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सत्यमेव जयते

भारत सरकार — रेल मंत्रालय
अनुसंधान अभिकल्प और मानक संगठन
लखनऊ — 226011

Government of India - Ministry of Railways
Research Designs & Standards
Organization, LUCKNOW - 226011

Om Prakash Kesari
Principal Executive Director Standards Electrical

D.O.No.EL.8.5.10.1

Dt:03.05.2019

Dear Shri Ghanshyam Singh ji,

Sub: PCDO for the month of April, 2019.

1.0 HIGHLIGHTS

- 1.1 Technical Circular No. RDSO/2019/EL/TC/0151, Rev.'0' dated 24.04.2019 for proper measurement of 'C' Clearance in MSU assembly of 6FRA6068 Traction motors in WAG9/WAP7 class of locomotives had been prepared and issued to all concerned vide letter No. EL/1.3.10/3 dated 24.04.2019.
- 1.2 To implement the feature of counter in VCD functionality of MPCS version 3, Amendment No. 3 of TC-119, Rev.1 amends the clause no. 6.2 'Main screen or default screen' given on page number 66/85 And 'Default screen in single Loco' and 'Default screen for multi consist locomotives' given on page no. 67/85 on technical circular number RDSO/2012/EL/TC/119 Rev-1 dated 20.3.2013 had been issued vide letter no. EL/4.2.15/Gen dated 30.04.2019.
- 1.3 Specification for interoperable Distributed Power Wireless Control System(DPWCS) for electric locomotives bearing no. RDSO/2019/EL/SPEC/0142(Rev.0) was issued on 03.04.2019 & circulated to Railways, manufacturers of DPWCS and manufacturer of Radio equipment through email on 04.04.2019. It has also been posted on RDSO website for downloading the same.
- 1.4 Specification No. RDSO/2017/EL/SPEC/0134(Rev.0) of twin beam LED head light for Electric Locomotives has been revised on 23.04.2019. Final Revised specification as

Recd on 03/5/19

Specification No. RDSO/2017/EL/SPEC/0134(Rev.1) has been uploaded on RDSO's website on 23.04.2019.

2.0 RELIABILITY IMPROVEMENT

- 2.1 MOM held at RDSO on 09.04.19 with ABB on reliability of propulsion system of 3-phase locomotives had been issued vide letter no. EL/11.5.5/21 dated 24.04.19.
- 2.2 A workshop on all steel lock nut held on 28.03.2019 at ELS/CNB and deliberated on 29.03.2019 in meeting at RDSO with representative of loco sheds, CLW,DLW and DMW. During meeting decided for single use of nut of size M16, M20 & M24. Minutes of meeting has been issued to railways vide this office letter No. EL/3.1.35/2 dated 02.04.2019.
- 2.3 Meeting held on 04.04.2019 at Electric Loco Shed, Ghaziabad along with OEMs of ESMON & Railways regarding performance of ESMON and compliance of decision taken in meeting on 09.01.2019 and MOM was issued vide letter no. EL/2.2.9/10,dated 09/04/2019.
- 2.4 Meeting on performance review of Cable Head Termination system & HV bushing with manufacturers and Zonal Railways was convened at RDSO, Lucknow on 26.04.2019. MOM was issued vide letter no. EL/3.2.21 dated 26.04.2019.

3.0 DEVELOPMENTAL ACTIVITIES

- 3.1 The documents of on line fresh vendor registration of 3 phase brake system applied by M/s. Hind Rectifier has been scrutinized by this office. The deficiencies as noticed has been informed to M/s. Hind Rectifier for clarification vide RDSO letter no. EL/3.2.19/3 phase (Hind) dated 29.04.2019.
- 3.2 The design & drawing /BOM of M/s. Escorts Ltd, on fresh registration have been scrutinized by this office. Firm has been asked to clarify on the points raised during scrutiny. A letter in this regard issued to firm vide RDSO letter no EL/3.2.19/3 Phase (Escort) dated 15.04.19.
- 3.3 As per CEE/SCR letter the information regarding foot operated pedal switches layout in conventional Electric locomotive has been informed to PCEE vide RDSO letter no. EL/3.2.19/G dated 05.04.19.

