ANDREW YULE & COMPANY LIMITED (A Government of India Enterprise) ELECTRICAL DIVISION, SWITCHGEAR UNIT 14, MAYURBHANJ ROAD, KOLKATA - 700023

<u>TENDER DOCUMENTS</u> <u>FOR</u> <u>REPAIRING OF 25KVA, 63KVA & 100KVA, 11000 V / 433 V DISTRIBUTION</u> <u>TRANSFORMERS</u>

ANDREW YULE & CO. LTD., Electrical Division, Kolkata Operation invites e-Tender under single stage two-part system (Part I: Techno-Commercial Bid and Part II: Price Bid) from bona fide and reputed Company/Firm for rectification of 25KVA, 63KVA & 100KVA 11KV/0.433KV Distribution Transformers, the details of which are available in Annexure-V, "Detailed Scope of Work" as specified in this tender document.

Tender document may be downloaded from MSTC website <u>www.mstcecommerce.com/eprochome/aycl</u>. Corrigenda or clarifications, if any, shall be hosted on the above-mentioned websites only.

For further requirement relating to other information about drawing, technical data, please contact the persons as **Annexure - I**

Schedule of Tender

1.	TENDER NO.	AYCL/Electrical Division KO/6/20-21/ET/153
2.	MODE OF TENDER	a) e-Procurement System Online submission of Part I - Techno-Commercial Bid and Part II - Price Bid through www.mstcecommerce.com/eprochome/aycl
		 b) The intending bidders are required to submit their offer electronically through this e-tendering portal. No physical tender is acceptable by AYCL/MSTC
3.	E-Tender No. / Event No.	AYCL/Electrical Division KO/6/20-21/ET/153
4.	Date of publication of e-Tender through publication in MSTC website	12.10.2020
5.	Date of availability of NIT to the Vendors for downloading	12.010.2020
6.	Earnest Money Deposit	 a) "Earnest Money Deposit" of Rs. 50000/- may be paid by Cash Receipt/D.D. favouring Andrew Yule & Co Ltd, payable at Kolkata. b) Others document as described in Annexure I, Sl. No.2
		51. NO.2
7.	Last date of submission of EMD & other documents to AYCL	07.11.2020 up to 2 pm
8.	Date & time of opening of Part-II (Price Bid)	Price Bid will be opened after finalization of Techno-Commercial bid. Price bid will be opened for only the techno-commercially qualified bidders. Date & Time of opening of Price Bids will be intimated to the eligible vendor separately by email.

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Important Instructions for e-Procurement

This is an e-Procurement event of ANDREW YULE & COMPANY LTD.

You are requested to read the Terms & Conditions (Annexure- II, III, and IV) of this tender before submitting your online tender. Tenderers who do not comply with the Conditions with documentary proof (wherever required) will not qualify in the Tender for opening of Price Bid.

1. <u>Process of E-tender:</u>

A) **Registration:** The process involves vendor's registration with MSTC e-procurement portal which is free of cost. Only after registration, the vendor(s) can submit his/their bids electronically. Electronic Bidding for submission of Techno-Commercial Bid as well as Price Bid over the internet will be done. The Vendor should possess Class III signing type Digital Signature Certificate. Vendors are to make their own arrangement for bidding from a PC connected with Internet. MSTC is not responsible for making such arrangement. (Bids will not be recorded without Digital Signature).

SPECIAL NOTE: THE PRICE BID AND THE COMMERCIAL BID HAS TO BE SUBMITTED ON-LINE AT **www.mstcecommerce.com/eprochome/aycl**

- Vendors are required to register themselves online with <u>www.mstcecommerce.com</u>→ e-Procurement → PSU / Govt. depts. → Register as Vendor under AYCL- Filling up details and creating own user id and password → Submit.
- 2) Vendors will receive a system generated mail confirming their registration in their email which has been provided during filling the registration form.

In case of any clarification, please contact MSTC/AYCL (before the scheduled time of the e-Tender).

