



## Inspection and Outage Support

From time to time, a power station or large operational plant will go out of service for short or long periods. This is often planned, however, due to unforeseen circumstances it can also be part of an emergency repair or procedure.

Outages can be an expensive task for a client, or can offer the potential for cost saving, by taking proper precautions, such as a planned inspection programme, to prevent future outages or failures.

EASL are able to provide experienced engineers to work at client sites in support or analysis roles during periods where additional resource levels are required.

We have many staff with experience of working on the assessment of safety case related inspections, including sentencing components as acceptable for future service or determining the most appropriate, safe and cost effective course of action if further work is required to achieve this.

### What is Inspection and Outage Support?

Inspection and Outage support is a service offered during periods of increased inspection activity, usually when the plant is not in operation. There are numerous reasons why an outage may occur, however, in industries such as Nuclear and Power Generation, this is often routine to ensure the safe condition of components and to investigate the working conditions.

It can be common for a client to have existing staff on hand for many processes associated with inspection and outages, however, it is often necessary for additional support. Whether it is working on-site to assess the inspection of steam pipe lines, or providing office-based support in areas such as design code assessment, fracture mechanics and the use of Fine Element Analysis to better understand material performance, EASL can offer their expertise to further improve the efficiency of an inspection or outage.

### EASL's Inspection and Outage Support Services

With our services, we aim to benefit our clients by providing high quality support from experienced engineers when manpower resources are stretched and additional time pressures are in place.

A specific example is the regular work carried out to assess the ultrasonic thickness testing of components deemed susceptible to flow accelerated corrosion (FAC) at nuclear power stations across the UK. Working as contractors to the station owners, an EASL engineer or team is present on site for the duration of the inspection period and is responsible for the interpretation and classification of assessment results.

This work also includes determining the best course of action for non-conforming components and where required presenting cases to a multi-disciplined assessment panel for peer review. The EASL team have developed excellent working relationships with client staff and contractors at all stages of the process from hands-on inspection staff to office based technical specialists in metallurgy.

Alongside this, we are able to provide background support where specialist advice is required to assess the consequences of unexpected inspection findings. For example, where unexpected cracks or indications have been identified or weld thicknesses have been found to be below minimum thickness criteria, cases can be referred on an individual basis for immediate attention.

We are able to provide a wide range of structural integrity based engineering assessment experience from simple design code assessments to more complex creep-fatigue crack growth analyses using FE derived stresses. At all times we will ensure compliance with client quality procedures and engineering standards.

Whether it's on-site or office-based support, EASL are able to provide a wealth of



experience from our highly trained team of experts. With years of experience working on site and assessing structural integrity, we can provide a reliable, clear and cost-effective service to our clients. We have a solutions-based approach, taking into account real world factors to ensure that a realistic and specific service is delivered.

To find out more about our previous outage and inspection work, please see our case studies and related services, or to see how EASL can help you with outage and inspection support, contact us on [enquiries@easl-stress.co.uk](mailto:enquiries@easl-stress.co.uk).

#### Related Services

- Hanger Surveys
- Radiation
- Seismic Walkdown