

Pre-bid Meeting held on 19.12.2022 at 15.00 at CO, New Delhi

Pre-bid Meeting : Queries raised/submitted in connection with RFP for "Comprehensive Study on suitability of 60 Kg, 90 UTS Rails on EDFC and 60 E1 1080 HH rails on WDFC for 25 T Axle load operation at 100 kmph on DFCCIL Routes on Consultancy Mode."- IREPS Notification No. : HQ-ENWCOMMSPT 1/16215 Dated:06.12.2022 []

SN	Clause	Queries raised/submitted	Remark by DFCCIL
1.0		Apna Technologies and Solutions Queries vide Letter no. ApnaTech/DFCC/RailStudy/01/221222 dated 22.12.2022	
1.	2.1 (Pt-II)	<p>Clause: Measurement of following track parameters required in rail stress calculations. Each reading of measurements shall be done by 2 separate sets of equipment's/electronic gadgets for reliability of observations.</p>	<p>Clause No.2.1(Pt-II) modified as under: Measurement of following track parameters required in rail stress calculations. Each reading of measurements shall be done by 2 separate sets of sensors/strain gauges installed at close proximity for reliability of observations. For measurement of track modulus and Dynamic augment, DFCCIL will provide required test wagon for multiple runs with varying weight and also permission to instrument the wagon if required.</p>
2.	2.1a (Pt-II)	<p>Kindly add a clause as below for clarity: For measurement of track modulus (2.1a) DFCC will provide required test wagon for multiple runs with varying weight and also permission to instrument the wagon if required.</p>	
3.	2.2 (Pt-II)	<p>Clause: Field measurement of actual rail stress on critical points of rail section (rail foot center, rail foot corner (GF & NG), Rail head (GF, NG) under no train-load condition i.e. mainly due to residual & thermal stress in rail, to be measured @ two different rail temperatures, at three locations.i.e., two in central portion of CWR/LWR and one in breathing length for each rail temperature condition of both rails in straight and 2.5 and 3.0. Degree</p>	<p>Clause No.2.2(Pt-II) modified as under: Field measurement of actual rail stress on critical points of rail section (rail foot center, rail foot corner (GF & NG), Rail head (GF [if feasible], NG) under no train-load condition i.e. mainly due to residual & thermal stress in rail, to be measured @ two different rail temperatures, at three locations', two in central portion of CWR/LWR and one in breathing length for each rail temperature condition of both rails in straight and 2.5 and 3.0. Degree curve track location for all 3 types of track formation conditions (as mentioned in clause 2.1a)</p>

