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**SPECIAL MAINTENANCE INSTRUCTION (SMI) FOR
PROVISION OF INSULATED CADMIUM COPPED CATENARY
WIRE UNDER OVER-LINE STRUCTURES ON 25 kV A.C
TRACTION SYSTEM.**

1. **OBJECTIVE:** To protect Catenary wire under overline structures, from flashover damages due to fall of foreign material, electrocution of birds/monkeys etc. by providing insulated Cd. Cu catenary cable in place of bare Cd-Cu catenary wire.
2. **BACK GROUND:** On 25, kV a.c. traction system, failures of catenary under over line structures are being experienced due to earth faults caused by foreign material and electrocution of birds/monkeys etc. Various preventive measures such as provision of PVC sleeve, PVC tube, heat shrinkable tape etc. have been tried but did not last long.

Subsequently, Insulated Cadmium Catenary wire has been developed and extensively put on field trial in N. Rly. Based on the satisfactory performance of this Insulated Cadmium Catenary wire manufactured as per RDSO's specification No. ETI/OHE/75(4/95), it has been decided in the XVII MSG (TRD) meeting (para 6.2, item 5.2) that all Railways will provide the same under over line structures.

3. **PROCEDURE:** The arrangement/procedure for providing Insulated Cadmium Catenary wire is indicated in the sketch No. ETI/OHE/SK-570, enclosed herewith.

The length of insulated cadmium copper catenary wire shall be selected in such a manner that the insulated catenary shall remain projected minimum 2 meters on either side of the over line structure. After providing the insulated catenary cable, the length of droppers in the span shall be adjusted to ensure that the profile of contact wire remains the same or as designed. The catenary splice (RI 1090) to be provided for joining the insulated catenary and the conventional catenary wire shall be procured as per RDSO Spec. No. ETI/OHE/49 (9/95) A&C Slip No. 1 or the latest.

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4. **MATERIAL SPECIFICATION:** The insulated Cadmium Catenary wire shall be procured as per RDSO Spec. NO. ETI/OHE/75(4/95) with A&C Slip No. 1&2.

5. **APPROVED SUPPLIERS:**

1. M/s. NICCO Corporation, NICCO House, 1&2 Hare Street
Calcutta – 700 001.

Contact person:

1. Sh. A. W. Shrwty, Sr. V.P (Mkt.) Ph. 2485102
2. Sh. D. Singh, Dy. GM (MS) Fax: 2209443

2. M/s. Universal Cables Ltd., PO Birla Vikas, Satna 484 005
(MP)

Contact person:

1. Shri J.M. Gupta, President Marketing- Ph. 23561 to
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2. Shri. M. Gandhi, GM (Marketing) Fax: 07672 (25344)