

Reliability Centered Maintenance Concepts And Applications: A Case Study

Al-Ghamdi, AS; Duffuaa, SO; Raouf, A

**UNIV CINCINNATI INDUSTRIAL ENGINEERING, INTERNATIONAL JOURNAL OF
INDUSTRIAL ENGINEERING-THEORY APPLICATIONS AND**

PRACTICE; pp: 123-132; Vol: 7

King Fahd University of Petroleum & Minerals

<http://www.kfupm.edu.sa>

Summary

In this paper the concepts and implementation steps of Reliability Centered Maintenance (RCM) are presented. A systematic methodology for implementing RCM to evaluate and improve an existing time-based maintenance program at a local plant in Saudi Arabia is discussed. A comparison between the existing and RCM based program illustrated the benefit of using RCM systematic approach to optimize and streamline maintenance programs. Implementation of the RCM program has resulted in substantial benefits to the plant. Significance: RCM is an effective approach for developing efficient preventive maintenance (PM) programs. The developed PM programs minimize equipment failures and provide industrial plants with effective equipment and extra capacity to meet customer demands and supercede competition.

References:

1. ANTHONY T, 1989, NUCL ENG INT, V1, P48
2. BEEHLER ME, 1997, IEEE T POWER DELIVER, V1, P1203
3. BOWLER DJ, 1995, IEE P-GENER TRANSM D, V142, P9
4. DEIZELL J, 1996, POWER ENG, V100, P89
5. DUFFUAA SO, 1995, INT AIRL IND C JEDD
6. FOX BH, 1994, POWER ENG, V98, P75
7. GERAGHTY J, 1996, METALLURGIA, V63, P23
8. JONES RB, 1995, HYDROCARB PROCESS, V74, P57
9. KUEHN SF, 1992, POWER ENG, V96, P23
10. NIEBEL BW, 1994, ENG MAINTENANCE MANA

11. ROTTEN J, 1994, NUCL NEWS, V37, P48
12. SHEIKH AK, 1996, J ENERG RESOUR-ASME, V118, P306
13. SMITH AM, 1993, RELIABILITY CENTERED
14. SRIKRISHNA S, 1996, J QUALITY MAINTENANC, V2, P3
15. WORLEDGE D, 1993, NUCL NEWS, V36, P41
16. WORLEDGE DH, 1993, POWER ENG, V97, P25
17. YOLTON J, 1996, PIMA MAG, V78, P36

For pre-prints please write to: abstracts@kfupm.edu.sa