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ANNEXURE-A

Principal Technical parameters of 220kV Potential Transformer

Sl No	Particulars	Description	
1	Type/Installation	Single phase, Oil Filled hermetically sealed/outdoor type EMVT	
2	Type of mounting	Pedestal mounted	
3	Rated voltage	220kV	
4	Highest system Voltage	245kV	
5	Suitable for system frequency	50 Hz	
6	Confirming to standard	IS-3156/IEC 60044-2	
7	No of secondary cores	Two	
8	Type of insulation used	'A'	
9	Rated Voltage factor	1.2 continuous 1.5 for 30 Secondary	
10	Rated Primary Voltage	220kV/ $\sqrt{3}$	
11	Core Details	Core-I	Core-II
	i) Rated Secondary Voltage	110V-110V/ $\sqrt{3}$	110V-110V/ $\sqrt{3}$
	ii) Rated voltage transformation Ratio	220 kV $\sqrt{3}$ /110V- 110V/ $\sqrt{3}$	220 kV/ $\sqrt{3}$ /110V-110V/ $\sqrt{3}$
	iii) Application	Protection	Metering
	iv) Accuracy	3P	0.2
	v) Rated Secondary Burden	400	400
	vi) Rated thermal Burden	800	
12	Methods of earthing of the system to be connected	Effectively earthed	
13	Lightening Impulse withstand Voltage level	1050 kVp	
14	One minute power frequency dry /wet withstand voltage on primary winding	460 kVrms	
15	One minute power frequency dry withstand voltage on secondary winding	3kVrms	
16	Minimum creepage distance of porcelain housing	6125 mm	
17	Visual corona withstand voltage	>156kVrms	
18	Maximum temperature rise over ambient of 50 deg cg	As per IS-3156/IEC-60044-2	
19	Seismic acceleration (Horizontal & vertical)	0.3g	
20	Provision of Tan Delta measurement and value at $U_m/\sqrt{3}$	< 0.005	
21	Partial discharge level at $1.1U_m/\sqrt{3}$	<10 pC	

PT shall be provided with tan Delta measurement point for measurement of Tan delta between 10kV to $U_m/\sqrt{3}$

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