

# **COST-BENEFIT ANALYSIS OF A TWO-UNIT COLD STANDBY SYSTEM WITH REST AND URGENCY OF JOB**

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## **ABSTRACT**

A two-unit cold standby system has been analysed evaluating the reliability and the profit incurred to the system. There are two types of repairmen – one regular and the other visiting. On failure of a unit, the regular repairman undertakes the unit for repair with the fact th-at he may feel a need of rest while repairing a failed unit. At this stage, a visiting repairman is informed to arrive at the system to resume the repair. When the regular repairman feels need of rest, he may or may not be allowed to rest depending upon the urgency of job. It is assumed that if the job is urgent, the regular repairman is not allowed to rest till the arrival of visiting repairman. System is analysed by making use of semi-Markov processes and regenerative point technique.

**KEYWORDS:** MTSF, Availability Rest, Special Visit, Cost-Benefit