

संजीव स्वरूप
प्रधान कार्यकारी निदेशक मानक विद्युत

Sanjiv Swarup

Principal Executive Director Stds. Electrical



सत्यमेव जयते

भारत सरकार – रेल मंत्रालय
अनुसंधान अभिकल्प और मानक संगठन

मानक नगर, लखनऊ – 226011

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

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D.O.No.EL.8.5.10.1

Dt: 01.06.2020

Dear Sri Tiwari ji,

Sub: PCDO for the month of May, 2020.

1.0 HIGHLIGHTS

Nil

2.0 RELIABILITY IMPROVEMENT

Nil

3.0 DEVELOPMENTAL ACTIVITIES

- 3.1 Railway Board sanction through CCRS for Introduction of new WAG9HH class of Locomotive on IR railway system for use by Zonal Railways at maximum speed up to 100 kmph has been processed vide RDSO letter no. EL/3.1.35/4/WAG9HH dated 29.04.2020.
- 3.2 Railway Board sanction through CCRS for Introduction of new WAG12B class of Locomotive on IR Railway system for use by Zonal Railways at maximum speed up to 120 kmph has been processed vide RDSO letter no. EL/3.1.35/4/WAG12B dated 05.05.2020.
- 3.3 Development of End of Train Telemetry(EoTT)
- (i) Design documents of M/s Signotron, Kolkata for End of Train Telemetry (EoTT) received through email dated 15.04.2020, 16.04.2020 & 26.04.2020 had been examined. Comments have been communicated to firm vide letter no. No. EL/4.2.15/EoTT/Signotron dated 05.05.2020.
- (ii) Design documents of M/s AAL, Noida for End of Train Telemetry (EoTT) received through email dated 02.05.2020 had been examined. Comments have been communicated to firm vide letter no. No. EL/4.2.15/EoTT/AAL dated 11.05.2020.
- 3.4 The Draft Speed Certificate for conducting the Operational Trials of Long Haul (three/two rakes amalgamated into one) & Push-Pull Freight Train with Electric and Diesel Locomotives fitted with DPWCS (Distributed Power Wireless Control System) on Manuguru (MUGR) - Bhadrachalam Road(BDCR)- Dornakal (DKJ) Section of South Central Railway has been examined & comments furnished to MP vide note no. EL/3.1.28, dated 19.05.2020.

- 3.5 Deficiencies in design document and drawing for fresh registration of High Reach Pantograph for electric locomotive has been advised to M/s CRRC Zhuzhou Locomotive Co. Ltd., vide RDSO letter no. EL/2.2.1/High Reach/CRRC dated. 13.05.2020.
- 3.6 Deficiencies in design document and drawing and Bill of Material for fresh registration of High Reach Pantograph for electric locomotive has been advised to M/s River Engineering Pvt. Ltd. Greater Noida, vide RDSO letter no. EL/2.2.1/High Reach/River dated. 13.05.2020.
- 3.7 RDSO letter no. EL/2.2.1/High Reach dated 14.05.2020 was issued wherein all the three firms i.e. M/s Schunk, M/s FTRTL and M/s Contransys have been advised to offer Pantographs with revised design to resolve the issue of sparking with High Reach Pantograph in Knee Leading position (Rear Panto) being experienced in High Rise OHE sections. Meanwhile, the ZRs/PUs have been advised to put on hold on procurement of High Reach Pantographs as per RDSO spec no. RDSO/2007/EL/SPEC/0054, Rev.2 until the issue gets resolved. Also, the ZRs/PUs have been advised to provide High Reach Pantograph at both the locations on sufficient number of locos and work trains with Knee Trailing position.

