

SC B4 POSTER SESSION

SESSION 1 (14:00 - 16:00)

Paper ID	Title	Screen
10121	Trade-offs in HVDC Protection System Design – Investigation into Protection Margin and Threshold Setting for Future DC Networks	1
10122	Protection system design for HVDC switching stations and electrical energy hubs	2
10123	Development of an analysis tool utilizing robotic image acquisition for early detection of thermal anomalies in HVDC converter equipment	3
10310	±525kV 2GW Bipole VSC-HVDC Offshore Transmission Projects – Critical Review and Status Updates	4
10555	Analysis of DC Switchyard Schemes for Multi-Terminal HVDC Systems with DC Circuit Breakers	5
10556	Operational Experience of HVDC Insulators under Climatic Variations & pollution deposit conditions in ±800 KV indoor DC Yard at Agra Terminal of NEA800 HVDC link and mitigations thereof	6
10558	Design and system studies consideration for enhancement of reverse power flow capacity of ± 800kV HVDC system.	7
10559	Operational Experience of Steady-State and Dynamic Reactive Power Capabilities of the Pugalur–Thrissur VSC-HVDC System	8
10560	Planning and Design of a ± 320 kV/1000 MW Hybrid City-infeed VSC-HVDC Link	9
10561	Impact Assessment of Converter Neutral Grounding on Transient Performance in Rigid Bipole VSC-HVDC Systems	10
10563	DC Line Fault Recovery Performance of the India's first ±320kV VSC HVDC Pugalur-Thrissur Link	11
10567	Transient Over-voltage Studies of ±800kV, 6000 MW LCC HVDC connected with RE source of Solar and Wind	12
10572	Life assessment and refurbishment of ±500kV, 2500 MW Talcher-Kolar HVDC Converter Stations	13
10573	Analysis of Higher 5th Order Harmonics & tripping of Type 3 filters (5/27) at HVDC Rihand & Dadri terminals	14
10775	Integrating protection and control in the reliability and resilience-informed planning of future MTDC grids	16
10780	Converter transformer in HVDC offshore projects: an approach for risk assessment	17
10783	Optimized Real-time simulation for VSC-HVDC bipolar scheme with physical control replica in the loop	18
10786	PQU diagram capabilities and operational needs for offshore HVDC converter stations	19
10788	Risk analysis of offshore commissioning during power transmission tests	20
10939	Confirmation test in refurbishment of the control and protection system devices and thyristor valve modules in the 300 MW Shin-Shinano No.2 frequency converter	21
10940	The construction and system study of the Higashi-Shimizu frequency converter station (VSC BTB link)	22
10942	Study on mechanical design requirements for HVDC valve tower in floating offshore converter stations	23
11013	Operational and Commissioning Challenges and mitigation measures while integrating new HVDC Bipole with existing +/- 800kV HVDC Bipole with DMR system	24
11103	On the analysis of faults along HVDC land electrode lines	26
11104	Insights from salt-fog testing on high-voltage insulators used in HVDC converter stations	27
11130	Investigation of Fast-Front Transients in HVDC Switchgear for CMS Multiterminal HVDC System	28
11285	Enhancing Electrical Protection and Automated Control Systems for HVDC Auxiliary Services: A Comprehensive Study Case	29
12587	Assessment of Station & System Tests of the Attica - Crete HVDC Interconnection	30
11345	Integrated EMT Modeling and Network-HILS Verification for HVDC Interconnection of the Southwest Offshore Wind Farm in South Korea	32
11418	Effect of Temporary VSC-HVDC converter blocking on Multiterminal HVDC and offshore windfarm performance	33
11420	Hierarchical Primary–Secondary Control of HVDC Grids: Challenges of Droop Control Schemes in Ensuring Safe Operation under Large-Scale Renewable Integration	34
11421	Addressing specific challenges for harsh environmental conditions and integration with large solar park for Khavda – Nagpur HVDC transmission	35

