

Bharat Heavy Electricals Limited  
Ramachandrapuram:: Hyderabad  
M&S-P&C

**Tender No. M&S/P&C/2016/37 Dt.12.07.2016**

**Scope of Work- Oil Filtration of all the transformers and arresting Leakages of Selected transformers**

S No.	Description of work	Unit	Quantity	Vendor to Confirm
1	Transformer oil filtration to improve dielectric strength of oil with High Vacuum Filter machine of capacity 2400 LPH or more. The filter unit shall filter Transformer oil to achieve BDV of 60 KV or more. The party shall have authorisation from the licensing authorities to test and issue the test certificates. The party shall issue transformer oil test certificates as per IS 6792. Filling of the transformer if low oil level. The transformers are located at various locations in the factory. The transformer of various capacities from 750 KVA to 10600 KVA will be given for filtration as per the availability.	Ltrs	88000	
2	Transformer oil BDV Testing before and after Transformer oil filtration. Reports of Transformer Oil BDV to be given before Filtration. (Total Transformer = 65). Should have authorisation given by the CEIG for issuing test certificated on BDV.	Sample	130	
3	Transformer oil acidity testing charges before and after filtration. (Total Transformer = 65). This should be done as per IS 1448. The method used should be stated while submitting tender. Also the lab should be authorised to do such tests. Copy needs to be submitted at the time of submission of reports.	Sample	130	
4	Transformer oil testing for moisture content (PPM) as per IS 13567:1992, Tan Delta as per IS: 6262: 1971 before and after filtration (Total Transformer = 65)	Sample	130	
5	Leakage Arresting of the list of Transformers attached in Annexure I. The details of the Transformers, type of leakage, make and year of manufacturing. The type of leakage is also given in the annexure. All the required tools required for leakage arresting is under the scope. All the materials required for Leakage arresting are under the scope of the vendor. Gaskets used should be of 70 C grade. Oil seals and O rings are also under the vendor scope . Leakage transformers list enclosed.	Nos	12	
6	Supply of 1 kg clear view type Silica Gel breather with crystals.	Nos	65	
7	Supply of Silica Gel crystals	Kgs	50	

Signature of the contractor

### List of Leakage Transformers & scope of work for Item No.5

Sl No	Block	Transformer Details	Type of Leakage Encountered	Nature of Leakage
1	07	T29, 750 KVA, 11/0.416 KV, 1330 Ltrs Transformer Oil, Year of Manufacturing 1965, make : HackBridge Madras	1. Radiators Coupling 2. Top Sample Valve 3. Conservator Drain Valve 4. Buccholz vent 5. LT Terminal Box	Minor
2	01	T2, 1000 KVA, 11/0.415 KV, 1008 Ltrs Transformer oil, Year of Manufacturing: 1965, Make: Kirloskar bangalore	1. Ht Terminal Box Gasket leakage 2. Top Sample Valve 3. conservator Gasket leakage 4. Buccholz Gasket leakage 5. LT Terminal Box Gasket leakage	Major
3	01	T42, 750 KVA, 11/0.415 KV, 790 Ltrs Transformer oil, Year of Manufacturing: 1978, Make: ETE Hyderabad	1. Top Tank Cover Gasket Leakage 2. Buccholz relay 3. LT Terminal Box Leakage	Major
4	09	Tr2, 750 KVA, 11/0.415 KV, 1330 Ltrs Transformer oil, Year of Manufacturing: 1965, Make: HackBridge Madras	1. Tap Changer 2. Buccholz relay 3. Top Cover 4. LT Termination Box 5. Ht Terminal Box Gasket leakage	Major
5	04	T17, 2000 KVA, 11/0.416 KV, 1800 Ltrs Transformer Oil, make: ETE Hyderabad, Year of Manufacturing: 1976	1. conservator Gasket leakage 2. Buccohlz Relay 3. Tap Changer	Major
6	04	T14, 2000 KVA, 11/0.416 KV, 1450 Ltrs Transformer Oil, make: Compton Greaves, Year of Manufacturing: 1998	1. LT Terminal Box 2. Buccohlz Relay	Major
7	T13	T13, 3150 KVA, 11/1.6 KV, 2045 Ltrs Transformer Oil, make: NGEF(India), Year of Manufacturing: 1988	1. conservator Gasket Leakage 2. Buccohlz Relay	Minor
8	05	T22, 1000 KVA, 11/0.415 KV, 1178 Ltrs Transformer Oil, make: Kirloskar Bangalore, Year of Manufacturing: 1965	1. conservator Gasket leakage 2. Top Drain Valve 3. LT Termination Box	Major
9	01	T7, 3000 KVA, 11/6.6 KV, 2350 Ltrs Transformer Oil, make: East India Electrical, Year of Manufacturing: 1962	1. Radiators Coupling 2. Buccohlz Relay	Minor
10	01	T4, 1000 KVA, 11/0.415 KV, 1211 Ltrs Transformer Oil, make: HackBridge Madras, Year of Manufacturing: 1967	1. conservator Gasket leakage 2. Buccohlz Relay 3. Top Cover Leakage	Major
11	01	T3, 750 KVA, 11/0.415 KV, 1330 Ltrs Transformer Oil, make: HackBridge Madras, Year of Manufacturing: 1965	1. LT Terminal Box and Bushes 2. Conservator Drain Valve	Major
12	17 Bldg	Tr3, 750 KVA, 11/0.416 KV, 1330 Ltrs Transformer Oil, make: HackBridge Madras, Year of Manufacturing: 1965	1. Buccholz relay 2. LT Side Bushings	Major