Government of India
Ministry of Railways
Research Designs & Standards Organisation
Manak Nagar, Lucknow – 226011

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मूल प्रति

INSTRUCTION NO. TI/IN/0008 Rev. 0

INSTRUCTIONS FOR USE OF COPPER CROSS FEEDERS AT SWITCHING STATIONS.

1. **Objective** : Use of copper cross feeder in place of aluminium cross feeder (spider) to improve the reliability of the system.

2. **Back Ground:** On 25 kV ac traction system, failures of 19/3.99 mm aluminum cross feeder due to industrial pollution, corrosion and bimetallic action etc. may take place thereby affecting the reliability of the system. Therefore, to avoid failures of cross feeders of aluminum conductor (Spider) and thereby to improve the reliability of the system only 37/2.25 mm, 150 mm^2 stranded copper conductor should be used as cross feeder. Aluminium conductor (Spider) wherever exists as cross feeder should be replaced with copper cross feeder.

3. The arrangement of copper cross feeders are indicated in the following drawings which should be followed:

i) ETI/OHE/G/05121 Sh. No.1 Rev C	General arrangement of connection to OHE by copper cross feeder (150).
ii) ETI/OHE/G/05122 Sh. No.1 Rev C	General arrangement of connection at switching station on double track section by copper cross feeder (150).
iii) ETI/OHE/G/05123 Sh. No.1 Rev C	General arrangement of connection at switching station on multiple track section by copper cross feeder (150).
iv) ETI/OHE/G/05121 Sh. No.3	General arrangement of connection to composite OHE by copper cross feeder .
v) ETI/OHE/G/05122 Sh. No.3	General arrangement of connection at switching station on double track section for composite OHE by copper cross feeder .
vi) ETI/OHE/G/05123 Sh. No.3	General arrangement of connection at switching station on multiple track section for composite OHE by copper cross feeder .

4. It should be ensured that the cross feeders are without any joint (splicing)in between.

5. **Agency for implementation .**

Railways and RE Project units.

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