

Work program of TC8X WG03

Current state of work on the Standards

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PRESENTED TO 43rd GRID CONNECTION EUROPEAN STAKEHOLDER
COMMITTEE MEETING

TC8X WG03 Overall Standardization activities overview

EN 50549-10	Requirements for generating plants to be connected in parallel with distribution networks - Part 10: Tests for conformity assessment of generating units	Enquiry stage complete with more than 90% positive votes. ED. 2 now in publication stage. Target to have EN 50549-10 ED.2 before RfG 2.0 publication could be achievable.
EN 50549-1/A1	Requirements for generating plants to be connected in parallel with distribution networks - Part 1: Connection to a LV distribution network - Generating plants up to and including Type B	Work on ED 2 or A2 started. EN 50549-2 received the about 90 comments, EN 50549-1 instead seems to have received few comments. Comments discussion already started, RfG 2.0 draft to be considered too.
EN 50549-2/A1	Requirements for generating plants to be connected in parallel with distribution networks - Part 2: Connection to a MV distribution network - Generating plants up to and including Type B	To be evaluated: • only one new ED. including both received comments and changes related to RfG 2.0; • two AMDs/Eds, first dealing with open comments, second with changes related to RfG 2.0

TC8X WG03 Overall Standardization activities overview

prTS 50744-1	Electrical characteristics of grid-forming generating and storage plants to be connected in parallel with electrical networks - definitions and tests of units	Full draft for WG03 internal comments circulated 2026-09-15. Aligned with TG GFC Chapter 3, under evaluation to have some chapters added: • Blackstart • intentional islanding • activation and deactivation of GFM capabilities Comments internal discussion will start early November 2026 Procedural shortcut under evaluation, aimed to have the standard publication asap
prEN 50744-2	Electrical characteristics of grid-forming generating and storage plants to be connected in parallel with electrical networks – functional requirements	Comments internal discussion started September 2026 Aligned with TG GFC chapter 2, under consideration blackstart and intentional islanding Procedural shortcut under evaluation, aimed to have the standard publication asap

TC8X WG03 Overall Standardization activities overview

CLC/prTS 50783-1	Requirements for dispatchable loads to be connected in parallel with public electrical grid - Part 1: Self-Regulation of Dispatchable Loads	1 st complete draft expected within the next few weeks for WG03 comments
prTS CLC/prTS 50773-1	Requirements for generating plants to be connected in parallel with public electrical grid - Part 1: Type C Generating plants	Starting point 50549-2, updated to be compliant and consistent with RfG 2.0 Circulation of 1 st draft Dec. 2026 - 1th quarter 2027
prTS CLC/prTS 50773-2	Requirements for generating plants to be connected in parallel with public electrical grid - Part 2: Type D Generating plants	
prTS CLC/prTS 50773-10	Requirements for generating plants to be connected in parallel with public electrical grid - Part 11: Tests for conformity assessment of Type C and D generating units	

IEC activities on GFCs

Main updates 1

- IEC TC8 SC8A JWG5: prTS 63496-10 ED1 Interconnection of converter-based resources with power systems - Part 10: Framework for the capability and performance of grid forming functions: 3 days meeting in September 2026, attended by some WG03 Experts to present WG03 work program and TG GFC Report once more. By now, no important step forward. EU GFM framework, both from legal and Standardization perspective, will likely be completed much ahead with proper detail level for unambiguous application
- IEC TC115 High Voltage Direct Current (HVDC) transmission for DC voltages above 100 kV. It was approved the creation of a dedicated WG: WG 23 - Specification of Functional Performance of Grid-forming VSC-HVDC systems, with presence of significant European involvement.
- IEC TC120 - Electrical Energy Storage (EES) Systems - WG3 Planning and installation: IEC TS 62933-3-2 Electrical energy storage (EES) systems – Part 3-2: Planning and performance assessment of electrical energy storage systems – Specific requirements for power intensive and renewable energy sources integration related applications will be evolved in an IS. CHAPTER 9: Active support with grid forming capabilities. A 1° CD was circulated on 2026-09-11, closing date for comments 2026-11-06. Black start, intentional islanding and short circuit current overload capability are foreseen

IEC activities on GFCs

Main updates 2

- SC 8A: Grid Integration of Renewable Energy Generation, WG 7: Proposal of a new TR, Title: Renewable energy generation based coordinated black-start in distribution system
- SC 8A/239/DTR (DRAFT TECHNICAL REPORT), Title: Roadmap for grid integration of renewable energy generation. The doc involves both Transmission and Distribution, the latter aspect should be integrated,
- 8A/233/DTS (DRAFT TECHNICAL SPECIFICATION). Title: Grid code compliance assessment methods for grid connection of renewable energy power plants The doc involves also GFM
- 22F/889/DC (PWI TR 22F-26 ED1), Title: Functional test of grid-forming inverter system. Referred to physical testing of Grid-Forming (GFM) inverters in a laboratory physical testing of Grid-Forming (GFM) inverters in a laboratory. Six representative tests:

Corresponding to
50744-1 tests



Phase Jump (PJ)	Voltage Jump (VJ)
Voltage-Forming (VF)	Load-Sharing (LS)
Loss-of-Last-Synchronous-Machine (LLSM)	Fault-Ride-Through (FRT)