Service High Voltage Products

CSA – Customer Support Agreement Training

Facing the challenges of tomorrow

Having gained experience from GIS supervision around the world, we have developed the CSA training program. It aims to impart know-how of GIS equipment to ensure smooth operation without interruption, and to train fast, efficient and professional reactions to different scenarios. Overall it gives valuable insights into GIS basics, customer failure avoidance and failure mitigation.

More know-how – higher reliability

In order to ensure the proper operation of any equipment it is fundamentally important to understand its functionality. In this context it is particularly helpful to stress operational processes and explain in detail which actions might positively or negatively affect these. Given that GIS bays are completely encapsulated, this becomes even more important as people simply consider it a black box they can't look inside and don't know how it works. This issue is solved by conducting short but frequent training sessions imparting basic GIS knowledge to your staff. Even in the case of high staff fluctuations, know-how can be retained.
A failure is mainly the consequence of a chain of unfortunate circumstances, mistakes and events. The past has shown us that basic knowledge of GIS equipment could have easily avoided some major failures by doing the right thing at the right time. Therefore the program contains analytical reviews of former incidents caused by human error and the lessons learned.

More training – higher availability

Unfortunately, unpredictable failures can still happen and therefore it is important to be well prepared and to know how to respond efficiently. Acquiring an understanding of how to react properly in particular cases is a crucial part of this program. We simulate various failure cases and develop corresponding solutions. These consist of step-by-step repair plans and interface optimization between ABB and the customer. In the end, this hands-on training is comparable to a fire drill. It reduces your downtime thanks to well prepared and practiced reactions.

Course goal

GIS Basic

- Introduction to GIS components and their working principle
- Typical single-line diagrams and arrangement of gas zones
- Basic knowledge of handling of SF_6-gas, SF_6-gas measuring instruments, measuring values and limits admissible for gas-insulated equipment

Customer Failure Avoidance

- Awareness of common human errors
- Overview of major failures caused by mishandling
- Understanding how to best avoid failures

Failure Mitigation Plan

- Knowledge of basic concept
- Brief overview of potential failure threats to customer
- Optimization of notification process (troubleshooting) based on case examples
- Emergency solutions to minimize equipment downtime

Course module	Description
GIS Basic (1 1/2 days)	Introduction to GIS
	Detailed explanation of vital components
	SF_6-gas handling and measurements
Customer Failure Avoidance (1/2 day)	Discussion of generally known failures
	Failures specifically caused by mishandling
	Lessons learned
Failure Mitigation Plan (1 day)	Explanation of basic concept
	Overview of major failures
	Two case examples (minor failure / major failure)
	– Action plan in the event of a failure
	– Process of notification (troubleshooting)

Training details	
Participants	Project management, engineering staff, operation and maintenance staff
Prerequisites	Basic knowledge of High Voltage Gas Insulated Switchgear
Methods	Lectures, demonstrations, case examples and studies, practical training, discussions
Duration	3 days
Number of participants	5 – 10
Location	On site

ABB Switzerland Ltd
Service High Voltage Products
Brown Boveri Strasse 5
CH-8050 Zurich / Switzerland
Phone: +41 58 588 35 50
Fax: +41 58 588 17 23
www.abb.com