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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

Date: 05.06.2018

Dear Shri Ghanshyam Singh ji,

Subject: PCDO for the month of May, 2018.

1.0 HIGHLIGHTS

- 1.1 Open E-Tender No. RDSO-ELECT-2017-18-01 for “Design, development, supply, erection, testing and commissioning of Re-generative Braking in WAG7 locomotives at POH Workshop, Charbagh, Lucknow, Quantity= 01 locomotive” opened on 22.03.2018 has been finalized and Letter of Acceptance(LOA) has been issued to M/s Medha Servo Drives Pvt Ltd, Hyderabad on 29.05.2018.
- 1.2 Testing of WAG12 locomotives, no. 60001 had been conducted at M/s. MELPL Madhepura from 16th to 17th May 2018. Vide letter no. EL/3.1.35/24 dated 21.05.18, joint note of inspection and status of punch was issued.
- 1.3 Vide letter no. EL/3.1.35/24 dated 24.05.18, MOM held at RDSO on 24.05.18 regarding maintenance manual of WAG12 locomotive was issued.
- 1.4 A modification sheet No. RDSO/2017/EL/MS/0469, Rev. ‘0’ for providing cab AC unit in Electric Locomotives has been prepared & issued to all zonal Railways on 08.05.2018 vide this office letter No. EL/3.1.10/2.
- 1.5 Special Maintenance Instruction No. RDSO/2007/EL/SMI/0251, Rev.‘1’, has been revised and the revised SMI No. RDSO/2007/EL/SMI/0251,Rev. ‘2’ for Maintenance of brake hangers for WAG 9/9H Electric Locomotives fitted with TBU/PBU brake rigging arrangement has been issued to Railways vide this office letter No. EL/3.2.19/3-phase(TBU) dated 31.05.2018.

- 1.6 Technical Circular No. RDSO/2018/EL/TC/0147 (Rev '0') dated 29.05.2018 for Testing of Carbon Brush Block properties from finished carbon brush of Hitachi Traction motors type HS 15250 A had been issued vide letter number EL/2.2.70 dated 29.05.2018.
- 1.7 Specification for Oil Cooling Unit with Casing for Transformer/Converter of Three Phase Locomotives bearing no: RDSO/2016/EL/SPEC, Rev '1' issued on date 04/05/2018 and uploaded on RDSO website use of Railways and manufacturers.

2.0 RELIABILITY IMPROVEMENT

- 2.1 Vide letter no. EL/11.5.5/5 dtd. 08.05.18, MOM on reliability improvement of HOG held at HQ/WR had been issued to Railways and suppliers.
- 2.2 Vide letter no. EL/11.5.5/5 dtd. 07.05.18, MOM on reliability improvement of IGBT & GTO based Power converter, Auxiliary converter and VCU held at ELS/KYN had been issued to Railways and suppliers.
- 2.3 Vide letter no. EL/5.5.5/5 dtd. 10.05.18, MOM on reliability of traction converter and Auxiliary converter of 3-phase locomotives held at RDSO/LKO was issued to Railways and M/s. CGPISL.
- 2.4 A meeting was held at RDSO on 30.05.2018 with firms, CLW and Railways to review the performance of axle box bearing (CRU-150) provided in WAP7/WAG/9 Electric locomotives.
- 2.5 M/s BHEL, Bhopal had been visited from 02.05.2018 to 04.05.2018 for examination of the reported problem of abnormal sound in NDE side FAG make bearing of traction motor type 6FRA6068. After detailed exercise of assembly & disassembly of 6FRA6068 traction motor and conduction of noise test with FAG & SKF bearing, detailed instructions had been issued to BHEL, Bhopal vide letter number EL/2.2.13 dated 24.05.2018.
- 2.6 Performance review meeting on Micro Processor based Fault Diagnostic System(MPCS) had been conducted with M/s Medha& Zonal Railways at RDSO, Lucknow on 30.05.2018. Minutes of Meeting will be issued by 15.06.2018.
- 2.7 Performance review meeting on bearings of 3-phase traction motors had been conducted with Bearing manufacturers, Zonal Railways, CLW & RDSO on 30.05.2018 at RDSO, Lucknow. Minutes of Meeting will be issued by 15.06.2018.
- 2.8 The minutes of meeting related to brake system of 3 phase locomotive has been issued vide RDSO letter no EL/3.2.19/ 3 Phase dated 08.05.2018. The minutes have been circulated to railways and OEM.

3.0 PROTOTYPE TESTING/QUALITY AUDIT

- 3.1 Based on the test results, prototype clearance of four TM Type 2141C of M/s CGL having serial Nos.2179705-233, 2179705-234, 2179705-235, 2179705-236 for 8 Wheeler DETC against Railway Board's P.O No.RE(S)/11/2015/0001/7/30665 dated 12.07.2016 was accorded vide Note No.EL/3.2.182(TI/OHE/TENDER) dated 01.05.2018.

4.0 SPECIFICATION/STR

- 4.1 Vide letter no. EL/3.1.35/32 dated 14.05.18, draft specification and standard for 9000 HP locomotive, specification no. RDSO/2010/EL/SPEC/0108 (Rev.2) had been sent to Railway Board for approval.
- 4.2 The draft technical specification no ELRS/SPEC/SIV/XXXX/ Rev 0 for 2 x 130 KVA SIV for conventional locomotive has been uploaded in RDSO website for comments from Zonal railways /CLW/DLW/DMW & industries. This has been uploaded vide RDSO letter no EL/1.2.9.1 dated 30.05.2018.
- 4.3 Draft Specification for Microprocessor based Electronic speed cum Energy monitoring system for Electric Locomotives bearing no: ELRS/SPEC/SPM/0002 Rev '4' has been uploaded on RDSO website for comments/suggestion of Railways, Prospective vendors and OEM vide letter no: EL/2.2.9/10 dated 22/05/2018.

