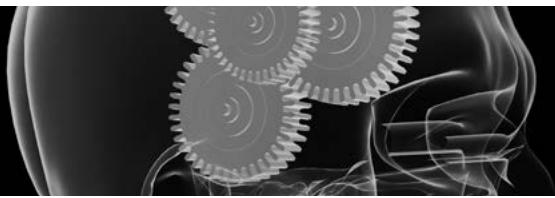


HUMAN FACTORS

How to take the next steps



CASE STUDY 2 - The best people DO make big mistakes...

What happened?

The most senior electrician on an installation was asked to perform a multi-point isolation on one of two gas turbines.

He took his permit, went to the switch-room and correctly identified the turbine to isolate. He was familiar with the switch-room and the layout of the turbine electrical systems. He began isolating the correct turbine.

He then received a call on the public address (PA) system to come to the galley, which he ignored because the job he was working on was important. A second announcement called him urgently to the galley. The electrician went to the galley where he found the chef standing next to an open fridge complaining that the fuse had blown. Annoyed that the chef had interrupted an important job with one that could have waited, the electrician replaced the fuse and then returned to the worksite.

He completed the remaining isolation points, but on the wrong turbine. The error was discovered days later when the electrician had left the installation. When he was told of the mistake he immediately offered his resignation, which was not accepted. An investigation found that the distraction during an important job had led to the error, which in this case was discovered before any harm was caused.



What human factors were involved?

What did people do intentionally?

Intentional behaviours were not the main cause of this incident.

What did people do without meaning to?

The electrician applied the isolation to the wrong machine

The electrician made an error - he performed the right action (applying isolations) on the wrong equipment. This was made more likely to happen because he was distracted during a complex job. Becoming angry at being called away may also have contributed to the error.

Barriers



- Safety Critical Communication



- Managing Human Failure
- Supervision

What can we learn from this incident?

- Performing the right action on the wrong piece of equipment is a common problem in our industry.
- The most experienced and competent personnel are sometimes more prone to error because they can do things automatically without thought.
- When we get distracted we may forget things, e.g. where we were in a sequence of steps or a procedure. This can lead to mistakes with serious consequences.
- You can prevent this type of incident by double-checking against the permit or asking another person to confirm that you are working on the right equipment. When the job's complete, have it independently checked to detect errors.
- Supervisors can help by recognising those jobs which could have serious consequences if someone makes a mistake. Minimise distraction for those carrying out complex or critical tasks. Encourage people to have their work checked for errors.