

MODIFICATIONS TO L66, L2, L3, L3(C), L8 AND L8(C) TOWERS

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PURPOSE AND SCOPE

A generic design defect exists in the layout of body extensions incorporated into Blaw Knox L66, L2, L3, L3(c), L8 and L8(c) towers. Some incidence of buckling has been found in members of the body extensions. These extensions are mostly used on tower heights above the standard height. Such extensions were not used in towers that were originally tested.

This problem has been known since 1990 and body extensions have since been modified as part of various overhead line refurbishment schemes, particularly those where tower loading has been increased by the use of larger conductors.

However, the majority of towers supporting original conductors and containing the original body extensions have been in use on the system for up to 40 years without incident.

This document identifies the affected towers.

PART 1 – GUIDANCE

1 DESIGN MODIFICATIONS

For each design specification, the tower types requiring body extension modifications are listed in Appendix A. Modifications comprise the changing of bracing arrangements in the body extensions.

As modification work has already been included in certain overhead line refurbishment schemes, some designs and drawings already exist but the majority do not.

2 RECOMMENDATIONS

The level of incidence of reported member buckling has been very low. Therefore, there does not appear to be an urgent requirement to modify all body extensions in a blanket programme.

However, where an overhead line containing affected towers is being refurbished, body extension modifications should be included in the refurbishment scheme. In addition, where individual towers are identified for third party aerial installations the body extension modification shall be carried out prior to installation of aerials.