

PGT-06-11 Life Extension and Remaining Life Assessment of Power Plants

Project

Life extension for aging power plant steam/gas driven turbines usually includes reconstructive measures intended not only to prolong their service time and raise their reliability but also to improve their efficiency.

Participation

Management: This project is proposed by India in association with utilities of the United States and the Department of Industries, Tourism and Resources of Australia.

Participants: Participants from India will be design engineers and specialists from the utilities and the Central Electricity Authority.

Objectives

To study the best practices of life extension (LE) and remaining life assessment (RLA) of power plants and acquire the know-how of implementation of LE & RLA technology with a view to implementing the same in power utilities in India.

Performance Indicators:

- Recapture of lost capacity at minimum cost.
- Operate the plant near to its design efficiency.

Milestones

Visit to utilities in Australia and the United States to study:

- Equipment life optimization program.
- Re-powering engineering techniques.
- RLA studies.

The major milestones are as below:

Year	2006				2007				2008				2009			
Activities	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
Finalization of Project Itinerary																
Visit to Plants in the United States & Australia and Discussions (5 days each)																
Preparation of Study Report & Technical Specifications																
Implementation in Pilot Project & Validation																

Location

Activity Location: The activity will include visits to power plants in the United States and Australia and discussions with experts.

Project Location: The information learned from this project will be put together in a handbook for use in the power sector. A pilot project (to be identified), will be taken up for implementation.

Resources

For the on-site study visits and discussions, the visitors will bear the travel expenses and hosts will cover the on-site costs.

The equipment and technology upgrades cost will be borne by the beneficiary participant utility implementing the project.