

INDIAN RAILWAYS
CENTRE FOR DESIGN & DEVELOPMENT
CHITTARANJAN LOCOMOTIVE WORKS

PO: Chittaranjan, West Bengal. PIN: 713331
Fax: (+91) 341-2526153, Ph: (+91) 341-2525550



No. C-D&D/T/21, Vol. II

Date: 20.04.2024

M/s BHEL

Electronic Division,
P.B No. 2602, Mysore Road,
Bengaluru, Karnataka 560026

Sub: Regular Approval of s/w ver. 792 for IGBT SR, S/w ver 889.8 for IGBT Aux and S/w Ver 61 for TCN based VCU for M/s BHEL make.

Ref: M/s BHEL ref. No. PES/PS-CLW/CLW/140 dated 18.04.2023.

1.0 In response to your letter under reference above it has been decided that below mentioned software is hereby accorded for regular downloading in all locos at different electric/diesel loco shed equipped with M/s BHEL propulsion equipment.

2.0 The details of software version with modification details is tabulated below for reference:

SN	Subsystem	S/W ver	Improvement done
1	Traction Converter	792	a) Harmonic Current detection delay of 1 Sec added for operation as well. Earlier this delay was only for starting. b) Harmonic contactor status for generating stuck errors now generated from MVB signals. c) Wheel diameter correction calculation optimized. d) Lifesign monitoring delay for control cards increased to 1sec from 0.2sec. e) Voltage break detection logic optimized. f) Monitoring points added for subsystem isolation without background message.
2	Auxiliary Converter	889.8	a) LVPS failure logic due to FH error optimized b) Lifesign monitoring delay for control cards increased to 1sec from 0.2sec. c) Battery Voltage monitoring through software signals
3	Vehicle Control Unit	61	a) Auto brake line pressure limits for AFL changes to 5.3bar from 5.1. b) Filter disturbance logic optimized. c) VCU reset implemented for both passenger & freight locomotives. d) Background data for Subsystem isolation added.

In addition to above it is also requested that software for energy saving maybe provided at the earliest for necessary validation. Further DDU software should be released after merging the software for monitoring & recording of 43 critical signals and GUI implementation of Rectifier/Inverter health status on home screen of DDU, so that multiple downloading can be avoided by ZRs.

3.0 The aforesaid software with release note may be downloaded from the below link:

https://clw.indianrailways.gov.in/view_section.jsp?lang=0&id=0,295,329,493,496s

Further comments/feedback/issues if any may be sent to this office on ceednd@clw.railnet.gov.in & dyceedd@clw.railnet.gov.in.

[Signature]
20/04/2024
(Pankaj Kumar)
Dy. CEE/D&D-I

Copy to:

1. Sr. DEE/ELS, All Zonal railways
2. Sr. DEE/DLS, All Zonal railways

-- For kind information please
-- For kind information please

[Signature]
20/04/2024
Dy. CEE/D&D-I