

CIGRE Session 2022

28 August - 02 September 2022

Paris, France

A1 - ROTATING ELECTRICAL MACHINES

PS 1 Generation Mix of the Future

PS 2 Asset Management of Electrical Machines

PS 3 DEVELOPMENTS OF ROTATING ELECTRICAL MACHINES AND OPERATIONAL EXPERIENCE

A2 - POWER TRANSFORMERS AND REACTORS

PS 1 EXPERIENCE AND NEW REQUIREMENTS FOR TRANSFORMERS FOR RENEWABLE GENERATION

PS 2 BEYOND THE MINERAL OIL-IMMERSED TRANSFORMER AND REACTORS

PS 3 BEST PRACTICES IN TRANSFORMERS AND REACTORS PROCUREMENT

A3 - TRANSMISSION & DISTRIBUTION EQUIPMENT

PS 1 DECENTRALISATION OF T&D EQUIPMENT

PS 2 DECARBONISATION OF T&D EQUIPMENT

PS 3 DIGITALISATION OF T&D EQUIPMENT

B1 - INSULATED CABLES

PS 1 LEARNING FROM EXPERIENCES

PS 2 FUTURE FUNCTIONALITIES AND APPLICATIONS

PS 3 TOWARDS SUSTAINABILITY

B2 - OVERHEAD LINES

PS 1 CHALLENGES & NEW SOLUTIONS IN DESIGN AND CONSTRUCTION OF NEW OHL

PS 2 LATEST TECHNIQUES IN ASSET MANAGEMENT, CAPACITY ENHANCEMENT, REFURBISHMENT

PS 3 ENVIRONMENTAL AND SAFETY ASPECTS FROM OHL (JOINT PS WITH C3)

B3 - SUBSTATIONS & ELECTRICAL INSTALLATIONS

PS 1 INCREASED IMPACT OF CLEAN ENERGY TRANSITION ON SUBSTATION DESIGN

PS 2 SUSTAINABILITY MANAGEMENT CHALLENGES IN SUBSTATIONS

PS 3 INTEGRATION OF INTELLIGENCE ON SUBSTATIONS (JOINT PS WITH B5)

B4 - DC SYSTEMS & POWER ELECTRONICS

PS 1 HVDC SYSTEMS AND THEIR APPLICATIONS

PS 2 DC FOR DISTRIBUTION SYSTEMS

PS 3 FACTS AND POWER ELECTRONIC (PE)

B5 - PROTECTION & AUTOMATION

- PS 1 ADDRESSING PROTECTION RELATED CHALLENGES IN NETWORK WITH LOW-INERTIA AND LOW FAULT-CURRENT LEVELS
- PS 2 APPLICATIONS OF EMERGING TECHNOLOGY FOR PROTECTION, AUTOMATION AND CONTROL
- PS 3 INTEGRATION OF INTELLIGENCE ON SUBSTATIONS (JOINT PS WITH B3)

C1 - POWER SYSTEM DEVELOPMENT & ECONOMICS

- PS 1 SYSTEM TRANSITION RESILIENCE & ASSET MANAGEMENT RESPONSE
- PS 2 ENERGY SECTOR INTEGRATION AND TACKLING THE COMPLEXITY OF MULTI-FACETED NETWORK PROJECTS
- PS 3 PLANNING UNDER UNCERTAINTY AND WITH CHANGING EXTERNAL CONSTRAINTS

C2 - POWER SYSTEM OPERATION AND CONTROL

- PS 1 SYSTEM CONTROL ROOM PREPAREDNESS: TODAY AND IN THE FUTURE
- PS 2 OPERATIONAL PLANNING STRATEGIES, METHODOLOGIES AND SUPPORTING TOOLS

C3 - POWER SYSTEM ENVIRONMENTAL PERFORMANCE

- PS 1 SETTING AMBITIOUS CLIMATE STRATEGIES IN THE ENERGY SECTOR
- PS 2 BIODIVERSITY AND THE SUPPLY OF ELECTRICITY, RENEWABLES-BASED OR NOT: RISKS, CHALLENGES, SOLUTIONS AND OPPORTUNITIES
- PS3 ENVIRONMENTAL AND SAFETY ASPECTS FROM OHL (JOINT PS WITH B2)

C4 - POWER SYSTEM TECHNICAL PERFORMANCE

- PS 1 CHALLENGES AND ADVANCES IN POWER QUALITY (PQ) AND ELECTROMAGNETIC COMPATIBILITY (EMC)
- PS 2 CHALLENGES AND ADVANCES IN INSULATION COORDINATION AND LIGHTNING RESEARCH
- PS 3 CHALLENGES AND ADVANCES IN POWER SYSTEM DYNAMICS

C5 - ELECTRICITY MARKETS & REGULATION

- PS 1 THE EVOLUTION OF MARKET DESIGN AND REGULATION TO INTEGRATE DISTRIBUTED ENERGY RESOURCES
- PS 2 CHANGES TO MARKETS AND REGULATION TO ENHANCE RELIABILITY AND RESILIENCE
- PS 3 WORKING WITH INNOVATION AND DISRUPTION — PREPARING FOR THE FUTURE

C6 - ACTIVE DISTRIBUTION SYSTEMS AND DISTRIBUTED ENERGY RESOURCES

- PS 1 DER SOLUTIONS AND EXPERIENCES FOR ENERGY TRANSITION AND DECARBONISATION
- PS 2 INNOVATIVE PLANNING AND OPERATION OF ACTIVE DISTRIBUTION SYSTEMS
- PS 3 AGGREGATED DER FOR ENHANCING RESILIENCE, RELIABILITY AND ENERGY SECURITY OF DISTRIBUTION SYSTEMS

D1 - MATERIALS AND EMERGING TEST TECHNIQUES

- PS 1 TESTING, MONITORING AND DIAGNOSTICS
- PS2 MATERIAL FOR ELECTRO TECHNICAL PURPOSES
- PS3 SIMULATION TOOLS PARTNERED WITH MEASUREMENT TECHNIQUES

D2 - INFORMATION SYSTEMS & TELECOMMUNICATION

- PS1: The opportunities and challenges brought by emerging Information and Communication Technologies to Electric Power Utilities in their path to Digital Transformation
- PS2: CYBERSECURITY TECHNIQUES, TECHNOLOGIES AND APPLICATIONS FOR SECURING CRITICAL UTILITY ASSETS
- PS3: Meeting the demands of the modern utility and DER with an agile and resilient telecommunication network