



Technical Bulletin

TB-0201 MDI 0047 updated requirements

Purpose

This technical bulletin provides an updated strength reduction factor (SRF) for use in overhead transmission mains design.

Background

MDI0047 amendment 0 was published in December 2014. This standard introduced requirements for limit state design and specified a SRF of 0.31 for wood poles and members under the strength limit state (refer to Clause 5.3.2 / Table 3).

Recent studies carried out by Primary Systems have identified that the SRF for wood poles and members may be increased to 0.4 while maintaining similar outcomes to designs under previous standards. It is recognised that due to the multitude of parameters involved it is not possible to maintain an identical outcome for every scenario. A SRF of 0.4 is considered to achieve a comparable outcome for the majority of scenarios while minimising any impact to safety or cost.

Actions

A strength reduction factor of 0.4 is to be used for the design of transmission wood poles and members under the strength limit state.

There is no change to the strength reduction factor of 0.17 for transmission wood poles and members under the serviceability limit state.

Implementation

Designs commenced after the release of this bulletin must meet the updated requirements.

Designs already commenced may use the new or old requirements; however designers are encouraged to adopt the new requirement as it is less onerous.

Impacted Standards

The contents of this technical bulletin will be included in the next update of the following standard(s):

- MDI0047 – Transmission overhead mains design