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Lucknow - 226 011
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No. EL /2.2.1/High Reach

Dated 06.10.2017

1. M/s. SCHUNK Metal & Carbon (India) Pvt. Ltd., No. 54/2, White Field Road, Mahadevapura-P.O., **Bangalore – 560 048**
2. M/s Concept Rail Engineers Pvt. Ltd., C-557, 5th floor, 71 Canning Street, **Kolkata-700001**
3. M/s. Faiveley Transport Rail Technologies India Ltd., P. Box -39, Harita, **Hosur – 635109 (TAMILNADU).**
4. M/s. General Stores & Engineering Co., 10, Lalbazar Street, Mercantile Buildings, (1st Floor), **Kolkata – 700 001**
5. M/s. Morgan Advanced Materials India Private Limited, No.419, 4th A Cross, HRBR Layout, 2nd Block, Kalyannagar, **Bangalore- 560043.**
6. M/s. Avadh Rail Infra Ltd., B-12, Industrial Area, Amausi, **Lucknow-226008.**
7. M/s. Sanrok Enterprises, E14, Greater Kailash Enclave-I, New Delhi-110057

Sub: Development of high reach pantograph.

- Ref:** 1. Development of high reach pantograph as per RDSO specification No. RDSO/2007/EL/SPEC/0054 Rev. '2' Nov. 2015.
2. Minutes of meeting held at RDSO on 05.10.2017.

Dear Sirs,

Reference above, the meeting regarding deliberations on development of high reach pantographs was held on 05.10.2017 at RDSO.

Minutes of meeting is attached for your ready reference and necessary action.

Thanking you,

Yours faithfully,

(Aseem Kumar)

for Director General/Elect.

Encl: As above.

Copy to: 1. Secretary (Electrical), Railway Board, Rail Bhavan, New Delhi-110001.- for kind information please.

(Kind Attn : Sh. A K Goswami, DEE/RS/RB)

2. Chief Electrical Engineer, Chittaranjan Locomotive Works, Chittaranjan-713331.

- for kind information please.

(Kind Attn : Sh. S K Singh, Dy.CEE/D-II)

(Aseem Kumar)

for Director General/Elect.

Encl: As above

Minutes of Meeting on development of High Reach Pantograph on 05.10.2017 at RDSO

Member Present:

SN	Name (S/Shri)	Designation
RDSO		
1	O.P. Kesari	EDSE/Co-ord.
2	Aseem Kumar	DSE/PS&SC
3	V K Yadav	SSE/D/Elect.
CLW		
1	S K Singh	Dy.CEE/D-II

SN	Name (S/Shri)	Designation
M/s. Schunk		
1	Naresh Goenka	Director Marketing
2	Prveen K. Bharti	Manager Sales & Marketing
M/s. Concept		
1.	Mahendra P Shah	Executive Officer
M/s. Morgan		
1.	P.H. Krishna Kumar	B. Dev. Manager
M/s. SANROK Enterprises		
1.	Vijay P Singh	Manager - Technical
M/s. Faiveley (Come late after meeting)		
1.	Sujata Narayan	Managing Director
2.	Sridhar P V	General Manager-Sales
M/s. GSEC		
1.	Saurabh Bhakta	Production Supervisor
M/s. Avadh Rail		
1.	Mukul Bhaskar	General Manager

A meeting has been convened for reviewing the status of development of high reach pantograph for electric locomotives. The agenda of the meeting is to review the targets and planning of the development. Discussion held is as follows:

1.0 Review the targets of development decided of high reach pantograph in the meeting held at RDSO :

- The Development of high reach pantograph is very slow. Firms were advised to expedite the development.
- Design has been approved long ago but no prototype offered so far. Firms are advised to expedite the development.
- M/s. Faiveley was advised to include factor of safety in FEA report. M/s. Faiveley wanted to carry Shock & vibration test, current heating test and endurance test on one unit and simultaneously wind tunnel test and remaining test on other prototype

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unit to reduce type test duration. M/s. Faiveley has submitted the revised test schedule., wherein wind tunnel test will be carried by November and Shock & vibration test by December 2017.

- M/s. Avadh Rail does not have experience and requested to relax the 3years experience clause of the specification. M/s. Avadh was advised to submit their design and drawing. Thereafter. Case can be put to competent authority for relaxation, if firm is found suitable having qualified manpower and resources.
- M/s. Morgan wants to work as a mediator and helps in transfer of technology between any foreign firm and Indian firms. They are searching some Indian firms.
- M/s. SANROK apprised that the firm will submit their design and drawing within a week to RDSO.
- M/s. Schunk has supplied next 8 nos. high reach pantograph to CLW. CLW is requested to submit fitment details so that performance can be monitored. Their prototype test is already cleared.
- M/s. GSEC was advised to submit their design and drawing within 3months to RDSO.
- M/s. Concept said that they will take 6months time to develop prototype.
- All the firms was advised to submit their schedule of type test to RDSO.

2.0 Development firms for spares of AM-92 type pantograph:

- For development of sources for spares for high speed pantograph type AM-92, it was advised to all the firms to submit their drawing for spares and simultaneously spares parts/assemblies required as per RDSO special maintenance instruction No. RDSO/2016/EL/SMI/0292 Rev. '0' 2016, so that spares may be checked physically in sheds and approval can be given based on performance.

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