



Fellesmøte for Den norske komite for CIGRE

Onsdag 09.04.2025 - kl 09.30 – 15.00

Rapport fra SC B3

Karl Eide Pollestad



Rapport om status for SC B3

- 24 medlemmer, 15 observatører, 4 Advisorgrupper
- 16 aktive arbeidsgrupper
- Undertegnede ferdig i SC B3 høsten 2026
- Ny Chair SC B3:
 - Koji Kawakita (JP) erstattes av Mark McVey (US)
- Aktiviteter:
 - Birmingham, Cairns, Paris, Klingenberg, Trondheim, Montreal

SC B3 aims to facilitate and promote the progress of engineering and the international exchange of information and knowledge in the field of substations. SC B3 acts to add value to this information and knowledge by means of synthesizing state-of-the-art practices, developing recommendations and providing best practice

The activities cover the design, construction, maintenance and ongoing management of substations and the electrical installation in power stations excluding generators. SC B3 serves a wide range of target groups in the Electric Power Industry whose needs include the technical, economic, environmental and social aspects in varying degrees.

Major objectives include increased reliability and availability, cost effective engineering solutions, managed environmental impact, effective asset management and the adoption of appropriate technological advances in equipment and systems to achieve these objectives.



Pågående arbeid og videre planer



TECHNICAL BROCHURES

Recommendations for dielectric testing of HVDC gas-insulated cable connection assemblies

Ref 957 • 2025



TECHNICAL BROCHURES

Recommendations for a Performance Guideline of Solid Insulated Busbar Systems

Ref 945 • 2024



TECHNICAL BROCHURES

Review of substation busbar component reliability

Ref 930 • 2024

B3.56 (bruk av 3D): TB Juni 25

B3/A3.60 (brukerguide for non-SF6): TB slutten av 25

B3.61 (helsebasert beslutning): TB Mai/Juni 25

B3.66 (LCA): Neste møte Trondheim

B3.YY (asset management): Kick-off Delft Okt 25.



Arbeidets nytteverdi for CIGRE

- Norge har i stor grad tatt i bruk bryterteknologi med alternativ til SF6.
- Norge bidrar med innspill til arbeidsgrupper og har Convener I B3.65.
- Norge har bidrag inn mot LCA og evaluering på bærekraft.

B3 er relevant for Norge gjennom å være aktiv og involvert i de større omstillingene i bransjen som utfasing av SF6, kraft til datasenter, generasjonsskifte, Asset management, og digitale løsninger.

Hva er spesielt viktig for Norge?

- Kunnskap om «ny bryterteknologi» og nye isolasjonsgasser
- Forvaltning av den eksisterende anleggsmassen
- Erfaringsutveksling med andre netteiere, produsenter og akademia.
- Bruk av mer sensorer kraftnettet.



Relevante arbeidsgrupper

Norske medlemmer

B3.52: Espen Masvik

B3.56: Hana Assefa

B3.65 Convener: Espen Masvik

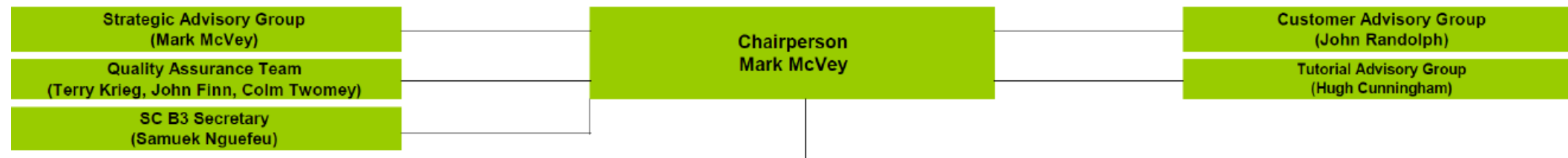
B3.68: Jan Kristian Sparre Skjold

B3/A2/A3/C3/D1.66 Guilhem Blanchet

B3.69: Karl Eide Pollestad



Study Committee B3 Organisational Structure - Effective on February 2025



Study Committee
24 Regular Members, 4 Regular Additional Members, 15 Observer Members + 4 Area Advisors, WG Convenors

Working Areas: AA1	AA2	AA3	AA4
Substation Concepts and Development Advisor: Mark Osborne	Gas Insulated Substations Advisor: Mark Kuschel	Air Insulated Substation Advisor: Shinki Noguchi	Substation Management & Digital Integatation Advisor: Johan Smit
B3.52 Neutral Grounding Mode Selection and Fault Handling for Substation in Distribution Grid	JWG B3/A3.60 User guide for non-SF6 gases and gas mixtures in Substations	B3.64 Guidelines on Optimising Seismic Design of Substations for Power Resiliency	B3.56 Application of 3D Technologies in Substation Engineering Works
B3.54 Earthing System Test Methods	JWG B3/D1.63 Guideline for assessing the toxicity of used SF6 gas onsite and in the lab of T&D equipment above 1 kV in substations	B3.69 Process Requirements for Commissioning and Inspection of Air Insulated Substations (AIS) and Gas Insulated Substations (GIS)	B3.61 Risk and asset health-based decision making in existing substations
B3.65 Guidelines for the Selection and Design of escape routes for substations rated above 1kV AC and 1.5 kV DC	JWG B3/A3.67 Operational safety of Medium Voltage GIS in case of abnormal leakage	B3.70 Guidelines for the Use of Advanced Technologies for Information and Knowledge Management in Substations	JWG B3/D2.62 Life-long Supervision and Management of Substations by use of Sensors, Mobile Devices, Information and Communication Technologies
B3.68 Experience of Offshore Substation (OSS) operation and maintenance	Greenbook Project 2 - SF6 Guidebook		JWG B3/A2/A3/C3/D1.66 Guidelines for Life Cycle Assessment in Substations considering the carbon footprint evaluation
B3.71 Substations Improvements to Black Start Capability			B3.YY (29-8-2024 tbc) Integration of Asset Information in Modern Substations for Management of Equipment
JWG B1/B3.74 Recommendations for a performance guideline of Polymer Insulated Busbars			

Legend:

WG	Joint WG led by B3
Special Project	Joint WG led by Other SCs



Andre forhold

- Forbedringspotensial på cigre sine nettsider og KMS
- Mange felles arbeidsgrupper som følge av at tema går på tvers av mange fagfelt
 - Mulighet for å lage nasjonalt møte på enkelt tema? Kanskje lettere å få deltagelse av flere som ikke jobber direkte i Cigre arbeidsgrupper etc?
- Opplever liten respons på spørreskjema som sendes ut fra arbeidsgrupper.
- Fått inn Bane NOR som kollektivt medlem 2025 og 4 deltakere i div WG.