3.4 Minimum Asset Maintenance Requirements

The minimum maintenance requirements to ensure continuity of service shall include:

- a) Details of sources of information regarding condition of systems
- b) A program of planned preventive maintenance inspections
- c) Response and repair timescales covering defect identification, verification, response and repair
- d) Details of planned preventative maintenance including maintenance tasks, who is going to undertake the work, frequency of operations and timescales
- e) A procedure for the application of unplanned maintenance to ensure appropriate measures to protect the delivery of service
- f) Appropriate Health & Safety and asset familiarisation training to operatives

Where required, written acceptance by the service provider (Contractor and or the Consultant) to the above shall be made prior to starting work.

3.5 Reliability Centered Maintenance (RCM)

3.5.1 RCM Philosophy

The basic philosophy of RCM utilizes predictive/preventive maintenance techniques with root cause failure analysis to detect and pinpoint the precise problems, combined with advanced installation and repair techniques, including potential equipment redesign or modification to avoid or eliminate problems from occurring.

RCM is the process that is used to determine the most effective approach to maintenance. It involves identifying actions that, when taken, will reduce the probability of failure and that are the most cost effective. It seeks the optimal mix of the following three types of maintenance approaches:

- i. Time or Cycle-Based (PM) Approaches
- ii. Condition-Based Approaches (PT&I)
- iii. Run-to-Failure Approaches

The appropriate use of these three types of maintenance shall be considered positively DMAT / Consultant for performance ratings for possible incentive payments. However, the use of these two types of maintenance does not relieve any obligation(s) to assign (initially) PM, PT&I or Run-to-Failure approaches to all mechanical & electrical equipment.

Programd Maintenance is maintenance where scheduled maintenance tasks are more than 2.5 years apart. Proactive Maintenance is defined in subsequent sections of the guide. The Contractor shall use the following guidelines to assign the most appropriate maintenance approaches to all mechanical and electrical equipment.

RCM is an ongoing process that gathers data from operating systems performance and uses this data to improve design and future maintenance. These maintenance strategies, rather than being applied independently, are integrated to take advantage of