Manpower Planning for Maintenance: A Method

Pritibhushan Sinha Indian Institute of Management Calcutta 1994

Thesis Advisory Committee:

Prof. Sujit K. Basu (thesis supervisor), Indian Institute of Management Calcutta Prof. Ashis K Chatterjee, Indian Institute of Management Calcutta Prof. Sanjiv Vaidya, Indian Institute of Management Calcutta

Abstract

We present a method to determine the optimal number of operators and repair persons for systems comprised of more than one stochastically failing units. The method is based on a regenerative-process theoretic approach and takes into account the adopted maintenance policy, which can be a preventive maintenance policy or an inspection policy. The use of the method has been illustrated considering a few well-known maintenance policies.

The method can also be used for similar problems, arising in other contexts.