

Amendment-I to Bidding Documents, Volume-II

Clause No.	Existing					Proposed Changes				
Volume-II, Section-1, Clause no. 2.3	2.3.1 with disc insulators					2.3.1 with disc insulators				
	SI No.	Particulars	Single 'I' Suspension Pilot	Double tension	Triple Tension	SI No.	Particulars	Single 'I' Suspension Pilot	Double tension	Single 'I' Suspension
	1.	No of Standard Insulator Discs	1 x 16	2 x 17	3 x 17	1.	No of Standard Insulator Discs	1 x 16	2 x 17	1 x 16
	2.	Size of Disc	280 x 145	280 x 170	280 x 170	2.	Size of Disc	255/280 x 145	280 x 170	255/280 x 145
	3.	E& M Strength of each disc KN	120	160	160	3.	E& M Strength of each disc KN	120	160	120
	4.	Size and Designation of pin ball shank (mm)	20	20	20	4.	Size and Designation of pin ball shank (mm)	20	20	20
	5.	Creepage distance of each disc (mm)	315	315	315	5.	Creepage distance of each disc (mm)	315	315	315
	2.3.1 with composite long rod insulators					2.3.2 with composite long rod insulators				
	SI No.	Particulars	Single 'I' Suspension Pilot	Double tension	Triple Tension	SI No.	Particulars	Single 'I' Suspension Pilot	Double tension	Single 'I' Suspension
	1.	No of Standard Insulator units	1 x 1	2 x 1	3 x 1	1.	No of Standard Insulator units	1 x 1	2 x 1	1 x 1
2.	Size of Composite Insulator (Core dia x Nominal length) (mm)	24x2320	24x2890	24x2890	2.	Size of Composite Insulator (Core dia x Nominal length)(mm)	24x2320	24x2890	24x2320	
3.	E& M Strength of each unit (KN)	120	160	160	3.	E& M Strength of each unit (KN)	120	160	120	
4.	Size and Designation of pin ball shank(mm)	20	20	20	4.	Size and Designation of pin ball shank (mm)	20	20	20	

	5.	Creepage distance of each unit (mm)	5040	5355	5355		5.	Creepage distance of each unit (mm)	5040	5355	5040			
Volume-II, Section-7A, Clause no. 1.1.3	The size of disc insulator ... :						The size of disc insulator ... :							
	Sl. No.	Type of string	Size of disc insulators (mm)	Minimum creepage distance of each disc (mm)	No. of discs	Electro-mechanical strength of insulator disc (kN)	Mechanical strength of insulator string along with hardware fittings (kN)	Sl. No.	Type of string	Size of disc insulators (mm)	Minimum creepage distance of each disc (mm)	No. of discs	Electro-mechanical strength of insulator disc (kN)	Mechanical strength of insulator string along with hardware fittings (kN)
	1.	Single "I" suspension Pilot	255x145 or 280x145	315	1x16	120	120	1.	Single "I" suspension Pilot	255x145 or 280x145	315	1x16	120	120
	2.	Double Tension String	280 x 170	315	2 x 17	160	2 x 160	2.	Double Tension String	280 x 170	315	2 x 17	160	2 x 160
3.	Triple Tension String	280 x 170	315	3 x 17	160	3 x 160	3.	Single "I" suspension	255x145 or 280x145	315	1x16	120	120	
Volume-II, Section-7B, Clause no. 1.1.4	The size of long rod insulator ...						The size of long rod insulator ...							
	S. No	Type of String	*Size of Composite Insulator (Core dia x Nominal length) (mm)	Minimum Creepage Distance (mm) per unit	No. of individual Units per String (Nos.)	Electro-Mechanical Strength of Insulator Unit(kN)	Mechanical Strength ... (kN)	S. No	Type of String	*Size of Composite Insulator (Core dia x Nominal length) (mm)	Minimum Creepage Distance (mm) per unit	No. of individual Units per String (Nos.)	Electro-Mechanical Strength of Insulator Unit(kN)	Mechanical Strength ... (kN)
	FOR 220kV AC TRANSMISSION LINES WITH TWIN MOOSE CONDUCTOR							FOR 220kV AC TRANSMISSION LINES WITH TWIN HTLS CONDUCTOR						
1.	Single	24x2320	5040	1x1	120	120	1.	Single	24x2320	5040	1x1	120	120	