- 3.4 Re-oscillation trial of WAG-11, where isolated peaks were observed during Long Confirmatory Run with worn wheel profile at 105 kmph and 110 kmph with new wheel profile had been issued vide letter no. EL/11.5.5/20 dated 12.04.19.
- 3.5 Re-oscillation trials of WAG12 were conducted from 10.04.19 to 12.04.19. Comments on draft trial report were given vide letter no. EL/3.1.35/4/WAG12 dated 29.04.19. Final report shall be issued by Testing Directorate.
- 3.6 Online application No. 506 dated 28.01.2019 submitted by M/s Avadh Rail Infra Ltd., Haridwar (Unit-II) for vendor registration for manufacturing and supply of Spheriblocs for three phase electric locomotives has been scrutinized and accepted for Capability cum capacity assessment of the firm vide this office letter No EL/3.1.35/12 (SB) dated 12.04.2019.
- 3.7 Routine test of spheriblocs for 3-phase electric locomotive manufactured by M/s Prag Industries (India) Pvt., Lucknow has been done as per ABB drawing No. IA 016-00269 in reference to Central Railway's PO No. 27173274104661 dated 30.10.2017. Vide this office letter No. EL/3.1.35/12 (Prag) dated 12.04.2019 clearance has been given for use.
- 3.8 Clearance of Design documents of different types of cables of M/s Thermo Cable Ltd. submitted by M/s BHEL related to propulsion and other equipment for IGBT based 3-phase drive 25 kV AC EMU have been communicated to PS & EMU Dte. vide note no: EL/8.1.25.1/ BHEL/3phase EMU date: 24.04.2019.
- 3.9 Comments on cables to be supplied by M/s Medha for 25 kV AC Microprocessor controlled IGBT based 3-phase propulsion equipment for Under-slung MEMUs have been communicated to PS & EMU Dte. vide note no: EL/8.1.25.1/Medha/Under Slung MEMU date: 04.04.2019.
- 3.10 Meeting held on 04.04.2019 at Electric Loco Shed, Ghaziabad along with CRIS & BEL regarding Real-Time Train Information System (RTIS).

4.0 PROTOTYPE TESTING/QUALITY AUDIT

- 4.1 The type testing of compressor model RR 1750 developed by M/s. AIML/Noida has been carried out as per RDSO specification. The type test report including FAD has been scrutinized by this office and found to be in order. Firm has been advised vide RDSO letter no EL/3.2.153 phase (AIML) dated 05.04.2019.

5.0 SPECIFICATION/STR:

- 5.1 A review meeting on High Reach Pantograph was held on 11.04.2019, at RDSO with M/s. Schunk Metal & Carbon Pvt. Ltd. The minutes of meeting has been issued vide RDSO letter no. EL/2.2.1/ High Reach dated 25.04.2019. The minutes of meeting has been uploaded on website.
- 5.2 A reliability issues meeting on E 70 brake system provided in 3 phase electric locomotive was held at ELS/GZB on 24th April. The minutes of meeting is under finalization and approval. The Minutes of meeting is to be released after finalization.
- 5.3 A meeting had been organized on the revised draft STR no. RDSO/2011/EL/STR/0076 Rev 01 dated Mar 19 for manufacture and supply of computer/micro processor controlled brake system for 3 phase locomotive. The reasoned document and final draft STR has been uploaded on RDSO website for further comments and suggestions from ZRs, Pus and vendors vide RDSO letter no EL/3.2.19/3-phase dated 10.04.2019.
- 5.4 A meeting had been organized on the revised draft STR at RDSO and the final revised draft STR for manufacturing of pantograph for electric locomotive no RDSO/2008/EL/STR/0049 Rev 01 has been uploaded on RDSO website for comments and suggestions from ZRs, Pus and vendors for a period of 15 days vide RDSO letter no EL/2.2.1/high reach dated 12.04.2019.

