

ABSTRACT

This research study investigates the frequent failures which are repeatedly occurring in United Energy Pakistan Limited (UEPL) operation zones/facilities. Failures always become hindrance or cause of suspending the operations in any continual operation systems in firms. Failures loss the production, time, property damage, environment - problems and may also cause fatalities.

In this study the data was collected from four UEPL operational zones in between 2006 and 2012 (except MKK zone, the data of this zone is consisting from 2009 to 2012 because of zone was purchased in 2009) and this thesis study has two stages. At first stage the frequent failures are determined by SPSS model and at second stage the root cause analysis of the failures is carried out along with suggestions of appropriate solutions for mitigation of those failures. The Root cause analysis is carried out by fishbone method, brainstorming session and questionnaire feedback.

This study identified that Fatigue Failure (FF) and Microbiological influenced corrosion (MIC) which are most frequent failure occurring in different operational zones of UEPL.

This study is also identified that these both types of failures are mostly occurring in north zone. On the basis of these outcome there are two way of forward are suggested controlling these types of failure, first way may be used on reactive basis and second way is consist on frameworks for each failure which may be adopted on proactive basis in design basis.