

ANALYSIS OF A 2-UNIT COLD STANDBY SYSTEM WORKING IN A SUGAR MILL WITH OPERATING AND REST PERIODS

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ABSTRACT

The present paper examines a model on a practical situation existing in a sugar mill at Karnal, India. The modeling for a 2-unit cold standby *Sulphated Juice Pump System* with alternating periods of *Working* and *Rest* is done. The *Reliability*, mean time to system failure (*MTSF*), various other measures of system effectiveness and then the profit are evaluated for the system. The system remains in the functional mode seasonally and goes to *Rest* during the non seasonal period. System is analysed by making use of semi-Markov processes and regenerative point technique.

KEY WORDS: Sulphated Juice Pump System, Working and Rest periods, Reliability and MTSF,

Availability, Profit analysis.