

### SPECIFIC PLANT DATA FOR ACSR “RAIL” CONDUCTOR

Sr. No.	Description	‘A’	‘B’	‘C’
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#### A- GENERAL

1.	Origin of Material (Maker’s Name & Address)	_____	_____	_____
2.	Origin of Conductor (Manufacturer’s Name)	_____	_____	_____
3.	Standard Specification applied	<u>P-50:88/</u> <u>Relevant international</u> <u>Standards</u> _____		

#### B- DATA OF COMPLETE CONDUCTOR

4.	Code name	ACSR <u>“RAIL”</u> _____		
5.	Diameter (mm)	<u>As per P-50</u> _____		
6.	Cross section (mm <sup>2</sup> )	<u>As per P-50</u> _____		
7.	D.C. Resistance at 20 °C (Ω/km)	<u>As per P-50</u> _____		
8.	Rated ultimate strength (kg)	<u>As per P-50</u> _____		
9.	Weight (kg/km)	<u>As per P-50</u> _____		
10.	Lay Ratio:			
	a) Aluminium:			
	i) Outer most Layer	<u>As per P-50</u> _____		
	ii) Layer immediately beneath outside layer	<u>As per P-50</u> _____		
	b) Steel:			
	- Outer most 6 wire layer	<u>As per P-50</u> _____		
11.	Direction of lay (outer most layer)	<u>As per P-50</u> _____		
12.	Nominal copper equivalent area (mm <sup>2</sup> )	<u>As per P-50</u> _____		

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13.	Current carrying capacity, Amps (40°C ambient, 40°C rise, 0.6 m/Sec. wind and 0.5 emissivity factor)	<u>As per P-50</u>	_____	_____
14.	Volume conductivity %age of IACS	<u>As per P-50</u>	_____	_____
15.	All tests, as called for in the Technical Provisions, will be carried out within the quoted cost	<u>Yes</u>	_____	_____
C-	<u>DATA FOR ALUMINIUM</u>			
16.	No. of wires	<u>As per P-50</u>	_____	_____
17.	Dia of each wire (mm)	<u>As per P-50</u>	_____	_____
18.	a) Dia of outer most layer (mm)	<u>As per P-50</u>	_____	_____
	b) Dia of layer immediately beneath outer most layer (mm)	<u>As per P-50</u>	_____	_____
19.	Total cross sectional area of Aluminum wires (mm <sup>2</sup> )	<u>As per P-50</u>	_____	_____
20.	Resistivity at 20°C ohm mm <sup>2</sup> /m	<u>As per P-50</u>	_____	_____
21.	Minimum ultimate tensile stress of Al strand (kg/mm <sup>2</sup> )	<u>As per P-50</u>	_____	_____
22.	Density at 20°C (kg/dm <sup>3</sup> )	<u>As per P-50</u>	_____	_____
23.	Co-efficient of linear expansion /°C	<u>As per P-50</u>	_____	_____
24.	Aluminum weight (kg/km)	<u>As per P-50</u>	_____	_____
25.	Type of joints in individual wires (during stranding)	<u>As per P-50</u>	_____	_____
26.	Distance between two consecutive joints in complete stranded conductor (m)	<u>As per P-50</u>	_____	_____
27.	Distance over which resistance butt welding joints shall be annealed	<u>As per P-50</u>	_____	_____

Sr. No.	Description	'A'	'B'	'C'
D-	<u>DATA FOR STEEL CORE</u>			
28.	No. of wires	<u>As per P-50</u>	_____	_____
29.	Dia of each wire (mm)	<u>As per P-50</u>	_____	_____
30.	Dia of 6 wire layer (mm)	<u>As per P-50</u>	_____	_____
31.	Total cross sectional area (mm <sup>2</sup> ) of steel wires.	<u>As per P-50</u>	_____	_____
32.	Minimum ultimate tensile stress (kg/mm <sup>2</sup> )	<u>As per P-50</u>	_____	_____
33.	Minimum stress at 1% extension (kg/mm <sup>2</sup> )	<u>As per P-50</u>	_____	_____
34.	Zinc coating:			
	a) Weight of Zinc coating (g/m <sup>2</sup> )	<u>As per P-50</u>	_____	_____
	b) Process of Zinc coating	<u>As per P-50</u>	_____	_____
	c) Minimum number of one minute dip in copper sulphate solution	<u>As per P-50</u>	_____	_____
35.	Density at 20°C (kg/dm <sup>3</sup> )	<u>As per P-50</u>	_____	_____
36.	Steel core weight (kg/km)	<u>As per P-50</u>	_____	_____
37.	Type of joints in base rod	<u>As per P-50</u>	_____	_____
E-	<u>REEL</u>			
38.	Dimensions:			
	i) Outside width (mm)	_____*	_____	_____
	ii) Flange dia (mm)	_____*	_____	_____
	iii) Drum dia (mm)	_____*	_____	_____
	iv) Flange thickness(mm)	_____*	_____	_____
	v) Inside width (mm)	_____*	_____	_____
	vi) Lagging thickness (mm)	_____*	_____	_____
	vii) Arbor hole dia (mm)	_____*	_____	_____

Sr. No.	Description	‘A’	‘B’	‘C’
39	Protection on inner flanges of reel	Moisture resistant solid fiber board	_____	_____
40.	Protection on two outer layers of Conductor	Moisture resistant Paper	_____	_____
41.	Protective covering for overall wrapping	Moisture resistant solid fiber board	_____	_____
42.	Preservative used for wood	*	_____	_____
43.	Length of conductor on reel (m)	As per P-50	_____	_____
44.	Weight of reel with conductor (kg)	*	_____	_____
45.	Weight of reel without conductor (kg)	*	_____	_____
46.	Are the conductor reels suitable for tension stringing	Yes	_____	_____

Initials of the signatory to the Bid.....