

Power Forensics



Forensic Investigations to establish the causes of power asset failures and to prevent future failures costly shutdowns.

Our main asset is our team of dedicated staff: widely experienced in **power asset failures** and with access to even greater expertise through the rest of EA Technology.

EA Technology has been supplying confidential forensic investigation, failure analysis and incident investigation services for more than 40 years. We cover every electrical power industry, in countries across the world, from EHV transmission and distribution to low voltage equipment, controls and components.

We test, check performance, strip down and analyse. Then we review, report and advise. We work on failed and ageing equipment; we assess how assets are aging; and because we know how things fail, we can help assess new solutions too.

Identifying causes of failure

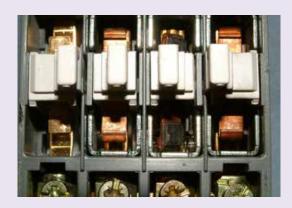
- · Manufacturing or design defects
- · Deliberate damage or sabotage
- · Environmental factors
- Service or operational issues
- · Operator error
- · Lack of maintenance
- Poor installation

International services

- On-site incident examination and assessment by experienced investigators with multi-disciplinary expertise
- Proven investigation procedures using modern analytical techniques
- · Expert and independent witness work
- Fast, confidential service
- Bespoke experimental investigations and assessments



Explosion in 3.3kV circuit breaker



Failed isolator



Analysis at EA Technology laboratory.

We will help you answer these kinds of questions:

- · What was the cause of failure?
- Is this failure a one-off or is this the start of a series of problems?
- How long should we leave this kind of equipment before we check it again?
- How should we prioritise replacement of this type of asset?
- · What is the best way to manage this asset?
- Are the maintenance procedures still appropriate?

- Was this incident caused by a manufacturing defect, installation issue, maintenance procedures, operating issues, overstress, the environment or something we haven't thought of?
- How can we avoid somebody getting injured if a similar issue arises again?
- How can we extend the life of this kind of asset?
- How can it be shown that a new technology will perform correctly and safely when there are no standard tests for it?

Benefits to your business

EA Technology provides an independent and thorough assessment of the issues, with no manufacturer, operator or contractor bias.

EA Technology provides independent technical assessments to assist with litigation, claims, and safety investigations.

By working with EA Technology, our clients can:

Prevent future failures, interruption in supply and loss of production.

Gather expert evidence for issues of legal responsibility, litigation and claims.

Improve safety, operating procedures, maintenance practices, reliability and design.

Inform asset management decisions in areas including:

- · Reliability improvement
- Risk analysis
- · Maintenance policies
- · Replacement and investment decisions

Analytical facilities

Our main asset is our team of dedicated staff: widely experienced in power asset failures and with access to even greater expertise through the rest of EA Technology. We know how things fail and will find what evidence remains, even when an incident has caused significant destruction.

We use our facilities to provide in-depth analysis, and these include:

- · Scanning electron microscopy
- · Optical microscopy
- · Mechanical testing
- · Materials analysis
- · High voltage and high current testing
- Fourier Transform Infrared (FTIR) Spectroscopy
- · Wide range of chemical analysis equipment

Worldwide experts in:

Incident investigation, cause identification, evidence collection and failure prevention.

Global Footprint

At EA Technology we specialise in asset management solutions for owners and operators of power network assets.



Founded in 1966 we have over 50 years' experience in the industry and 6 regional offices around the world to support our global customer base.

We help clients to safeguard their networks. Advising them on strategy and implementation of a range of technology solutions to manage power assets, delivering maximum life and minimising cost

