

training



CBGS-0 Primary GIS Switchgear



Installation, Commissioning & Maintenance

Duration: 4 days

Content:

- CBGS-0 Cubicle General Presentation
 - Main Characteristics
 - 3 position disconnecter
 - Circuit breaker
 - Busbar system
 - CT & VTs
 - Functional Units
- SF6 General Knowledge
- CBGS-0 Cubicles Operations & Assembly (Video3D)
- Site Assembly of CBGS-0 cubicles (Video3D)
- Erecting & testing tools for CBGS-0
- Visit to CBGS-0 cubicles assembly line
- Practical Operations with CBGS-0 cubicles
- CBGS-0 Cubicles Maintenance:
 - Tests: Dielectric Test & Voltage Drop
 - SF6 pressure and recharge of gas
 - Manometer, Pressure Gauge, Coils, Locks, VPIS replacement.
 - Interlocks: Adjustments & Commissioning
 - CTs, VTs, LVC & Cubicle dismantling

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1st Day

Time	Subjects	Responsible
8 h 30 – 8 h 45	Welcome and program preview	E.Larraskitu
8 h 45 – 9 h 45	CBGS-0 cubicle general presentation Main Characteristics 3 position disconnecter Circuit breaker Busbar system CT & VTs Functional Units	E.Larraskitu
9 h 45 – 10 h 15	SF6 general knowledge What is it SF6 and global warming SF6 & internal arc	E.Larraskitu
10 h 15 – 10 h 45	Coffe break	
10 h 45 – 11 h 00	Operations with CBGS-0 cubicles (Video – animation)	E.Larraskitu
10 h 45 – 12 h 00	Site Assembly of CBGS-0 cubicles Mechanical assembly Busbar assembly VT assembly Site tests (Video – animation)	E.Larraskitu
12 h 00 – 13 h 00	Erecting & testing tools for CBGS-0 Tools for Mechanical/Electrical erection Tools for Testing	E.Larraskitu
13 h 00– 14 h 15	Lunch	
14 h 15 – 14 h 30	Dress up working overalls	
14 h 30 – 17 h 45	Assembly of CBGS-0 cubicles Handling Positioning Levelling Junction	Roberto Lombilla
17 h 45 – 18 h 00	Undress working overalls	

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2nd Day

Time	Subjects	Responsible
8 h 30 – 8 h 45	Dress up working overalls	
8 h 45 – 11 h 00	Assembly of CBGS-0 cubicles Assembly	Roberto Lombilla
11 h 00 – 11 h 15	Coffe break	
11 h 15 – 13 h 00	Assembly of CBGS-0 cubicles Busbar assembly	Roberto Lombilla
13 h 00– 14 h 15	Lunch	
14 h 15 – 17 h 15	Rear Duct assembly	Roberto Lombilla
17 h 15 – 17 h 30	Undress working overalls	

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3rd Day

Time	Subjects	Responsible
8 h 30 – 8 h 45	Dress up working overalls	
8 h 45 – 10 h 45	Assembly of CBGS-0 cubicles Site test according to 10A 99 procedure Busbar VT assembly	Roberto Lombilla
10 h 45 – 11 h 00	Coffe break	
11 h 00 – 11 h 30	Assembly of CBGS-0 cubicles Low Voltage connections	Roberto Lombilla
11 h 30 – 13 h 00	After Sales SF6 pressure control & detection Pressure gauge replacement Coils Replacement	Roberto Lombilla
13 h 00– 14 h 15	Lunch	
14 h 15 – 16 h 45	After Sales Lock replacement VPIS replacement and wiring Disconnecter selector switch replacement	Roberto Lombilla
16 h 45 – 17 h 00	Undress working overalls	

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4th Day

Time	Subjects	Responsible
8 h 30 – 8 h 45	Dress up working overalls	
8 h 45 – 10 h 45	After Sales Replacement of one cubicle CTs, VTs and LVC dismantling	Roberto Lombilla
10 h 45 – 11 h 00	Coffe break	
11 h 00 – 12 h 45	After Sales Interlock functioning, adjustment & commissioning	Roberto Lombilla
12 h 45– 14 h 15	Lunch	
14 h 15 – 17 h 15	Disassembly of CBGS-0 cubicles	Roberto Lombilla
17 h 15 – 17 h 45	Knowledge Questionnaire	Roberto Lombilla
17 h 45 – 18 h 00	Undress working overalls & training closure	