4.0 SPECIFICATION/STR

- 4.1 Functional Requirement Specification (FRS) has been prepared and uploaded in RDSO website for Third Party Audit and Certification of the modification carried out in software & hardware of WAP5/WAP7 locomotives for safe operation in push-pull mode.
- 4.2 In compliance to Railway Board's decision on recommendations of 39th MSG, the draft Functional Requirement Specification (FRS) titled as "Functional requirement specification for speed interface unit for 3-phase Electric Locomotives" has been prepared & uploaded on RDSO website for suggestion/comments vide letter no. EL/2.2.9/10, dtd 13/05/2020.
- 4.3 As per MOM held at Railway Board on 07.02.2020 regarding OCU Blower & Impeller for 3 Phase Electric Locomotive, the RDSO specification for 'Oil cooling unit with Casing for Transformer/Converter of Three Phase Locomotive' bearing no: RDSO/2016/EL/SPEC/0123 Rev. '1' has been withdrawn and specification no: RDSO/2016/EL/SPEC/0123 Rev. '0' has been restored/introduced w.e.f. from 21.05.2020 vide letter no: EL/3.2.176/2 dated 21.05.2020.

5.0 PROTOTYPE TESTING/QUALITY AUDIT

Nil

6.0 OTHER ITEMS

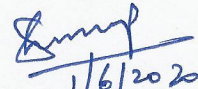
- 6.1 M/s Zhuzhou CRRC, China has submitted revised Type test Report No. TEC-KME-TTRE-S001-02 along with pending design documents through PS & EMU Directorate vide note EL/MRS/3-phase/Zhuzhou CRRC-TEC dated 09.03.2020 for traction motor type YQ-190-28 for Kolkata Metro project. After scrutiny the submitted documents, firm has been advised the shortcomings through PS & EMU Directorate vide Electrical Directorate note no. EL/3.2.182/K. Metro/Zhuzhou dated 14.05.2020.

- 6.2 Submitted design documents of Traction Motor of M/s CG Power for 25 KV AC microprocessor controlled IGBT based 3-Phase propulsion and equipment through PS & EMU Dte. note no. EL/1.3.16.7/On Board MEMU/CGL dated 3.12.2019 has been examined in reference to RDSO specification No. RDSO/PE/SPEC/EMU/0096-2008(Rev.4) of Dec' 2009 along with ICF annexure ICF/EMU/0096-01(Rev. 0). Comments have been communicated to PS & EMU Directorate vide Electrical Directorate note no. No. EL/3.2.182/On Board MEMU/CGL dated 20.05.2020.
- 6.3 SKF Technologies (India) Pvt. Limited vide their letter no. nill dated 06.04.2020 requested RDSO for change of name of firm from SKF Technologies (India) Pvt. Limited to Lincoln Helios (India) Limited. Documents have been examined and firm was requested to submit the required details /documents as per the ISO work instruction vide letter no. EL/2.2.13/SKF/NU2236 dated 04.05.2020.
- 6.4 Type test clearance for Traction Inverter and Filter Reactor to be supplied by M/s CRRC Zhuzhou for Kolkata Metro has been given vide RDSO note no. EL/11.5.5/1/KM/Zhuzhou dated 19.05.2020.

Warm Regards'


Encl: Annexure I ,II & III

Yours sincerely,


1/6/2020
(Sanjiv Swarup)

**Shri Rajesh Tiwari,
Member Traction,
Railway Board, Rail Bhavan,
New Delhi - 110 001**

Copy for kind information to-
Additional Member (Electrical), Railway Board, Rail Bhawan, New Delhi.


1/6/2020
(Sanjiv Swarup)
Pr.Exe.Dir.Stds. Electrical

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

Position on: 25.05.2020

Rly	Shed	TM location	WAP7	WAG9H	Total no. of bogies	Balance to be modified	PDC
CR	AQ	1,2	28	204	232	27	Jun'20
		3	30	257	287	209	
	BSL	1,2	0	0	0	0	Completed in all locos
		3	0	0	0	0	
	KYN	1,2	0	0	0	Nil	June'20
		3	0	96	96	96	
		3	0	49	49	0	
NR	GZB	1,2	143	0	143	0	Completed in all locos
		3	159	0	159	0	
SCR	LGD	1,2	68	164	232	0	NA
		3	84	206	290	154	
	KZJ	1,2	0	0	0	Nil	June.' 20
		3	0	99	198	26	
SER	TATA	1,2	0	0	0	Nil	June.'20
		3	0	49	44	05	

Note: Following sheds have already modified motor support in all locations of bogies.