6.0 OTHER ITEMS

- 6.1 Document No.NRD0000572141,Rev 1 for 'Shock & Vibration measurement of traction motor at train level' submitted by M/s Alstom for WAG12 locomotive had been examined. Comments had been given vide this office note No.EL/3.2.182(Madhepura) dated 09.04.2019.
- 6.2 M/s BHEL's Routine test Schedule Document No.TM20207, rev.03 for TM type IM3302AZ had been approved, for carrying out routine tests vide this office note No.EL/3.2.182/OTM/163/BHEL dated 10.04.2019 and communicated to concerned group.
- 6.3 Design document of Traction Motor document no. CG/TM/C1026/MEMU/DD/01_R00 dated 06.03.2019 submitted by M/s CG Power and Industrial Solutions Ltd. Mandideep, Bhopal had been examined.

Comments had been given vide Electrical Dte.'s note no. EL/3.2.182 (MEMU)/CGL dated 22.04.2019 and communicated to concerned group.

- 6.4 Comments on shock and vibration of traction motor documents no. NRD0000572141 for WAG12 had been issued vide letter no. EL/3.1.35/24 dated 11.04.19.
- 6.5 Design comments on Driver Training Manual Rev. 3 for WAG12 locomotive had been issued vide letter no. EL/3.1.35/24 dated 16.04.19.

with regards,


Yours sincerely,

 03.5.19
(Om Prakash Kesari)

**Shri Ghanshyam Singh,
Member Traction,
Railway Board, Rail Bhavan,
New Delhi-110 001.**

Copy for kind information to-

Additional Member (Electrical), Railway Board, Rail Bhawan, New Delhi.

 03.5.19
(Om Prakash Kesari)
For Director General/Electrical

Status of un-modified motor support in WAP7 & WAG9/9H three phase locomotives

Rly	Shed	TM location	WAP7	WAG9H	Total no. of bogies	Action plan	PDC
CR	AQ	1,2	28	214	242	158 bogies have been modified by M/s Ashika commercial pvt ltd Kolkata. 84 bogies yet to be modified.	Dec'19
		3	16	226	242	For TM 3 position not being changed.	
ECR	GMO	1&2	0	198	198	Tender awarded to M/s. Ved, Kanpur. Work started in Jan.2018. 138 bogies have been modified.	Dec'19
		3	0	49	49	All bogies have been modified	
NR	GZB	ALL	143	0	143	56 bogies modified M/s. Ved, Kanpur. M/s	Dec'19
SR	RPM	1 & 2	52	0	52	50 bogies modified by M/s Ved Kanpur.	June'19
		3	86	0	86	77 bogies modified.	
SCR	LGD	1&2	68	164	232	230 bogies have been modified by M/s. Ved, Kanpur.	June'19
		3	84	206	290	Balance 240 bogies. Modification work to be done during POH. But not being done by POH shops.	
SCR	KZJ	3	0	9	9	9 bogies Yet to be modified	Dec.'19
SER	TATA	3	0	70	70	21 no. bogies have been modified by M/s Ved, Kanpur. For 49 bogies, retendering under progress.	Dec.'19
WCR	TKD	1, 2 & 3	39	77	116	97 bogies have been modified by M/s M/s. Anup Malleables, Jharkhand. 19 bogies yet to be modified.	Oct'19
		3	8	12	20	For TM 3 position, 15 bogies modified.	June'19

Note: As informed by Sr. DEEs all modified bogies in the following sheds:

KYN, HWH, WAT, LDH, CNB, BRC, BSL, ED, BNDM, SRC, ET, NKJ, BIA

Annexure-II

Status of modified/unmodified brake lever of WAG-9/9H locomotive as per MS 455 issued on Dec'16

SN	Shed	No. of WAG-9/9H locos	Modified with TBU/PBU	Un-Modified with TBU/PBU	Converted to conventional rigging
1	BSL	16	15	01	0
2	AQ	158	46	112	0
3	KYN	69	16	53	0
4	GMO	177	0	177	0
5	WAT	140	13.5	125.5	1
6	LDH	51	22	0	29
7	CNB	42	9	3	30
8	LGD	104	27	77	0
9	KZJ +GY(D)	51	27	10	14
10	TATA	152	1	151	0
11	BIA	102	31	69	2
12	TKD	103	79	2	22
13	NKJ	29	11	14	4
14	BNDM	41	18	19	4
Total		1230	306.5	822.5	101