

# ACCIDENT AND EQUIPMENT FAILURE INVESTIGATIONS



## OVERVIEW

Thorough and evidence based investigations of accidents and equipment failures are necessary to establish both basic and underlying causes and to ensure appropriate actions to prevent recurrence are identified.

Threepwood Consulting provide independent and expert resources to support network owners with these investigations.

## CASE STUDY

Following the catastrophic failure of an outdoor switchboard, an electricity network operator identified the need for expert support to identify the events leading up to the failure and whether opportunities were missed to prevent failure

## OBJECTIVES



Establish all relevant facts surrounding the equipment failure



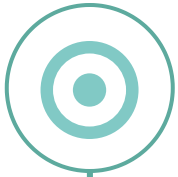
Identify basic cause(s) and underlying cause(s)



Identify any breaches of client's operational procedures



Summarise significant findings to the client's Head of Safety, Health and Environment



### PROJECT AIM

To thoroughly and independently investigate a multifaceted switchgear failure and provide the client with an objective report detailing causation, any breaches of procedures and specific learnings to prevent recurrence



### PROJECT CHALLENGES

- Understand the likely failure mechanism
- 'Stitching' together different accounts from many information sources
- Generating a clear timeline of dependent events
- Co-ordinating interviews with different interested parties



### PROJECT SOLUTION

Threepwood Consulting successfully completed the investigation and delivered a comprehensive report using the following approach:

- Conduct interviews with the relevant parties
- Independently verify events through witness statements and SCADA records
- Apply a 'just and fair culture' to individuals involved
- Establish underlying causes through Root Cause Analysis

## KEY RESULTS

Illustrated time  
line of events

Transcripts of  
interviews

Causation  
analysis

Individual  
breaches and  
gaps in Company  
procedures

Independent and  
expert findings



*'Independent and expert failure investigation has provided the client with clear causation and specific learnings that the Head of Safety, Health and Environment can communicate to the business to prevent recurrence'.*