HWH, WAT, LDH, CNB, BRC, ED, BNDM, SRC, ET, NKJ, BIA, RPM, TKD, GMO, BSL, GZB.

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	29	13	0	13
2	AQ	155	71 _(22TBU/PBU+41BL)	84	11
3	KYN	69	16	53	0
4	GMO	177	0	177	0
5	WAT	150	14.5	113.5	15
6	LDH	129	22	0	107
7	CNB	79	12	0	67
8	LGD	130 ₍₈₉₊₄₁₎	28	61	41 _(37-WAG9H; 4-WAG9)
9	KZJ	99	38	14	45
10	TATA	133	0	133	20
11	BIA	128	77.5	29.5	21
12	TKD	103	82	0	21
13	NKJ	63	26	14	23
14	BNDM	19	0	19	19
Total		1463	400	698	403

Annexure-III

POPULATION OF HIGH REACH PANTOGRAPH (UPTO MAY'2020)

POPULATION OF HIGH RISELY PARTS OF CR. 11 (CR. 11)																					
RLY	Shed	Rev.1										Rev.2							Rev 2 Total	Total Shed wise (Rev1+2)	
		WAG-5	WAG-7	WAG-9	WAP-5	WAP-7	WAP-1	WAP-4	Shop Floor	Rev 1 Total	WAG-5	WAG-7	WAG-9	WAP-5	WAP7	WAP-1	WAP-4	WCA M-3			WCAG-Shop 1 Floor
CR	AQ	0	1	6	0	0	0	0	9	16	0	0	38	0	3	0	0	0	6	47	63
CR	KYN	0	0	0	0	0	0	0	0	0	0	1	24	0	0	0	0	1	0	27	27
CR	BSL	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	1	14	14
NR	LDH	0	6	0	0	0	0	0	3	9	0	1	36	0	0	0	0	0	2	39	48
NR	GZB	0	0	0	0	0	0	0	0	0	0	0	0	36	3	0	0	0	1	40	40
NR	KUGY	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1
NCR	JHS	1	15	0	0	0	0	0	0	16	0	4	0	0	0	0	0	0	0	4	20
NCR	CNB	0	5	0	0	0	0	0	2	7	0	5	38	0	0	0	0	0	11	54	61
ER	ASN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	HWH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ECR	GMO	0	0	0	0	0	0	0	0	0	0	0	33	0	0	0	0	0	0	33	33
ECR	MGS	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	5
ECOR	ANGL	0	0	0	0	0	0	0	13	13	0	2	0	0	0	0	0	0	0	2	15
ECOR	VSKP	0	0	0	0	0	0	0	4	4	0	0	12	0	0	0	0	0	2	14	18
SCR	KZJ	0	0	3	0	0	0	0	1	4	0	2	35	0	0	0	0	0	2	39	43
SCR	LGD	0	0	7	0	0	0	0	3	10	0	0	37	0	1	0	0	0	0	38	48
SCR	BZA	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	8	8
SER	BKSC	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	16	16
SER	BNDM	0	0	9	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	9	9
SER	SRC	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	5	12	12
SER	TATA	0	3	7	0	1	0	0	4	15	0	1	12	0	0	0	0	0	0	13	28
SER	ROU	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	27	27
SECR	BIA	0	0	0	0	1	0	15	14	30	0	0	2	0	5	0	0	0	0	7	37
SR	AJJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SR	ED	0	3	0	0	0	0	0	0	3	0	4	0	0	0	0	0	0	0	4	7
SR	RPM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WCR	ET	2	0	0	0	0	0	0	5	7	0	0	0	0	0	0	0	0	0	7	17
WCR	NKJ	0	0	0	0	0	0	0	0	0	0	10	6	0	0	0	0	0	1	17	17
WCR	TKD	0	0	0	0	0	0	0	2	2	0	0	41	0	7	0	0	0	7	55	57
WR	BL	0	0	0	0	0	0	0	0	0	1	52	0	0	0	0	4	0	0	57	57
WR	BRC	0	0	0	0	0	0	0	0	0	0	0	0	51	82	0	9	0	5	147	147
IR	TOTAL	3	34	47	0	2	0	0	60	146	1	91	370	87	108	0	13	1	47	719	865