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ANALYSIS OF FOUR UNIT STANDBY SYSTEM WHERE TO MATCH WORKLOAD OF MAIN UNIT WORKING TOGETHER OF ALL THREE STANDBY UNITS IS NECESSARY

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ABSTRACT

In the current paper profit of a standby system working in a thermal plant has been studied.

The system consist of one main unit and three standby units. Initially main unit is in operating state and other three units are in standby state. In case of failure of main unit the working of all three standby units is necessary as the work load of main unit is equal to the work load of three standby units working together. The system will be in failed state on the failure of main unit and any of the standby unit. Various measures of system reliability has been calculated with the help of Semi-Markov processes and Regenerative Point Technique.

Key Words: Standby Systems; Semi-Markov Process; Regenerative Point Technique