



# STANDBY SYSTEM ANALYSIS WITH CONCURRENT WORKING OF ALL STANDBY UNITS

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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 two standby units. Initially main unit is in operating state and other two units are in standby state. In case of failure of main unit the working of both standby units is necessary as the work load of main unit is equal to the work load of two 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 . Graphical study of MTSF and profit has also been done.*

**Keywords:** *Standby Systems; Semi-Markov Process; Regenerative Point Technique*