

FAULT TOLERANT CONTROL OF LINESIDE SIGNALLING EQUIPMENT

The report considers techniques for improving the fault tolerance of lineside signalling control equipment. Particular emphasis is placed on the reliability of output power control. Strategies are developed that could be applied in a number of situations for equipment of differing designs. Aspects having a direct bearing on fault tolerance, such as safety, are given appropriate attention.

A radical new approach is proposed that represents a significant departure from current practice. This investigation has concentrated on low power applications and is directly applicable to lineside signals.

Many of the conclusions are of a general nature, covering fault tolerance and availability, semiconductor drive, integrating the control module and output monitoring.