

THE DYNAMIC BEHAVIOUR OF OVERHEAD LINE EQUIPMENT

The report summarises the preliminary results of a practical and theoretical study into the wave propagation characteristics of overhead line equipment. The work is aimed at obtaining an understanding of the factors that control the dynamic behaviour of the equipment and how these can be modified to improve current collection.

The report discusses:

- The development of a theoretical model to describe the wave propagation characteristics of overhead line equipment
- Work undertaken to measure some of the parameters which governs the behaviour of the equipment
- The measurements made to determine the normal modes of oscillation of Mark IIIa equipment
- Preliminary results obtained when a pantograph interacts with the equipment.