

CIGRE Sverige konferensen – Program

10:00–11:30: Rundvandring på Chalmers tekniska högskola parallellt med posterpresentationer

Postersession

- A1 ROTATING ELECTRICAL MACHINES**
The integrated damper winding behaves like a continuous classic damper winding during sudden short circuits in large, saturated hydro generators, Marcus SVANBERG, Voith
- B1 INSULATED CABLES**
Stresses on crossing third-party assets due to lightning strikes along underground HVDC cable route, Peter SIDENVALL, I2G
Study of frequency-dependent properties in HVDC links, Claes HENRIKSSON, NKT
- B4 DC SYSTEMS & POWER ELECTRONICS**
Unlock Capacity through HVDC C&P Replica-as-a-Service Business Model, Marielle HAGSTRÖM, Hitachi Energy
Converter design specification for railway capacity expansion Medium voltage railway dc-dc converter design and performance, Mohd SHADAB ANSARI, Hitachi Energy
Addressing specific challenges for harsh environmental conditions and integration with large solar park for Khavda – Nagpur HVDC transmission, Abhay KUMAR, Hitachi Energy
Electrification of offshore platforms using SFC - Concept analysis for the Norwegian grid, A. DUQUE, Hitachi Energy
- C2 POWER SYSTEM OPERATION & CONTROL**
Providing FCR-N with a BWR type nuclear power plant Providing FCR-N with BWR in a Nordic context, Anton GRÖNBERG, Vattenfall
- C4 POWER SYSTEM TECHNICAL PERFORMANCE**
Immittance-based frequency-domain method for sub synchronous torsional resonance analysis, Ehsan BEHROUZIAN, Svk
Scalable Framework for Stability Assessment at the Grid Interface of Power Electronic Interfaced Devices, Oscar LENNERHAG, Svk
- D2 INFORMATION SYSTEMS, TELECOMMUNICATIONS & CYBERSECURITY**
SASMaker: A Framework for Generating Synthetic IEC 61850 Traffic from Diverse Substation Setups, Filip NATVIG, Ångström/UU
Protection relays using 5G for inter-substation communication to enhance selectivity, Anders KARLSSON, Vattenfall
Protection automation and control using private 5G: Use-case evaluations for fully digital substations, Daniel BRODÉN, Vattenfall

11:30–12:30: Lunch på Kårhusrestaurangen

(Sal Volvofoajén)

- 12:30–12:50: Välkomna och inledning, Leif Pettersson, Svenska kraftnät, ordförande i svenska nationalkommittén
- 12:50–13:10: DSO:ns syn på internationellt kunskapsutbyte och nya roller i kraftsystemet, Lars Edström, vd Göteborg Energi Elnät
- 13:10–13:20: Information om konferensen, Thomas Hammarström, Chalmers tekniska högskola

13:30–15:00 Session 1A (Sal Scania)

Moderator: Danijela Palmgren, NKT

- A1 - ROTATING ELECTRICAL MACHINES**
Lessons learnt from actively balancing two units magnetically with rotor segmentation and dedicated power supplies which results in resolving vibration issues, Urban LUNDIN, Ångström laboratoriet
Parameter-driven strategies to analyze fault ride through capability of synchronous generator, Pollen BARAU, Chalmers tekniska högskola
- A3 - TRANSMISSION & DISTRIBUTION EQUIPMENT**
Breakthrough for Rogowski coils (LPCT's) in medium voltage switchgear: benefits, standardization, and challenges in protection and testing applications
Andrea BONETTI och Frej SUOMI, Megger
- B1 - INSULATED CABLES**
First results from curvature sensor installed in dynamic cable on floating platform, Vilhelm RYDÉN, NKT
Cables in air-filled ducts – comparison between IEC 60287 and FEM
Ola THYRVIN, NKT
- B2 - OVERHEAD LINES**
Corrective maintenance of OHL equipped by composite insulators
Peter SIDENVALL, I2G

15:30–17:00 Session 2 A (Sal Scania)

Moderator: Tommie Lindquist, Rise

- B2 - OVERHEAD LINES**
Service experience with composite insulators in Danish OHL, Peter SIDENVALL, I2G
- B3 - SUBSTATIONS & ELECTRICAL INSTALLATIONS**
Assessing risk factors for pd-activity in 24 kV secondary substations using machine learning, Tommie LINDQUIST, Rise
Prefabricated modular substations: Findings from ongoing pilot project
Tor JOHANSSON, Vattenfall
- D1 - MATERIALS AND EMERGING TEST TECHNIQUES**
The effect of hotspot conditions on DGA key gas generation on novel insulating Liquids, Pär WEDIN, Nynas
Biodegradability testing of transformer insulating liquids: decoding the oecd 301 for the electrical industry, Thomas NORRBY, Nynas
- D2 - INFORMATION SYSTEMS, TELECOMMUNICATIONS & CYBERSECURITY**
Pilot project: Line differential protection over Ethernet, Per KRIEWITZ, Vattenfall
5G-enabled smart grid IoT: Architecture, use cases, challenges & solutions
Rahul GORE, Hitachi Energy

13:30–15:00 Session 1B (Sal Runan)

Moderator: Emil Hillberg, Rise

- B4 - DC SYSTEMS & POWER ELECTRONICS**
Grid forming STATCOM dynamic performance: A technical study
Yousef KHAYAT, Hitachi Energy
Virtual control and protection system in real time software in the Loop
Joan HERNANDEZ, Hitachi Energy
- B5 - PROTECTION & AUTOMATION**
Expertise development in innovative technologies for next-generation Substations,
Erik WEJANDER, Svenska kraftnät
- C1 - POWER SYSTEM DEVELOPMENT & ECONOMICS**
Hydrogen sector impact on the power sector: power system development, grid planning and operation, Yelena VARDANYAN, Rise
- C2 - POWER SYSTEM OPERATION & CONTROL**
SIPS – The unknown superheroes of the power system, Susanne ACKEBY, Rise
Design considerations for fast frequency control in the nordic synchronous area,
Henrik EKESTAM, Svenska kraftnät
- C3 - POWER SYSTEM ENVIRONMENTAL PERFORMANCE**
Sustainability in HVDC tenders and projects - A pathway to long-term value
Creation, Madeleine STOLPE, Hitachi Energy

15:30–17:00 Session 2B (Sal Runan)

Moderator: David Lundback, Vattenfall

- C4 - POWER SYSTEM TECHNICAL PERFORMANCE**
Application of grid-enhancing technologies for stability improvement in low-inertia power systems: a case study from egypt, Mustafa IBRAHIM, Afry
State-space models of virtual control and protection systems for stability
Analysis, Joan HERNANDEZ Hitachi Energy
Co-simulation for nuclear power plant and power electronic interfaced devices
interaction studies, Julia JONASSON, Vattenfall
- C5 - ELECTRICITY MARKETS & REGULATIONS**
Proposed tariff component for compensating voltage - regulating reactive power in the Swedish transmission system, Hannes HAGMAR, Svenska kraftnät
Impact of Economic Incentives in the Power System on Small Companies
Haya RAJEH, Högskolan väst
- C6 - ACTIVE DISTRIBUTION SYSTEMS AND DISTRIBUTED ENERGY RESOURCES**
Black-start Capabilities of the Arholma Microgrid,
Alexandra GARÐARSDÓTTIR, Vattenfall
From consumers to prosumers: A techno-economic analysis of residential pv-bess
deployment in Sweden, Patrik OLLAS, Rise