		curve track location for all 3 types of track formation conditions.																																																							
4.	2.3 (Pt-II)	<p>Clause: Field measurement of actual rail stress on critical points of rail section (rail foot center, rail foot corner (GF & NG), Rail head (GF, NG), rail head (GF (if feasible) & NG) for five rolling stocks (type to be decided by DFCCIL) and for each rolling stock 2 different speeds (75kmph and 100 kmph or the maximum speed at which rolling stock is fit) of both rails in straight and 2.5 and 3.0. Degree curve track location for all 3 types of track formation conditions.</p>	<p>Clause No.2.3 (Pt-II) modified as under: Field measurement of actual rail stress on critical points of rail section (rail foot center, rail foot corner (GF & NG), Rail head (GF, NG), rail head (GF (if feasible) & NG) for five rolling stocks (type to be decided by DFCCIL) and for each rolling stock 2 different speeds (75kmph and 100 kmph or the maximum speed at which rolling stock is fit) of both rails in straight and 2.5 and 3.0. Degree curve track location for all 3 types of track formation conditions (as mentioned in clause 2.1a).</p>																																																						
5.	Notes of 2.3 (Pt-II)	Clause 2.3 mentions 3 types of rails (JINDAL, SAIL, NSSMC) please confirm that measurements will be made once for any of those rail types and for the other rail types the theoretical model will be used to calculate the expected values.	<p>Additional Note below item No 2.4 is added as under : Note 2: The measurement scheme for item No 2.2, 2.3 and 2.4 is as under:</p> <table border="1"> <thead> <tr> <th>Measurement Location</th> <th>2.1a</th> <th>2.1b</th> <th>2.2</th> <th>2.3</th> <th>2.4</th> </tr> </thead> <tbody> <tr> <td>Instrumented Track 1 Location A with Jindal 60 Kg 90 UTS rail</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>Instrumented Track 1 Location A with SAIL 60 Kg</td> <td></td> <td></td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>Instrumented Track 1 Location A with 60 Kg NSSMC 1080 HH E1 rail UTS rail</td> <td></td> <td>Yes</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>Instrumented Track 2 Location A with Jindal 90</td> <td></td> <td></td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>Instrumented Track 2 Location A with SAIL 60 Kg</td> <td></td> <td>Yes</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>Instrumented Track 2 Location A with 60 Kg NSSMC 1080 HH E1 rail UTS rail</td> <td></td> <td></td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>Instrumented Track 1 Location B with Jindal 60 Kg</td> <td></td> <td></td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> <tr> <td>Instrumented Track 1 Location B with SAIL 60 Kg</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> </tr> </tbody> </table>	Measurement Location	2.1a	2.1b	2.2	2.3	2.4	Instrumented Track 1 Location A with Jindal 60 Kg 90 UTS rail	Yes	Yes	Yes	Yes	Yes	Instrumented Track 1 Location A with SAIL 60 Kg			Yes	Yes	Yes	Instrumented Track 1 Location A with 60 Kg NSSMC 1080 HH E1 rail UTS rail		Yes	Yes	Yes	Yes	Instrumented Track 2 Location A with Jindal 90			Yes	Yes	Yes	Instrumented Track 2 Location A with SAIL 60 Kg		Yes	Yes	Yes	Yes	Instrumented Track 2 Location A with 60 Kg NSSMC 1080 HH E1 rail UTS rail			Yes	Yes	Yes	Instrumented Track 1 Location B with Jindal 60 Kg			Yes	Yes	Yes	Instrumented Track 1 Location B with SAIL 60 Kg	Yes	Yes	Yes	Yes	Yes
Measurement Location	2.1a	2.1b	2.2	2.3	2.4																																																				
Instrumented Track 1 Location A with Jindal 60 Kg 90 UTS rail	Yes	Yes	Yes	Yes	Yes																																																				
Instrumented Track 1 Location A with SAIL 60 Kg			Yes	Yes	Yes																																																				
Instrumented Track 1 Location A with 60 Kg NSSMC 1080 HH E1 rail UTS rail		Yes	Yes	Yes	Yes																																																				
Instrumented Track 2 Location A with Jindal 90			Yes	Yes	Yes																																																				
Instrumented Track 2 Location A with SAIL 60 Kg		Yes	Yes	Yes	Yes																																																				
Instrumented Track 2 Location A with 60 Kg NSSMC 1080 HH E1 rail UTS rail			Yes	Yes	Yes																																																				
Instrumented Track 1 Location B with Jindal 60 Kg			Yes	Yes	Yes																																																				
Instrumented Track 1 Location B with SAIL 60 Kg	Yes	Yes	Yes	Yes	Yes																																																				
6.	Measurement Scheme	A clear definition of what all measurement can be done for each location will help us optimize the cost that we bid at which will eventually benefit the customer. Measurements for different line items can often be done at the same location to optimize cost and execute within the budget provided. Kindly confirm the measurement scheme for measurements in line with the below figures. Figure 1 explains the																																																							

A2

B

<p>measurements for each clause and at which location it is made. For example, Instrumented Track 1 Location A in the table will measure values required by clause 2.2 and clause 2.4.</p> <p>Figure 1 Measurement scheme against the clauses in tender.</p> <p>Figure 2 Various locations on Instrumented Track</p> <p>Figure 2 mentions how the various locations on the 6 instrumented tracks can be organized.</p>	<p>Instrumented Track 1 Location B with 60 Kg NSSMC 1080 HH E1 rail UTS rail</p>			Yes	Yes	Yes	
	<p>Instrumented Track 2 Location B with Jindal 90</p>		Yes	Yes	Yes	Yes	
	<p>Instrumented Track 2 Location B with SAIL 60 Kg</p>			Yes	Yes	Yes	
	<p>Instrumented Track 2 Location B with 60 Kg NSSMC 1080 HH E1 rail UTS rail</p>		Yes	Yes	Yes	Yes	
	<p>Instrumented Track 1 Location C with Jindal 60 Kg</p>		Yes	Yes	Yes	Yes	
	<p>Instrumented Track 1 Location C with SAIL 60 Kg</p>			Yes	Yes	Yes	
	<p>Instrumented Track 1 Location C with 60 Kg NSSMC 1080 HH E1 rail UTS rail</p>	Yes	Yes	Yes	Yes	Yes	
	<p>Instrumented Track 2 Location C with Jindal 90</p>			Yes	Yes	Yes	
	<p>Instrumented Track 2 Location C with SAIL 60 Kg</p>		Yes	Yes	Yes	Yes	
	<p>Instrumented Track 2 Location C with 60 Kg NSSMC 1080 HH E1 rail UTS rail</p>			Yes	Yes	Yes	
	<p>Track 1 – Straight Track Track 2 – 2.5 to 3 degree Curve Location-A- As per item No 2.1/a/i Location B- as per item No. 2.1/a/ii Location C- As per item No. 2.1/a/iii</p>						

A

E