

CONCEPT OF ESSENTIAL UNIT TO INCREASE STANDBY SYSTEM FUNCTIONING

Upasana Sharma

Associate Professor, Department of Statistics, Punjabi University, Patiala

ABSTRACT

In the present paper two units standby system has been studied with generator. Initially one compressor unit is in operating state while other is in standby state. To keep system in functioning state at least one unit out of two units must be in working state. Here generator is considered as side by essential standby unit which will operate when there is halt in electricity supply. When operative unit fails it is repaired and after repair it will work as good as new. During the repair of 1st unit standby unit become operative . Various measures of reliability such as MTSF, Availability and Profit Analysis have been calculated by using semi- Markov process and regenerative point techniques. For practical utility of our proposed model previous data of different years from Verka milk plant has been gathered and is used for graphical analysis.

Key Words: *Standby System, Semi- Markov Process and Regenerative Point Techniques*