



Fellesmøte for Den norske komite for CIGRE

Onsdag 09.04.2025 - kl 09.30 – 15.00

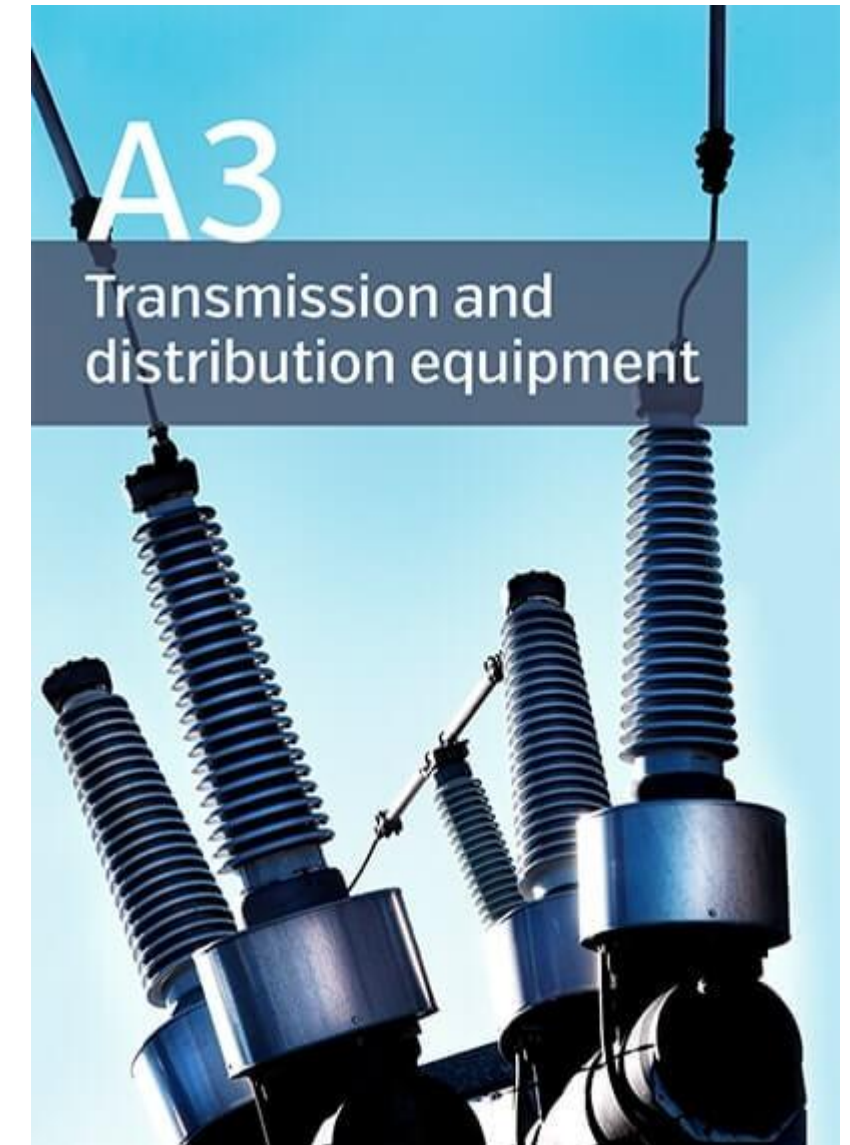
Rapport fra SC A3

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Rapport om status for SC A3

- A3: Distribution and transmission equipment
 - Dvs alle komponenter i en koblingsstasjon bortsett fra trafoer og kabler/linjer inn og ut
- A3 har fått ny leder:
 - Nicola Gariboldi (CH) har overtatt fra Nenad Uzelac (US)
 - Frank Richter (DE) har fått støtte fra Paolo Mazza (IT) til sekretærjobben
- Aktiviteter:
 - Arbeidsgrupper / Green books
 - Kollokvium / symposium
 - Tutorials / workshops / papere
 - Samarbeid mot IEEE og IEC



Pågående arbeid og videre planer

Working Areas:

Equipment	Technologies/ Principles	Applications	Life Cycle Mangement
<p>A3.42 Failure analysis and risk mitigation for recent incidents of AIS instrument transformers Zoltan Roman</p>	<p>A3.45 Methods for identification of frequency response characteristic of voltage measurement systems Erik Sperling</p>	<p>A3.39 Application and field experience with Metal Oxide Surge Arresters Robert LeRoux</p>	<p>A3.43 Tools for lifecycle management of T&D switchgear based on data from condition monitoring systems Nicola Gariboldi</p>
<p>A3.49 Aging effects on accuracy class of Instrument Transformers Robert Tinarelli</p>	<p>JWG C4/A3/B2/B4.75 Guide to procedures for the creation of contamination maps required for outdoor insulation coordination Massimo Marzinotto</p>	<p>JWG A3/A2/A1/B1.44 Consequence of High Voltage Equipment operating exceeding highest system voltages Bartosz Rusek</p>	<p>B3/A3.60 User guide for non-SF6 gases and gas mixtures in Substations K.P.Knol</p>
<p>A3.51: Requirements for HV T&D Equipment operating under Abnormal Weather Conditions Santosh Kumar Annadurai</p>	<p>A3.50 On-site calibration and verification of the accuracy of instrument transformers Paolo Mazza</p>	<p>A3.46 Generator Circuit-Breakers: review of application requirements, practices, in-service experience, and future trends Pavel Nowak</p>	<p>B3/A2/A3/C3/D1.66 Guidelines for Life Cycle Assessment in Substations considering the carbon footprint evaluation Akshaya Prabakar</p>
	<p>JWG B4/A3 Fault Current Limiting Technologies for DC Grids</p>	<p>WG C4.76 Overvoltage protection in switching inductive devices with vacuum circuit breaker Qing Yang</p>	<p>A3.47 Lifetime Management of Medium Voltage Indoor Switchgear Ankur Maheshwari</p>
	<p>A3.52 new! Application of Digital Twin in Switchgear Javier Mantilla</p>	<p>B3/A3.67 Operational safety of Medium Voltage GIS in case of abnormal leakage Maik Hyrenbach</p>	<p>A3.48 4th CIGRE Reliability Survey on Transmission and Distribution Equipment Hiroki Ito</p>

Arbeidets nytteverdi for CIGRE

- God deltagelse på de siste årenes A3-arrangement (Birmingham, Cairns, Paris, Klingenberg, **Trondheim**)
 - Eksempel: Workshop under CIGRE Paris Session 2024, med over 500 deltagere
- “Alle” jobber mot lavere utslipp av klimagasser gjennom reduksjon av SF₆-utslipp og introduksjon av alternativ bryterteknologi
 - A3 bidrar til å samle nøytral informasjon og dele erfaringer, samt å samle deler av verdikjeden
- Relevant for norske nettselskap, industri og utdanning/forskning
- De siste årene: aktiv rekruttering av NGN-medlemmer



Hva er spesielt viktig for Norge?

- Overgangen til SF₆-fri bryterteknologi
 - Oppdatert F-gassforordning som Norge følger
 - (mulighet for enda strengere krav gjennom **foreslått** PFAS-restriksjon)
- Digitalisering
 - AI / cybersikkerhet
 - Nye sensorer og overvåkning
 - Kontrollsystemer
- Ikke-konvensjonell (snart konvensjonell?) måletrafo
- Feilstatistikk i komponenter og erfaringsutveksling

Relevante arbeidsgrupper

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Andre forhold

- LCA (life-cycle assessment) mer og mer aktuelt
- Mange problemstillinger krever samarbeid mellom ulike studiekomiteer
- Kanskje ikke kun aktuelt for A3:
 - Litt vanskelig å ha oversikt over norske representanter i de ulike arbeidsgruppene
 - Mitt inntrykk: Samlet annonsering av nye arbeidsgrupper fra CIGRE Norge har hjulpet med å finne relevante eksperter til arbeidsgruppene
 - Fortsatt forbedringspotensial når det kommer til CIGREsamarbeid nasjonalt
- Kontakt meg gjerne ved interesse for A3-arbeidsgrupper eller annet!



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