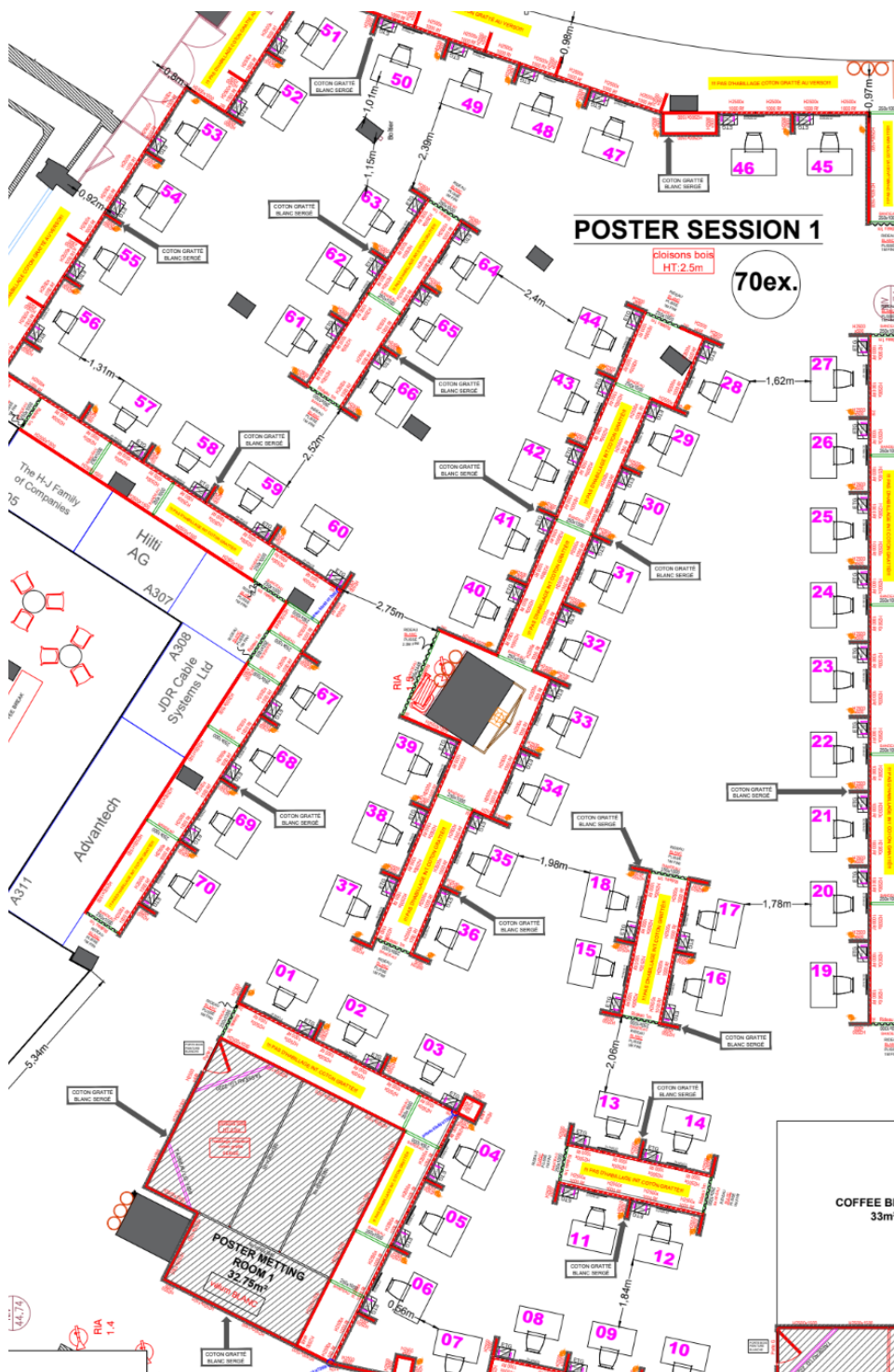
SC B4 POSTER SESSION

SESSION 1 (14:00 - 16:00) CONT.

