

On Semi-Markov Modelling of a Switching System

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ABSTRACT

This paper deals with some of the realistic situations which are very crucial to design a highly reliable system but are mostly understated. In this paper a two unit cold standby system is studied with standby and switch restoration. The failure time of unit follows exponential distribution whereas other restoration activities (inspection and replacement) follows some arbitrary distribution. Single server carries out all activities. The system is analyzed using semi-Markov and regenerative point technique and various system performance measures are obtained. Simulation is done to show practical importance.