

Mobility

Dy. CEE-D&D-I

Chittaranjan Locomotive Works Chittaranjan, West Bengal

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Your letter of

Our reference SMO/RS/Propulsion/Reliability Progress-III

Date 06.03.2024

Sub: Update on the closure on Observation and permission for trial software

Ref:

- 1. CLW Purchase Order no. 70221134100910 dated 10-JUL-23.
- 2. CLW Minutes of the Meeting held on 16.02.2024.

Dear Sir,

In line with the letter under Ref. 2), we have we have done progress on clauses 10.0, 11.0, 12.0, 17.0 - i, 17.0-ii, 17.0-vi and same is tested in ELS/LGD and ELS/BRC. The implementation details are in Annexure.

The joint notes between Siemens and ZR are attached as Annexures.

In line with joint notes and implementation, we would like to implement the solution in 10 locomotives each in ELS/BRC, ELS/LGD, ELS/BNDM, ELS/NKJ, ELS/TKD before release of formal SW version.

In view of the above, we request you to kindly accord the necessary permission for implementation at the earliest to have more feedback before final release.

Thanking you and assuring you our most careful attention, we remain.

For Siemens Ltd.

Arka Dey Project Manager

Annexure: Changes implemented. Joint Note of ELS/LGD

Copy to: CDE/CLW, PCEE/CLW, DSE/TPL-RDSO, ZR

Siemens Limited Management: Sunil Mathur Mobility India; Management: Gunjan Vakharia DLF Cyber Park, Phase III, Tower B, 10th Floor, Sector 20, Gurugram 122018, India

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Annexure

1. Message of DC-Link Voltage is not in range from AUX-1 is activating when ever AUX-1 was ramping down from Ventilation Level – 3 to Ventilation Level -1

Earlier frequency ramp down was 5 Hz/sec. To over come the above issue ramp down frequency was reduced to 1 Hz/sec only for AUX-1. Remaining both AUX-2 & AUX-3 has no change in ram down frequency i.e., 5Hz/sec.

2. Compressor contactors were not operating if Circuit breaker Aux interlock is failed.

For compressor contactor operation Circuit braker Aux contact feedback was considered earlier and now it is ignored and contactors will operate how ever a message will be display on DDU regarding the status of CB and should be physically ensure regarding the breaker tripping condition by user.

3. Throttle not responding and TCC PWI pulsing not enabling after Neutral section.

If VCB commanded to open by driver VCB reclosure is allowed only after 5 Sec's.

4. VCB closure in Traction or Regenerative MODE when angle transmitter is moved.

VCB closure is not allowed if angle transmitter is in MOTORING or BRAKING mode with POP UP message "Please Bring Throttle to 0 for VCB Clouser."

5. Speed increasing to 17 KMPH in shunting mode.

Regenerative brake enabled in shunting mode if speed is increasing beyond 15 KMPH.

- 6. <u>Diagnostic Messages added as below.</u>
 - a. If Feedback from VCB is missing "428: VCB: Temporary loss of VCB feedback".
 - b. If TCU-1 has not released VCB loop "424 VCB: VCB loop not released by TCU-1".
 - c. If TCU-2 has not released VCB loop "425 VCB: VCB loop not released by TCU-2".

7. Energy Saving Mode.

It has been reported from BNDM that Energy saving mode is exiting in version 2.05 this is due to trafo oil pressure monitoring which has been ignored in 2.05B and tested.

SOUTH CENTRAL RAILWAY

No.E2/38C

E2 section/ELS/LGD Date: 16/02/2024

JOINT NOTE BETWEEN ELS/LGD AND SIEMENS ON 16/02/2024

Loco No:	20261	T	
	39261	D.O.C:	31/10/2023
D.O.F	24/01/2024	Date of attention	30/1/2024
Loco attended at	LGD	Make	Siemens
Date arrived Shed/HYD	30/01/2024	Loco given ready	30/01/2024

LP report/Log book	MCP's intermittently working continuously
remarks	
Messages logged in	Nill
Registration	
Actions taken by the firm/shed	New software patch has been uploaded on both CCU after that Loco testing done found working normal and given loco fit for service.
Responsibility	Siemens Firm
Remarks	Firm is advised to submit the detailed investigation report.

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Service Engineer Siemens

Mujeebulla Khan

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SOUTH CENTRAL RAILWAY

No.E2/38C

E2 section/ELS/LGD Date: 05/03/2024

JOINT NOTE BETWEEN ELS/LGD AND SIEMENS

Loco No	39317	DOC:	29.02.2024		
Date of Failure	02.03.24	Dt arrival to shed	04.03.2024		
Date given Ready	05/03/2024	Loco attended at	ELS/LGD		
LP Remarks	Panto lowered with message of vcb struck in on position				
	Some times TE comes to zero				
Faults Stored	1.VCB: Switch-or	1.VCB: Switch-on acknowledgement fault			
	2. TCC1 Cutout re	2. TCC1 Cutout requested by ICU 4QC			
	3. TCC2 Cutout r	3. TCC2 Cutout requested by ICU 4QC			
	4.VCB: TCU requested help from CCU to open the VCB				
Observations/ Attentions	As per the firm all the above problems are mainly due to the synchronization issue between PWI pulsing with traction motor stator flux intermittently at higher speeds. All these problems will be addressed in the ensuing TCU software release. Above problems are observed in all Siemens propulsion locos. As an interim measure a trial software patch has been issued, duly incorporating 5 secs delay for reclosure of VCB after opening it. This software has been provided in loco no. 39266 and service engineer accompanied the loco from 24-02-2024 to 26-02-2024. It has been observed that loco functionality was normal. The same patch has been provided in locos 39302 & 39317.				
Responsibility	Siemens				
	Siemens is working on optimisation of above problems.				

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Siemens firm Representative

S. Raketh King

SSE/E2/ELS/LGD

ADEE-II/ELS/LGD

note: Firm is adolded to inventgen the tailure and to take suitable demedial measures at the earliest.