2001/Elect(G)/170/I Pt.

Chief Electrical Engineers,
All Indian Railways including NR,
CORE/Allahabad,
The Director General, (TI/Electrical Standards/PS & EMU), RDSO/ Lucknow

Sub: Inputs required for running trains at 150 kmph speed.

Ref: (i) Board's letter No. 2001/RE/170/I dated 13.03.2007,

The requirements of inputs pertaining to traction distribution for running trains at 150 kmph speed on existing tracks was circulated vide Board's letter under reference(i).

2.0 As per letter under reference (i) following technical requirements shall be met for running trains at 150 kmph:

(i) The drop bracket assembly bracket assembly as per drg.no. ETI/OHE/P/2366 along with steady arm as drg no. ETI/OHE/P/2390 to give a push up of 110 mm required for a speed of 150 kmph.

(ii) Cross type OHE to be modified on priority.

(iii) Increase in tension is not required.

(iv) The contact wire gradient contact wire gradient should be reduced from 3 mm per meter to 1 mm per meter and difference in contact wire gradient between two adjoining spans be reduced from 1.5 mm per meter to 0.5 mm per meter.

(v) Presing of contact wire should be reduced from 1.4 mm/meter to 0.8 mm/meter.

(vi) The condensing diameter of contact wire shall not be changed.

(vii) The flexible droppers for increasing current capacity are not required as there is adequate provision of C&G jumpers.

(viii) PTFE type short neutral section should be provided wherever required.

(ix) Retro-reflective number plates should be provided.

(x) The traction sub-stations should not be augmented for running only one train of high speed.

3.0 Railways must ensure that the adjustment of OHE shall have same provisions as mentioned in para 2.0 in following conditions as these adjustments will save large scale adjustments required later on to raise 150 kmph speed:

(i) At the time of replacement work of contact wire in existing main line OHE.

(ii) New construction work of OHE on main line.

4.0 This letter has been issued with approval of Board (ML).

(R.K.Jain)
Director Elect. Engg. (PS)