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<p>Volume-II, Section-7B, Clause no. 4.1.1</p>	<p>On the complete composite Long Rod Insulator String with Hardware Fittings For 220 kV AC Transmission Lines with Twin Moose Conductor</p>		<p>On the complete composite Long Rod Insulator String with Hardware Fittings For 220 kV AC Transmission Lines with Twin HTLS Conductor</p>																																									
<p>Volume-II, Section-9, Appendix-A, Table-A-1</p>	<table border="1"> <tr> <th>Wind Pressure (kg/Sq-m) considering gust factor</th> <th>Design Tension at Every Day Temp (32° C) and full wind condition – Earthwire) in kg for Wind Zone</th> </tr> <tr> <td>200</td> <td>2838</td> </tr> </table>		Wind Pressure (kg/Sq-m) considering gust factor	Design Tension at Every Day Temp (32° C) and full wind condition – Earthwire) in kg for Wind Zone	200	2838	<table border="1"> <tr> <th>Wind Pressure (kg/Sq-m) considering gust factor</th> <th>Design Tension at Every Day Temp (32° C) and full wind condition – Earthwire) in kg for Wind Zone</th> </tr> <tr> <td>204.09</td> <td>2875</td> </tr> </table>		Wind Pressure (kg/Sq-m) considering gust factor	Design Tension at Every Day Temp (32° C) and full wind condition – Earthwire) in kg for Wind Zone	204.09	2875																																
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<p>Volume-II, Section-9, Annexure-A, Clause 1.6(ii) High Temperature endurance & creep test</p>	<p>High Temperature endurance & creep test</p> <p>(ii) On other conductor sample, the conductor temperature shall be increased to designed maximum temperature in steps of 20 deg. C and thermal elongation of the conductor sample shall be measured & recorded at each step. The temperature shall be held at each step for sufficient duration for stabilisation of temperature. Further, the temperature of the conductor shall be maintained at maximum continuous operating temperature (+10 Deg. C) for 1000 hours. ...</p>		<p>High Temperature endurance & creep test</p> <p>(ii) On other conductor sample, the conductor temperature shall be increased to designed maximum temperature in steps of 20 deg. C and thermal elongation of the conductor sample shall be measured & recorded at each step. The temperature shall be held at each step for sufficient duration for stabilisation of temperature. Further, the temperature of the conductor shall be maintained at designed maximum temperature (+10 Deg. C) for 1000 hours. ...</p>																																									

Amendment-I to Bidding Documents, Volume-III

Clause No.	Existing	Proposed Changes																																					
Volume-III, Price Schedule-1 and Schedule-2	Not included	6.0 Supply of following items for Aviation Requirements <table border="1" data-bbox="1218 411 2045 1002"> <thead> <tr> <th rowspan="2">Item No.</th> <th rowspan="2">Item description</th> <th colspan="2">Estimated</th> </tr> <tr> <th>Unit</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> <td>4</td> <td>5</td> </tr> <tr> <td>6.0</td> <td>Supply of following items for Aviation Requirements</td> <td></td> <td></td> </tr> <tr> <td>i)</td> <td>Painting of normal tower above 45 mtr. from ground level</td> <td>MT</td> <td>150</td> </tr> <tr> <td>ii)</td> <td>Span markers</td> <td>Nos.</td> <td>10</td> </tr> <tr> <td>iii)</td> <td>Onstruction lights (to be provided as per IS 5613)</td> <td></td> <td></td> </tr> <tr> <td></td> <td>a) 1 Medium + 2 Low Intensity</td> <td>Sets</td> <td>6</td> </tr> <tr> <td></td> <td>b) 1 Medium + 4 Low Intensity</td> <td>Sets</td> <td>4</td> </tr> </tbody> </table>				Item No.	Item description	Estimated		Unit	Quantity	1	2	4	5	6.0	Supply of following items for Aviation Requirements			i)	Painting of normal tower above 45 mtr. from ground level	MT	150	ii)	Span markers	Nos.	10	iii)	Onstruction lights (to be provided as per IS 5613)				a) 1 Medium + 2 Low Intensity	Sets	6		b) 1 Medium + 4 Low Intensity	Sets	4
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	4.8.1	OPGW cable & Accessories			
	ii)	Installation Hardware set for above 24 Fibre OPGW Fibre Optic cabling including all cable fittings & accessories as per below :	Sets	88	
	4.9.1	OPGW cable & Accessories			
	ii)	Installation Hardware set for above 24 Fibre OPGW Fibre Optic cabling including all cable fittings & accessories as per below :	Sets	88	
	Note 2.) The Prices of equipments are inclusive of type test charges except.towers, conductors and earthwires.				
	4.8.1	OPGW cable & Accessories			
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Volume-III, Price Schedule-4(a)	10	Installation of insulator strings complete with arcing horns & necessary hardware, installing of bundle conductor including fixing of conductor accessories, installing & stringing of earth wire including fixing of earth wire accessories (Twin bundle Conductor) in Double Ckt Line.			
	(i)	Normal Stretch (Double Ckt. Portion)	kms	88	
	10	Installation of insulator strings complete with arcing horns & necessary hardware, installing of bundle conductor including fixing of conductor accessories, installing & stringing of earth wire including fixing of earth wire accessories (Twin bundle Conductor) in Double Ckt Line.			
	(i)	Line with twin HTLS Bundle	kms	88	
	(ii)	Line with single ACSR Bear	kms	3	
Volume-III, Price Schedule-4(d)	4	7/3.35 mm GS Earthwire			
	4.1	UTS Test	No.	1	
	4.2	D.C. Resistance Test	No.	1	
	5	AACSR Earthwire			
	5.1	UTS Test	No.	1	
	5.2	D.C. Resistance Test	No.	1	
	NA				