

SHEET - I

TECHNICAL SPECIFICATION WITH GTP

Sr. No.	Characteristics of Transformer Oil	As per CPRI Requirement
A	Appearance	The oil shall be clear transparent & free from suspended matter or sediments
B	Density Max	0.89 gm/cm ² at 29.5 ⁰ C
C	Kinematics viscosity Cst at 27 ⁰ C	27 Cst Maximum
D	Interfacial tension at 27 ⁰ C Newtons/M	0.04 Minimum
E	Flash Point Pansky-marten (Closed)	140 ⁰ C Min.
F	Pour Point	- 6 ⁰ C Maximum
G	Neutralization Value	
	a) Total acidity mg	0.03 mg KOH/gm Max
	b) Inorganic acidity / Alkalinity	Nil
H	Corrosive Sulphur (In terms of classification of Copper Strips)	Non Corrosive
I	Electric Strength (Break-down voltage)	
	a) New Untreated Oil	30 Kv Minimum (RMS)
	b) After treatment	60 Kv Minimum (RMS)
J	Dielectric Dissipation Vector (Ten Delta) at 90 ⁰ C	0.002 Max.
K	Specific Resistance (Resistivity)	
	a) at 90 ⁰ C	35 X 10 ¹² Ohm - Cm Minimum
	b) at 27 ⁰ C	1500 X 10 ¹² Ohm - Cm Minimum
L	Oxidation Stability	
	a) Neutralization value after oxidation for 164 Hrs. at 100 ⁰ C	0.40 mg KOH/gm Maximum
	b) Total Sludge after oxidation for 164 Hrs. at 100 ⁰ C	0.10 % by weight Maximum
M	Presence of oxidation inhibitor	The oil shall not contain anti-oxidant additives.
N	Water content (PPM)	50 PPM Maximum
O	Ageing characteristics after accelerated ageing (Open breaker method with copper catalyst)	
	a) Specific resistance (Resistivity)	
	i) at 27 ⁰ C	2.5 X 10 ¹² Ohm - Cm Minimum
	ii) at 90 ⁰ C	0.2 X 10 ¹² Ohm - Cm Minimum
	b) Dielectric Dissipation Vector (Ten delta) at 90 ⁰ C	0.2 Maximum
	c) Total acidity	0.05 mg KOH/gm Maximum
	d) Total Sludge Value	0.05 % by weight maximum

Signature of Tenderer

Date :

Company's Round Seal

Place :

SHEET - II

PROFORMA TO BE FILLED IN FOR THE CONFIRMATION AND AGREEABILITY IN RESPECT OF TRANSFORMER OIL OFFERED.

Sr. No.	Description of Goods with details of specification	Tenderer should state here agreed / not agreed / or enclosed as applicable
1.	i) EHV Grade transformer oil conforming to CPRI Specification as per Sheet No. I attached, in 209/210 Liters, non returnable new steel barrels. (Ref Sr. No. 4 below)	
	ii) Quantity offered	
2 - A	i) Laboratory facilities for carrying out test as per IS 335/1993 with latest amendments if any.	
	ii) Copy of 'ISI Mark' license should be attached.	
	ii) ISI Mark License No.	
2 - B	Test certificate got approved in last one year from NTPC/CPRI/ REC etc. For oil test as per IS -335/1993 for EHV Grade oil to be utilized for Distribution Transformers.	
	i) Please state Name	
	ii) Test Certificate No. / Date . Please attach photo state copy for verification.	
2 -C	The test as per specification Sheet-I attached must be offered at the time of factory testing before dispatch of oil.	
	i) Capacity to offer the oil at a time must be indicated.	
3.	Please arrange for - Quantity verification from the lot received by consignee duly filled and approved by DISCOMs inspector will be selected randomly. Gross weight of said drum will be done. The net weight of oil will be worked out after deducting the tare weight of the drum. Quantity in liters will be worked out considering the density of the oil at the temperature at the time of weighing. The shortage of oil, if found , during verification , will be applicable to whole lot on prorata basis and amount of shortage such arrived will be deducted from the bills of the supplier.	
4.	Packing of the transformer oil shall be in sealed barrels. The drum shall conform to IS -1783 / 1988 Part-II Type Grade - B.	
5.	List of Testing Instruments / Equipment	
6.	Brand Name.	

Signature of Tenderer

Date :

Company's Round Seal

Place :