ANNEXURE-A

PRINCIPAL TECHNICAL PARAMETERS OF 220 KV POTENTIAL TRANSFORMER

The potential transformers covered in this specification shall meet the following technical requirements.

S.No.	Item	Specification of 220 KV Potential transformer	
1.	Type/installation	Single phase, oil filled hermetically sealed/outdoor type	
2.	Type of mounting	Pedestal type	
3.	Highest system voltage (KVrms)	245 KV	
4.	Suitable for system frequency	50 Hz	
5.	Standard	As per IS 3156	
6.	Number of secondary cores	Two	
7.	Rated voltage factor	1.25continuous 1.5 for 30 seconds	
8.	Rated primary voltage	220KV/√3	
9.	Core details	Core I	Core II
	i. Rated secondary voltage (Volts)	110V-110V/√3	110-110V/√3
	ii. Voltage ratio	220KV/√3 / 110V-110V/√3	220KV/√3 / 110V-110V/√3
	iii. Application	Protection	metering
	iv. Accuracy	3P	0.2
	v. Output burden (VA)	400	400
	vi. Rated thermal burden	800	
10.	Method of earthing of the system to be connected	Effectively earthed	
11.	Lighting impulse withstand voltage (KVp)	1050	
12.	1 minute dry power frequency withstand voltage primary winding (KV rms)	460	
13.	1 minute power frequency withstand voltage for secondary winding (KV rms)	3	
14.	Minimum creepage distance of porcelain housing (mm)	6125	
15.	Visual corona extinction voltage KV rms	176	
16.	Max. temperature rise over ambient of 50 deg.C	As per IS 3156/IEC 60044-1	
17.	Seismic acceleration (horizontal)	0.3g	
18.	Partial discharge level at 1.1 UM/√3	Less than 10 PC	
19.	Fixing centre for VT	700x700 mm (+/- 2) with hole dia 26mm	
20.	Primary terminal Material & Size	30 x 80 Lg. Cu Tinned in Horizontal direction	
21.	Ferrous Parts	Epoxy Painted with shade 631 of IS 5	

22.	Material of primary and secondary windings	High Conductivity copper
23.	Termination of Secondary terminal	With HRC fuse & link inside the secondary terminal box
NOTE:- The 220 KV PT offered should have been fully type tested as per IS 3156 from recognised test lab or at manufacturer test lab & test witness by representative of utilities like NTPC,PGCIL ,MPPTCL or other electricity board/PSU.		

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