

HEAT RATE STUDY IN
THERMAL POWER PLANT

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ABSTRACT

The considerable rise in electricity demand has resulted in big capital investment for new power plants. This expansion, coupled with the escalating cost of fuel, spare parts, labour etc., have imposed an increasingly urgent need to ensure that the existing plants are operated and maintained as near to optimum conditions as possible.

The term 'efficiency' is commonly used when quantifying plant performance and 'heat rate' is less favourable. Therefore, performance monitoring is usually based on efficiency calculation. However, heat rate data are valuable in order to decide the optimum number of plants to run to meet the required load, and to determine the best distribution of load between those plants.

In system operation, the heat rate value is an essential parameter for System Operation Department to determine which particular generating plant is relatively more economical to operate.

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