Paper ID	Title	Screen
11438	Unlock Capacity through HVDC C&P Replica-as-a-Service Business Model	36
11532	Micro-sector Analysis of Harmonic Instability for HVDC Systems Interconnected to Weak Grids	37
11547	Planning and Specification Challenges for Bipole Multiterminal HVDC Systems	38
11594	Multi-terminal HVDC Transmission Technology for Offshore Wind Power Adopting Hybrid Cable-OHL and Its Applications	39
11595	Topology and Control of High Transformation Ratio and Large Capacity DC Transformer Based on Multi level Current Source	40
11599	DC Overhead Line Fault Ride-through Schemes Comparison in End-to-end VSC-HVDC System	41
11600	8 GW VSC UHVDC transmission -- Fault handling in the Gansu-Zhejiang ± 800 kV project	42
11621	A Review of Practical Approaches to Dielectric Valve Terminal AC-DC Tests for Modular Multi-level Voltage Sourced Converters Incorporating Rapid Discharge Circuits	43
11633	A Strategy for Enhanced Resilience of the NEOM Grid U-shape HVDC	44
11724	Upgrade of Monopole to Bipole in ± 500 kV, 3000 MW Bukdangjin-Godeok LCC HVDC Link - Strategy and Commissioning Experience	45
11727	Restoration Strategy for Bipolar MVDC Systems Following Fault Events	46
11765	Survey of the Reliability of HVDC Systems Throughout World during 2023-2024	47
11771	Design of generation runback scheme for a HVDC-connected wind farm	48
11823	Control and Recovery of DC Faults in Overhead Line UHVDC Systems: A Comparison of Full-Bridge and Half-Bridge MMCs	50
11851	Transitional HVDC Systems Operation and Maintenance Strategy	51
11853	HVDC Digital Twin – Maturity Level and Use Cases	52
11874	RAM Analysis of an HVDC Multi-purpose Interconnector for Offshore Wind Integration	53
11875	Analysis of reliability of Nordic HVDC interconnectors based on DISTAC data from 2016-2022	54
12012	Operational Experience with Composite Insulators for HVDC Air Core Reactors in Outdoor Polluted Environments	56
12031	Discussion of simplified methods for short-circuit current calculation in HVDC networks	57
12050	Key facilitators of HVDC systems for advanced electrical infrastructures	58
12051	Commutation Failure Prediction in LCC-HVDC under Severe Voltage Distortion	59
12511	Low-loss Bidirectional DC Circuit Breaker with Capacitance Self-charging Ability	60
12289	A hybrid HVDC Breaker for 525 kV DC Switching Station Applications	61
12292	Digital Wideband DCCT with advanced Signal Processing and IEC 61850 Communication Services	62
12345	Design Implications of DC Grounding in Bipolar VSC-HVDC Systems	63
12359	Impact of DC Circuit Breakers on Transient Stresses within Modular Multilevel Converters in Bipolar HVDC Systems	64
12384	Towards Resilient HVDC Networks: DC Switching Stations and Multi-Vendor Interoperability	65
12407	Piloting Wireless Communication-based Condition Monitoring in an HVDC Station	66
12410	On Transient Electrical Cable Stresses in Next Generation Multiterminal HVDC Systems	67
12446	Optimizing of VSC HVDC-Systems with the use of an On-Load Tap Changer Transformer	68

SC B4 POSTER SESSION

ROOM 1 MAP



SC B4 POSTER SESSION

SESSION 2 (16:00 - 18:00)

Paper ID	Title	Screen
12984	Advanced simulation framework for AC/MTDC power systems	1
13391	Experience Of Statcom For Improvement Of Voltage Stability & Assistance In Avoiding Loss Of Generation Of Renewable Energy (Inverter Based Solar Power) In Western India	2
13410	Operational Experience of STATCOM in POWERGRID- challenges and mitigation	3
12791	Enhancing Grid Resilience of RE dominant Power System's through STATCOM's – A Practical Illustration	4
13734	Optimisation of MSR & MSC switching instances during Auto mode operation of STATCOM to enhance the life of the equipment	5
13252	Commissioning and Field Testing of 40 MW Stabilizing Devices in the Italian Transmission Grid	6
13218	Synchronous Grid-forming STATCOM Supercapacitor Energy Storage - Control During Active-Power Involving Events	7
12774	Grid-Connected Characteristics Analysis of GFL PCS and GFM PCS under Dynamics Perspective	8
13316	Active Impedance Reshaping for High-frequency Resonance Suppression of Renewable Energy Power Stations with STATCOM	9
14079	Experiences and recommendations for parallel operation of SSSC devices, Candelaria – Ternera 220 kV circuits case	10
13501	Rapid tripping of a NH fuse using a power-flow controller with high-frequency current injection	11
12919	Design and Testing of Filters to Reduce EMC Interference in a Power-Flow Controller Based on Power electronics	12
13340	Tradeoff for Power Loss and Electromagnetic Interference of IGBT Devices in Converter	13
13559	The largest 1 Gvar STATCOM Deployment in the Korean Power System: Architecture, Control, and Operational Approach	14
13951	Impact of Nearest-Level Modulation harmonics on the Small- Signal Dynamics of the Modular Multilevel Converter	15
13256	New Concepts in Overall Control of Large Renewable Generation Hubs Connected to Load Centers through Grid-Forming Multi-Terminal HVDC Technology	16
13242	Insulation Coordination in Bipolar Multi-Terminal HVDC Grids	17
13859	Superconducting Medium Voltage DC Transmission: Architecture, Protection, and Simulation Insights	18
13029	Testing models and physical C&P replicas prior to interaction studies in a MV and MT context	19
14074	An Owner's Perspective on the Implementation of Grid-Forming Controls for VSC HVDC and STATCOM Projects	20
14137	Deployment Considerations of Autonomous Robots in HVDC Converter Stations	21
12961	Development of guidelines and HIL simulation on the control and protection scheme for multivendor multi-terminal HVDC systems	22
13724	Analysis of DC circuit breaker performance in multi-terminal HVDC grids considering fault dynamics and reclosing behaviour	23
13710	Operation of modular VARC DC-CB under load and fault current and the impact on system dynamics	24
13687	Experimental Validation of a Low-Voltage Prototype of a Converter- Transformer for HVDC Applications	25
13190	Development of a Novel Polarity Reversal Inhibitor for Future MT-HVDC	26
14050	Assessment of Multiterminal HVDC Systems with Grid-Forming Converters in the Brazilian Power System	27
14007	Expanded Grid-Forming Solution and SGFM Control in HVDC System to Harvest Additional Energy from Offshore Wind Farms	28
14014	TenneT 2GW Bipole Offshore HVDC Transmission Schemes – Key Advanced Control Features	29

