Transition Scenario
I10	11062	Development Possibilities of Distribution Network Service Charges of Low-Voltage Customers - Apartment Houses as Energy Communities
I11	11080	Technical Impacts of the Deployment of Renewable Energy Communities on Electricity Distribution Grids
I12	11236	Flexibility Solutions To Adapt E-REDES Business Management To Face Network Challenges
I13	11247	Climate Analysis to Prevent Risk to Distribution Network Assets
I14	11255	Meter Placement Algorithm for Reliable Distribution System State Estimation
I15	11258	A Long-term Risk-based Approach To Investment Optimisation
I16	11281	Modeling of Risk Aversion Linked to Renewable Energy Policy and Decision- Maker Behavior
I17	11283	E-Redes' Asset Management Certification Involves All The Organization And Is Not a Myth
I18	11352	Impact On The Distribution Network Of An Energy Super-Station
I19	11400	Standardization ISO55000 & PAS55

G20-H8	Tour 5 - Digitalization 1	
---------------	----------------------------------	--

G20	10138	EleniaGO – Crowdsourcing Maintenance Inspections
G21	10205	Electrification Technologies And Grid Services Testing Inside Enel X Labs
G22	10217	Towards the digital transformation of Distribution System Operators using Knowledge Graphs and Conversational AI
G23	10267	Anonymisation Score For Time Series Consumption Data
G24	10373	Using Smart Meter Data to Predict and Identify Consumer Vulnerability
G25	10384	SIORD, a New DSO-shared Data Hub to Monitor and Control Distributed Energy Resources in Spain
G26	10514	Central Monitoring Application used at Brno University of Technology
H1	10560	Smart Meters Technology Intervention – benefits to Consumers and Utility
H2	10601	New Tool To Improve The Grids Status Monitoring And Customer Connections Process
H3	10673	Renewable Energy Data Platform Including Electric Power Transmission and Distribution System
H4	10684	HAPe Optimizing Customer Relation by Automatic Task Distribution Using Constrained Optimization and Natural Language Processing
H5	10785	Smart Metering, Monitoring & Optimising LV Network performance
H6	10804	Cybersecurity In DSO OT Environment Using Advanced Anomaly Detection
H7	10863	Time Series Machine Learning Augmented With Social Network Events To Improve National Electricity Consumption Profile Estimation
H8	10919	Data Quality Challenges in Existing Distribution Network Datasets

I20-J3	Tour 6 – Regulation 1	
I20	10113	Incentive Regulation For Lower Losses And More Efficient Use Of The Grid When Random Photovoltaic DG Is Connected In Argentinian LV Networks
I21	10240	Model and Tariff Design for Multifunctional Distribution Networks
I22	10268	Swedish Approach For The Assessment And Monitoring Of The Smart Grid Development
I23	10317	Metrics for the Validation of Agent-Based Local Flexibility Markets
I24	10391	Relax Regulation and Market Frames to Increase Sector Coupling
I25	10393	The UMEI – Universal Market Enabling Interface. Enabling Standard Interaction with Various Flexibility Markets to Procure Grid Services
I26	10407	Design of an Auction-based Local Energy Market for Integrated Electricity and Heat Networks Coordinated with Wholesale Market
I27	10411	Public Consultation Platform for Network Development Plan
I28	10445	Regulatory Learnings from EU Funded Flexibility Projects. The i-DE Case: Preparing the Future DSO.
I29	10465	Real-Time Pricing Tariffs for Flexible Energy Storage Systems Considering the Market and Grid Conditions
I30	10495	An Assessment Of The GB Energy Market's Suitability For Delivering A Customer-Focused Net-Zero
I31	10569	Privacy by Design in Local Electricity Markets: A Differentially Private Market Mechanism
I32	10576	Volumetric Or Capacity-based Grid Tariffs: A Case Study For Residential Consumers In Flanders
I33	10629	Reactive Power Flows From Mv To Hv Grids
I34	10653	Business, Regulatory, and Technical Challenges for Integration of Network Aware Algorithms in Local Flexibility Markets
I35	10682	Business Case of DSO Peak Shaving to Reduce Capacity Payments to Upstream Network Operators
I36	10697	Incentive Scheme for Efficient Grid Utilization and Use of Flexibility Services
J1	10709	Performance Comparison of Three Network Tariffs in Combination With a Local Electricity Market
J2	10758	Market-Based Flexibility Services For Congestion Management – A Comprehensive Approach Using The Example Of German Distribution Grids
J3	10814	Remuneration And Coordination Aspects Of Flexibility By Power-to-Gas And Gas-to-Power Technologies In Distribution Networks

