In supersession of all previous policy guidelines on the subject, it has been decided to adopt the following policy for the use of 25 kV insulators on AC traction system based on Equivalent Salt Deposit Density (ESDD) test enumerated in RDSO’s SMI no. TI/MI/040, Rev (0) circulated vide RDSO’s letter no. TI/OHE/INSCOM/05 dated 05.04.2005 as an interim measure:

(a) For ESDD ≤ 0.3
   (i) Use of only composite insulators of 1050 mm CD for stone pelting menace areas with the approval of CEE as para(2) below
   (ii) Use of porcelain insulators of 1050 mm CD for other areas

(b) For ESDD > 0.3
   Use of composite insulators of 1600 mm CD in all the areas with the approval of CEE as para(3) below

2.0 Procurement of insulators for the areas as specified in para a(i) above shall be identified & cleared by Sr. DEE of the respective division with CEE’s approval.

3.0 Procurement of insulators for areas where ESDD is more than 0.3 as stated in para (b) above shall be personally approved by CEE of the zonal railways after conducting the ESDD test as per RDSO SMI mentioned above. Till such time 1600 mm CD composite insulators are developed, 1050 mm CD composite insulators are to be used in such areas.
4.0. In pursuance to Board’s letter No.2006/RE/161/21 dtd 03.03.2005, RDSO advised CR, WR, SR & ECoR vide its letter no. TI/OHE/INSCOM/GTSL/05 dted. 17/19.05.2005 to procure 500 nos. of 1600 mm CD (31 mm per kV) composite insulators for conducting trials in highly polluted areas. CEEs of CR, WR, SR & ECoR are accordingly advised to expedite installation of these insulators, if not already provided, and inform such locations to RDSO who shall prescribe a schedule of monitoring during AMW/POH and prescribe special test for few selected locations to check degradation with respect to environmental impact.

5.0. This issues with the approval of Board (ML).

(Sushil Kumar)
Director Elect. Engg. (PS)
Railway Board

Copy to: Sr.ED/TI/RDSO – It is advised to rigorously pursue trials of 1600 mm CD composite insulators on priority in CR, WR, SR & ECoR and submit the report to Board’s office.