



Gujarat Industries Power Co. Ltd

Residual Life Assessment (RLA) – Case Study

Overview & Objective:

Residual Life Assessment (RLA) is very relevant to all those industry's equipments which runs under high pressure high temperature and are subjected to wide variation of loading and their availability is very critical for performance of the plant. Residual Life Assessment (RLA) found its application in most power plants, being backbone of all industry as well as other capital intensive industry.

The ever growing demand of power put severe stress on existing power plant for generating electricity. In view of the current economic scenario and peak power demand the plants are being operated for shorter/longer periods of time under low/heavy load conditions. In such situations reliability of key equipments of the power plant such as Steam turbine or Gas turbine and Boiler is of prime importance. Utilities are interested in knowing the residual life of critical turbine-steam generator components to avoid the breakdown of it while maintaining safe operating conditions.

In order to achieve more than design life, RLA of that component is necessary. A residual Life Assessment study involves critical inspection as well as identification of flaw, defect or damage in the components. A combination of components & defects decides the type of Nondestructive Evaluation (NDE) method to be used. It is also important to identify the critical area where failure are likely to occur and select suitable NDE method for detection of failure. Information obtained from several methods, past experience , previous failures information & design data allows user to make informed judgments regarding potential further reliable & safe operation of critical power plant component.

The clear objective of the RLA process is to assist the users to evaluate the potential for continued safe and efficient operation of the power plant and providing the possibility to detect and address potential damage before it may occur.

The importance of conducting RLA studies also arises from the **regulations** that are in place for a number of industrial equipments, like boilers, turbines etc. Also, conducting RLA studies properly can safeguard human lives.

Course Content:

- Introduction and importance of RLA
- Different NDT techniques associated in RLA
- RLA of Boiler and IBR (Regulatory) compliances.
- RLA of Steam Turbine
- RLA of Gas Turbine
- Visit to GIPCL Plant.

Training Methodology:

- Classroom training
- Interaction
- Case Studies
- Plant Visit

Recommended For : Jr. level Engineers & Middle level engineers working in power plant or process industry.

Date : Refer Training Calendar posted on website

Duration of Course : 2 Days

Course Fees : Rs. 6000/- + applicable taxes

Venue : GIPCL Projects & Consultancy Company Limited
2nd Floor, Corporate Office Building,
GIPCL, P.O. Petrochemical - 391 346,
Dist. Vadodara, Gujarat

For Nominations:

[Registration Form](#)

OR

Contact:

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