H9-H23	Tour 7 – Digitalization 2	
H9	10960	Leveraging Smart Metering Data To Estimate The SAIDI
H11	11009	Open Data; Delivering Results For Data Stakeholders

H12	11010	Estimating Local Electricity Consumption And Production For Small Geographic Areas using smart meters
H13	11074	A State Of the Art Language Model Trained On A Corpus Of Texts Generated From The Set of DSO Activities
H14	11121	Automated Development of the Software Model of the Distribution Network Based on Field Collected Data and GIS Coordinates
H15	11130	EUMED Metering, A CIM-based Exchange Model: First Experiments And Perspectives From A DSO
H16	11243	Supervised Machine Learning For False Data Injection Detection: Accuracy Sensitivity
H17	11244	Smart Metering Project Serbia 2022 Prospective For DSO Operation Improvements
H18	11256	Making The Most Of Existing Data – A Data Lake Approach To Risk Quantification
H19	11278	Creating Bottom Up Load Profiles Using Disaggregation, Clustering and Supervised Machine Learning on Large Smart Meter Dataset
H20	11310	Leveraging Big Data Technologies For Supporting DSO Operations And Adding Business Value To The Collected Data
H21	11440	A Regulatory Asset Management Machine Learning Application
H22	11447	Architectural And Systems Approach To Sustainable Digital Transformation Of Distribution Utilities
H23	11498	Proactive Complaint Management with ClientID

J4-J23	Tour 8 – Regulation 2	
J21	11385	Flexibility Baselineing In The UK – An Assessment Of Historic Methods
J4	10847	DN-FLEX: Local-flexibility Market Platforms For Distribution Networks
J5	10887	Dynamic Network Tariffs for Efficient Distribution System Utilization
J6	10896	Proposal For Improvement Of The Supply Continuity Regulation In Brazil
J7	10898	Predicting Peak Prices in the Current Day-Ahead Market
J8	10907	A Business Model Analysis Of Different Long Duration Energy Storage Systems In GB Energy Market Conditions
J9	10990	FLEX – Winter Trial Of Flexibility Services In Northern Ireland
J10	11002	Local flexibility market development at E.ON Hungary
J11	11070	Investigating the Role of Flexible Electrical Appliances in a Demand Charge Grid Tariff Scenario – A Norwegian Case Study
J12	11092	Market Participation of Resilience-enabling Technologies While Prioritizing Resilience-as-a-service
J13	11107	Empowering Consumers with 100 % Green Power Solution
J14	11111	Analysis Of The Incentive Program For The Voluntary Reduction Of Electricity Consumption In Brazil In 2021 From The Perspective Of Behavioral Economics
J15	11135	From Ordinary Incentives Regulation To Sandboxes: A New Way To Enhance Continuity Of Supply
J16	11136	A Framework for Development of Distribution Code towards Decentralized Power System
J17	11150	Joint and Sequential DSO-TSO Flexibility Markets: Efficiency Drivers and Key Challenges
J19	11155	Simulation And Comparison Of The Impact Of Different Price Tariffs On Grid Utilization
J20	11381	A Scalable Open-Source Co-simulation Framework for Assessing the Effectiveness of Flexibility Activation Mechanisms on Congestion in Dutch Distribution Networks
J22	11394	A Review on Local Flexibility Market Advancements: Practices in Nordic Countries
J23	11404	Method for the Assessment of Structural Parameters for Distribution Grid Cost Drivers