5.0 DEVELOPMENTAL ACTIVITIES

- 5.1 Type test on prototype unit of modified AS-Peri cards of M/s. ARC for working with IGBT type speed sensors in GTO locomotives had been completed satisfactorily and clearance given to firm vide letter no. EL/11.5.5/1 dated 03.05.18.
- 5.2 Vide letter no. EL/3.1.35/Misc. dated 07.05.18, MOM held at RDSO on 07.05.18 to discuss possibilities of up gradation of WAP5 locomotives from 4000 kW to 4500 kW was issued.
- 5.3 Quality Audit of M/s National Engineering Industries Ltd., Khatipura road, Jaipur, Rajasthan-302 006 for manufacture & supply of CRU-150 type of axle box bearing (NEI No. RB-5080D) used in WAP7/WAG/9 Electric locomotives has been conducted on 18.05.2018 and 19.05.2018.

- 5.4 Endurance test of high reach pantograph of M/s. Faiveley transport Rail technologies India Limited is under progress in their works premises.
- 5.5 The STR verification & capability assessment of M/s Pullman Engineering / Kolkata has been carried out at firm's works premises against online application for registration of High reach pantograph. The capability assessment report scrutinized and found that firm is not capable for development of High reach pantograph.

6.0 OTHER ITEMS:

- 6.1 Design document no. TME/TECH/2018/1001 Rev.0 dated 16.03.2018 consisting of technical data sheet, routine test schedule, type & special test schedule, Quality Assurance Plan, Characteristic Curve & List of drawing etc. for Three Phase Electrics for AC MEMUs submitted by M/s BHEL through PS & EMU Dte. Was examined and comments communicated to them for compliance by firm vide note no. EL/3.2.182/OTM/163/BHEL dated 09.05.2018.
- 6.2 Routine test protocol No.RTS/TM2141C, Revision 2 of M/s CGL for traction Motor Type 2141C with 97% field excitation for 8 Wheeler DETC against Railway Board's P.O No.RE(S)/11/2015/0001/7/30665 dated 12.07.2016 was approved and communicated to TI Directorate vide Note No.EL/3.2.182(TI/OHE/TENDER) dated 14.05.2018.
- 6.3 Design documents No. TEC-KME-RDMT-S001-02, Version 2 including 12 attachments received through DSE/Metro note dated 03.04.2018 of M/s Zhuzhou-CRRC-Tec for Kolkata Metro project had been examined and comments communicated to PS & EMU Dte. vide note No. EL/3.2.182/K. Metro/Zhuzhou dated 14.05.2018.
- 6.4 Documents related to Design of 3-Phase IGBT based propulsion system and equipment for high speed under slung EMU (160Kmph) denoted as 'Train-18' forwarded by DSE/Metro were examined and comments communicated to PS & EMU Dte vide this office note No.EL/3.2.182 (Train -18) dated 22.05.2018.
- 6.5 Maintenance manual for traction motor for madhepura project submitted vide Note No.EL/3.1.35/24 dated 24.05.2018 had been examined. Comments on the maintenance manual for traction motor were communicated to 3Pphase System Group vide note No. EL/3.2.182(Madhepura) dated 24.05.2018.

- 6.6 Motorette test report no. RD/26/15/93, Feb'2016 along with all test records of traction motor type IM3601AZ for three phase AC EMU submitted by M/s BHEL had been examined. Observations on motorette test report and submission of compliance of pending issues related to traction motor type IM3601AZ was given to PS & EMU Dte vide note no. EL/3.2.182 (BHEL) dated 24.05.2018.

with regards,


Yours sincerely,

 05/6/18
(Om Prakash Kesari)

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

Copy to-

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|------------------------------------|---|----------------------|
| 1. Additional Member (Electrical), |) | |
| Railway Board, Rail Bhawan, |) | For kind information |
| New Delhi. |) | |
| 2. Secy to DG/RDSO |) | |

 05/6/18
(Om Prakash Kesari)
For Director General/Electrical

Annexure -I

		Replacement of EPROM after 6 years of service		Create low pressure zone by providing Baffle plates		Blocking leak holes in the Machine Room		Reed relay modification		Cab redundancy modification	
<u>Railway</u>	<u>Shed</u>	<u>No. of Locos to be done</u>	<u>Cumulative up to date</u>	<u>No. of Locos to be done</u>	<u>Cumulative up to date</u>	<u>No. of Locos to be done</u>	<u>Cumulative up to date</u>	<u>No. of Locos to be done</u>	<u>Cumulative up to date</u>	<u>No. of Locos to be done</u>	<u>Cumulative up to date</u>
CR	AQ	100	53	175	175	175	175	169	169	169	73
CR	KYN	0	0	64	155	64	155	64	155	64	181
ECoR	WAT	0	0	0	140	0	140	0	140	0	133
ECR	GMO	69	43	157	157	157	157	157	120	157	60
ER	HW H	3	3	25	25	25	25	25	32	25	25
NCR	CNB	0	0	13	13	13	13	0	0	13	13
NR	GZB	90	63	86	86	151	151	124	124	87	87
NR	LDH	0	0	21	21	21	21	21	21	21	0
SCR	LGD	86	24	176	176	176	176	161	161	161	158
SECR	BIA	10	3	71	46	71	71	64	18	71	31
SER	TAT A	4	0	152	200	152	211	152	173	152	120
SR	RPM	0	0	56	56	56	56	56	56	56	55
WCR	TKD	35	35	141	144	141	144	141	144	141	71
WR	BRC	2	2	84	84	84	84	83	83	22	22
Grand	TTL	399	226	1221	1478	1286	1579	1217	1396	1139	1029