

Tender Specification & Format for repairing of Transformers upto 100 KVA 11/0.433 KV rating (Aluminium wound)

Sl. No.	Capacity	Unit	Material cost (based on rates given in the Anx.-1)	Labour Charge	Total Cost (in Rs)
1	10 KVA , 11/0.250 KV Al. wound	No			
2	15 KVA , 11/0.250 KV Al. wound	No			
3	16 KVA , 11/0.250 KV Al. wound	No			
4	25 KVA , 11/0.433 KV Al. wound	No			
5	63 KVA , 11/0.433 KV Al. wound	No			
6	100 KVA , 11/0.433 KV Al. wound	No			

SCOPE OF WORKS -

The repair work shall cover complete replacement of all H.V coils by new one and re-insulation of L.V coils. The scope of work shall further cover replacement of other materials, such as major insulation Gaskets , Bolts and Nuts , Breathers , Bushings etc. by new one . The old H.V coils should not be used in the transformer in any manner or shape. The transformers shall be delivered after complete repair with filling of transformer oil conforming to relevant ISS.

New brass studs (H.V Bushings & L.V Bushing) are to be used for all capacity of transformers.

NOTE

For all copper wound Distribution transformers and transformers above 100 KVA , the estimate will be framed separately as per annexure -1 .

INSPECTION & TEST

The following routine tests as applicable to the new transformers by relevant I.S.S shall be conducted on the repaired transformers in presence of our authorized officer

- 1) Measurement of winding Resistance .
- 2) Ratio and polarity Test & Phase relationship .
- 3) Load Losses (Full Load and No Load) .
- 4) Impedance voltage Test (% of Impedance) (Short circuit test)
- 5) Insulation resistance . (Of all category)
- 6) Induced over voltage with stand test . (D.V.D.F)
- 7) Separate source voltage with stand test . (High voltage)
- 8) B.D.V of oil .
- 9) Temperature rise test .

INSTRUMENTS

All the instruments for test should be digital as far as possible and must be standardized by Govt. Standard Testing Laboratory whether analog or digital.

The above tests shall be carried out at tendered's workshop for which he shall provide necessary testing equipments to carry out the tests.

GUARANTEE PERIOD

The performance of guarantee period will be one year after installation and eighteen months after delivery which ever is earlier.