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No. C-D&D/T/42, Vol. II   **Date: As signed**

Sr. DEE/Sr. DME
Electrical/Diesel Loco Shed
All Zonal railways

Sub: Release Note of Software version 0211 for Push Pull operation in MICAS based VCU.
Ref: CR's letter no. ELSKYN.TECH.125C dt 18.04.24 and ELSKYN.Tech.125C/02 dt 18.05.24

1. In response to letter under reference above, the release note of software version 0211 for Push Pull operation in MICAS based VCU is as follows:

   a. Independent control of Compressor of master and slave loco to arrest the issue of MR overcharge in slave loco implemented.

   b. Parking brake speed modified to 2 KMPH to avoid any wheel skidding issue due to communication loss between 5-2 kmph speed.

   c. Disabling of Equivalent proportionate brake in case of OHE failure during RG in slave loco implemented which will arrest the issue of wheel skidding in slave loco.

   d. Activation of Hotel load converter of both Master and Slave loco implemented so that HOG can be made available in case Master loco's HOG fails. However, as the control of HOG command is not available in loco so it is to be ensured by escorting staff of Power Car that two HOG on same feeder shouldn't be switched ON at the same time.

   e. Indication of LSHO light activation on status feedback of Hotel Load Output Contactor has been implemented. Further issue of LSHO light not glowing during lamp test from CAB-1 has been corrected.

   f. Speed Interlock has been OR with ZNN switch so that if the locos are in push pull and if ZNN switch is disconnected due to loose connection then also Neutral Section Negotiation will happen.

   g. Auto recovery of WTB/FSK communication has been provided which means if there is communication loss then the slave loco will become ideal (panto lower) but if the communication gets established within 10 secs then Multi will again form without resetting the MCE. However, after communication recovery BPFA is to be acknowledgment in master loco.

   h. VCB closing timing between master and slave on pressing of BLDJ has been optimized. It cannot be reduced further as stuck ON/Stuck OFF spurious messages can appear.

   i. Logic of HLC not getting on in case of MR low has been removed as HLC doesn't have any EP contactors.

   j. Special logic for neutral section negotiation in trailing mode operation (Master loco main power off) has been implemented. However, it is to be noted that first the train is to be

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stopped then MR equalizer and FP pipe in front of driving cab of master loco needs to be connected through NRV and isolating cocks. After that normal ZPT and BLDJ operation is to be performed and whenever neutral section negotiation is to be done then ZNN is to be switched on after completion same is to be switched off. Further additional logic of SR interlock ha been provided so that traction is not allowed in slave loco if MR of master is low.

2. In addition to above it is to be noted that software has been developed on Windows platform. Thus, wherever required for DDS firmware of MVB module of Auxiliary and Traction Converter needs to be changed to TCN (as done for DPWCS/Energy Saving) for which necessary assistance maybe taken from standalone IGBT based Converter manufacturers.

3. The aforesaid software with release note may be downloaded from the below link: https://clw.indianrailways.gov.in/view_section.jsp?lang=0&id=0,295,329,493,495 (CLW→ Department → Electrical → C-D&D→ Download LOCO Software for GTO MICAS VCU)

Further the Performance/comments/feedback/issues on above software needs to be sent to this office on ceednd@clw.railnet.gov.in & dyceedd@clw.railnet.gov.in.

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(Pankaj Kumar)
Dy.CEE/D&D-I

Copy to:

Director/TPS/RDSO] For kind information & necessary review of above implemented Push Pull logic

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