SC B4 POSTER SESSION

SESSION 2 (16:00 - 18:00) CONT.

Paper ID	Title	Screen
12927	HansaLink: Multiterminal HVDC Rigid Bipole Offshore MPI	30
13609	Medium voltage railway dc-dc converter design and performance	31
12696	Virtual Control and Protection System in Real Time Software in the Loop	32
12897	Key Technologies and Research Applications of UHVDC Current Source Converters Based on RB-IGCT	33
13938	Key Technologies and Grid Integration Challenges of Low-Frequency AC Transmission for Offshore Wind Power	34
12672	Feasibility Study on Cancelling the DC Choppers in VSC-HVDCs for Renewable Energy Integration	35
13130	Performance Study and Specification Framework for DC Circuit Breakers in Multi-Terminal HVDC Networks	36
13510	Digital Twin-Enabled Support for Network Restoration: A Case Study on Grid-Forming Controlled HVDC Interconnectors	37
12683	Electrification of offshore platforms using Static Frequency Converters - Concept analysis for the Norwegian grid	38
13707	Grid Forming STATCOM Dynamic Performance: A Technical Study	39
13023	A Novel Grid-Forming Controller Based Upon DC-Side Dynamics	40
13923	FPGA-Based Modelling of Modular Power Converters for Data Centres System Interconnection and Integration Studies	41
13087	An Interline Multiport DC Circuit Breaker with Power Flow Controller	42
13870	DC FRT Analysis and Disturbance Propagation of Grid-Forming HVDC Converters in Future MTDC Systems	43
12886	Innovation and Challenges in the Implementation of Series FACTS in 500kV Transmission Lines of the Peruvian System	44
13652	Economic Analysis of Solid-State Transformers for Modern Power Systems	45
13336	Advanced Management and Power Quality Performance of Hybrid Transformers in modern Distribution Networks	46
13928	Modelling Protection Concepts for Multi-terminal HVDC Systems for Congestion Management	47
13583	Ultra-fast Power Electronics based HVDC Circuit Breaker: A Paradigm Shift towards System Flexibility and advanced Control Features	48
13706	E-STATCOM, the first of its kind: Design and performance of a supercapacitor energy storage integrated into a STATCOM	49
13562	System Design for the World's First ± 800 kV 8 GW VSC-UHVDC Transmission Project	50
13657	Effect of Power Electronic Converter Parameters on Converter- driven Stability in Transmission Grids with High Converter- interfaced Device Penetration	51
13570	A novel low-impedance bidirectional voltage-clamped fault current limiter based on a coupled inductor	52
12806	Dynamic Equivalent Network Methods for Grid Forming Performance Test	53
12794	The Impact of Synchronous Grid Forming on the Rating of HVDC Transmission Links	54
12749	True Inertia Constant of Synchronous Grid-Forming Control Strategies	55
13533	Grid-Forming Control for Reactive Power Sharing in Bipolar MMC-HVDC Systems Under Asymmetric Grid Conditions	56
14169	Coordinated Frequency Support in Multi-Terminal HVDC Network Via Grid-Forming Converter with Dynamic Power Allocation	57
13618	Introduction of Containerized STATCOM up to 200Mvar Rating	58

SC B4 POSTER SESSION

ROOM 1 MAP

