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

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



No.EL/3.1.35/12

Date 07/06/2018

Central Railway, Mumbai CST-400 001.

Northern Railway, Baroda House, New Delhi-110 001.

North Central Railway, Block A2, Allahabad- 211 033

Eastern Railway, Fairlie Place, Kolkata -700 001.

East Central Railway, Hazipur-844101.

East Coast Railway, Chandrashekharpur, Bhubaneshwar-751016.

Southern Railway, Park Town, Chennai-600 003.

South Central Railway, Secunderabad-500 371.

South Eastern Railway, Garden Reach, Kolkata -700 043.

South Western Railway, 4<sup>th</sup> Floor, Laxmi Balakrishna Square Complex, Railway Station Road, Hubli- 580 020 (Karnataka).

South East Central Railway, Bilaspur-495004

Western Railway, Churchgate, Mumbai-400 020.

West Central Railway, Jabalpur-482001.

Chittaranjan Locomotive Works, Chittaranjan-713 331 (WB)

**Sub**: Minutes of the meeting held at RDSO on 06.6.2018 regarding failure of Elastic ring in 3-phase Electric Locomotives.

Enclosed please find Minutes of the meeting held at RDSO on 06.6.2018 regarding failure of Elastic ring in 3-phase Electric Locomotives.

( Pratibha Gupta ) For Director General /Elect

Encl; As above

- (a) The Secretary (Elect.), Railway Board, New Delhi-110 001- for kind information please.
- (b) M/s Acla Werke, Frankfurter STR 142-190 KOLN D-51065, Germany.

(Through Indian Representative)

M/s. R.S.Technologies, 247, Dum Dum Park, 2<sup>nd</sup> floor, near 2 no. tank, Kolkata-700 055. (Email: rstechnologies3@gmail.com)

- (c) M/s Avadh Rail Infra Ltd., D-12, Industrial Area, Amausi, Lucknow- 226008.
- (d) Sequoia safety products Pvt. Ltd., 4, pocket-1, Jasola, New Delhi-110015

## Minutes of the meeting held at RDSO on 06.6.2018 regarding failure of Elastic ring in 3-phase Electric Locomotives

## **Members Present:**

RDSO(Smt/Shri)	Railway(Smt/Shri)	Firm(Smt/Shri)				
O. P. Kesari	V. Surendranath	Abhishek Saraff				
PEDSE	DEE/ELS/LGD	Avadh Rail Infra Ltd				
Pratibha Gupta	K. Sukumar	Mukul Bhaskar				
JDSE/C&S	JEE/ELS/LGD	GM, Avadh Rail Infra Ltd				
Santosh Kumar,	Chhotelal chauhan	Mukesh kumar Verma				
SSE/Elect	JE/ELS/BIA	Sequoia Safety Products Pvt. Ltd.				
	Naresh Barot					
	SSE/ELS/BRC					
	Pralay ambade					
	SSE/ELS/AQ					

A meeting was held at RDSO on 06.6.2018 to discuss the failures of Elastic ring for 3-phase Electric Locomotives. During the meeting following points were discussed:

(i) Failure details received from sheds / Railways are as follow:

Rly/	Туре	Particulars	Make									
Shed	of		ACLA Werke			Avadh			SSPPL			
	Loco		15-16	16-17	17-18	15-16	16-17	17-18	15-16	16-17	17-18	
NR	WAP-5	Population	150	152	106	26	60	170				
		Failure	13	16	23	0	0	2	NIL			
		FRPCPY	8.67	10.53	21.10	0	0	1.18				
	WAP-7	Population	211	190	106	97	170	230				
		Failure	52	29	5	. 0	0	3				
		FRPCPY	24.64	15.26	4.72	0	0	1.30			•	
LGD	WAP7	Population	212	216	288							
		Failure	8	.8	15	NIL						
		FRPCPY	3.8	3.7	.65							
	WAG9	Population	432	448	248	16	20	115	8	12	77	
		Failure	16	33	53	2	3	16	0	8	0	
		FRPCPY	3.65	7.3	21.4	12.5	15	13.9	0	66.6	0	
WCR	WAP7/ WAG9	Population	311	125	205	31	333	302	2	2	9	
		Failure	2	0	16	0	0	0	0	0	0	
		FRPCPY	0.64	0	7.80	0	0	0	0	0	0	
BIA	WAP- 7/WAG- 9H	Population	226	257	300	39	96	153	3	3	3	
		Failure	27	19	0	0	0	0	0	0	0	
		FRPCPY	11.94	7.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Population	252	256								
KYN	WAG-9	Failure	0	0	0	NIL						
		FRPCPY	0.00	0.00	0.00							
AQ	WAP-7	Population	50	57	101	10	12	15				
		Failure	9	0	2	1	2	0	NIL			
		FRPCPY	18	0.00	1.98	10	16.66	0.00				
		Population	518	526	504	50	58	80				
	WAG-9	Failure	19	7	2	2	4	0				
		FRPCPY	3.66	1.33	0.39	4	6.89	0.00				

Failure rate of M/s Avadh and M/s SSPPL is higher.

- (ii) Quality audit of M/s Avadh Rail Infra Ltd Haridwar was done on 14 & 15/12/2017. During the quality audit firm informed that they have changed the curing process as per the advice of OEM. M/s Avadh Rail Infra Ltd were advised to submit revised QAP with changed curing process.
- (iii) During the quality audit of m/s SSPPL some deficiencies were noticed. M/s SSPPL were advised to submit the compliance of quality audit at the earliest.
- (iv) PEDSE advised that the sheds should follow the replacement schedule of elastic ring i.e. during alternate TOH.
- (v) Sheds were advised to call the firm for joint inspection in case of any premature failure i.e. before 4 year of service of elastic ring and a copy of joint note should be sent to RDSO also.

(vi) All firms should ensure embossing of their name and manufacturing month and year in the elastic ring.

(Pratibha Gupta)

For Director General/Electrical