No. TI/CIV/Ms/12

To,
The Chief Electrical Engineer,
i) Central Railway, 2nd Floor, Parcel Office Building, CST Mumbai - 400 001.
ii) Eastern Railway, Fairlie Place, Kolkata - 700 001.
iii) Northern Railway, Baroda House, New Delhi-110 001.
iv) South Central Railway, Railnilayam, Secunderabad -500 371.
v) South Eastern Railway, Garden Reach, Kolkata 700 043.
vi) Southern Railway, Park Town, Chennai-600003.
vii) Western Railway, Churchgate, Mumbai - 400 020.
viii) East Coast Rly, B-2, BDA Rental Colony, Chandshekharpur, Bhubaneswar 751016.
ix) East Central Railway, Hajipur (Bihar) 844 101.
x) North Central Railway, Block-A. Subedarganj Rly Station, Allahabad 211001.
xii) North Western Railway, Jaipur 302 006 (Rajasthan).
xii) South Western Railway, Hubli 580 023 (Karnataka).
iii) West Central Railway, Jabalpur 482 008 (MP).
xiv) South East Central Railway, Bilaspur 495004 (Chattisgarh).
xv) N.E.Railway, Gorakhpur 273001 (UP).
xvi) Northeast Frontier Railway, Mallgaon, Guwahati 781 011.

Sub: Guideline for OHE arrangements on TTC.

There has been an incident on 31.03.2012 of twisting of TTB (8.0 meter) at location No. 1332/21 in Bhandai Station yard of Jhansi Division of North Central Railway.

Triple Cantilever were erected on a RSJ type Drop Arm. The Drop Arm was erected on 8 meter TTB during April, 2011. TTC & Drop Arm were erected in connection with modification of Bhandal Station Yard for connecting new Railway track leading to “Udi” Station.

The Drop Arm erected with TTB was holding three OHE (one OHE of UP main line, another OHE of a crossover connecting UP Main line & DN Main line and Third OHE was of a turnout of UP loop).

In view of above incident, following Guidelines for OHE arrangement on TTC are issued:

(i) The OHE arrangements on TTC are made of 6" x 6" BFB or 8" x 6” RSJ type Drop Arm. 6"x6” BFB type Drop Arm is suitable for single Back to Back Bracket Assembly and 8"x6” RSJ drop arm is suitable for multiple back to back Bracket Assembly.

(ii) Triple Cantilever arrangement can be provided on single RSJ type Drop Arm at a distance of 6.5 meters from TTC upright.
(iii) Three Cantilever arrangement on single RSJ Drop Arm at the farthest distance on 8 meters Boom is found to be unsafe and unstable.

(iv) The Boom is found to be safe if 3 cantilever are provide on two Drop Arm.
(a) One Drop Arm provided at the midpoint of Boom (TTB) with one Cantilever and
(b) Another Drop Arm provide at farthest end of 8 meters Boom with two Cantilever arrangement.

3. Single or Double Cantilevers can be provided on single Drop Arm at the distance of 7.5 meters from Upright.

4. The OHE arrangement on the TTC is governed by RDSO Drawing No. ETI/C/0076 & ETI/C/0013/69.

5. As per RDSO Guideline, the Anchor span shall not be less than 54 meters [Para 5.5(vi) of ACTM, Volume-II, Part-II].

(Ranjit Srivastava)
Director (OHE-D)
For Director General(TII)

Copy to: The Secretary (Railway Electrification), Railway Board, Rail Bhavan, New Delhi- 110 001-for kind information.

24 MAY 2012