<u>Contact person (ANDREW YULE & COMPANY LTD):</u>

1.	Mr. Bhaskar Bandyopadhyay	2) Mr. Somnath Majumder
	Sr. Manager (Materials)	Dy Manager (Materials)
	Ph. No: (033) 2449-1601	Ph. No.: (033) 2449-1770, 9836530976
		Email: majumder.somnath85@gmail.com
	Email, hhadren handenadhuau@an	drouwnle com

Email: <u>bhaskar.bandopadhyay@andrewyule.com</u> <u>Contact person (E-Commerce, MSTC Ltd):</u> Mr. Pritam Biswas, Assistant Manager (ERO) Mobile- 9903248755, email- pbiswas@mstcindia.co.in

Mr. Mayank Jain, Assistant Manager (ERO) Mobile- 9721277969, email- mhjain@mstcindia.co.in

Mr. Vikash Kumar Jaiswal, Regional Manager (ERO) Mobile- 9903042449, email- vikash@mstcindia.co.in

HELP LINE NO. (033) 2290 1004

System Requirement:

- i) Windows XP-SP3 or above / Windows 7 Operating System
- ii) IE-7 or above Internet browser.
- iii) Signing & Encryption type digital signature
- iv) JRE 7 updates 79 software to be downloaded and installed in the system. Security level should be medium
- v) To enable ALL active X controls and disable 'use pop up blocker' under Tools
 → Internet Options → custom level (Please run IE settings from the page www.mstcecommerce.com once)
- 2. Part-I: Submission of EMD & other Documents: Within specified Date & time the vendor must submit the following documents to Sr. Manager (Materials) Electrical Division, Andrew Yule & Co. Ltd., 14, Mayurbhanj Road Kolkata-23. Off-line.
 - Earnest Money of Rs. 50000/- by Cheque/DD favoring Andrew Yule & Co. Ltd. Payable in Kolkata.
 - General information, under Annexure-II complete in all respect along with desired document.
 - In case of failure to submit the EMD within the stipulated time, the Tender may be rejected.
 - Part-II: Online Bid submission: On the basis of submission of EMD and other Documents at Andrew Yule & Co. Ltd, the list of vendors who will participate in online Techno commercial and price bid submission will be finalized. Only those qualified bidders will be eligible to submit Online Techno-commercial and price bid.

Bidding in e-Tender:

- **a.** No interest will be paid on EMD. EMD of the unsuccessful bidder(s) will be refunded by ANDREW YULE & COMPANY LTD. EMD to be paid along with the Document within the last date as mentioned in Schedule of Tender.
- **b**. The process involves Electronic Bidding for submission of Techno Commercial Bid as well as Price Bid.
- **c**. The bidder(s) who have submitted the above fees and submitted documents to Andrew Yule will be short listed by Andrew Yule and those qualified bidders can only submit their Techno Commercial Bids and Price Bid through internet in MSTC website <u>www.mstcecommerce.com</u> \rightarrow e-procurement \rightarrow PSU / Govt depts. \rightarrow Login under AYCL \rightarrow My Menu \rightarrow Auction Floor Manager \rightarrow live event \rightarrow Selection of the live event.

- **d.** The bidder should allow to run an application namely en Apple by accepting the risk and clicking on run. This exercise has to be done twice immediately after opening of Bid floor. Then they have to fill up Common terms /Commercial specification and save the same. After that clicking on the Techno-Commercial bid, if this application is not run then the bidder will not be able to save / submit his Techno-Commercial bid.
- e. After filling the Techno-Commercial Bid, bidder should click 'save' for recording their Techno-Commercial bid. Once the same is done, the Price Bid link becomes active and the same has to filled up and then bidder should click on "**Save**" to record their Price Bid. Then once both the Techno-Commercial bid & Price Bid has been saved, the bidder can click on the "**Submit**" button to register their bid.
- **f**. Vendors are instructed to use link in **My Menu** to *Upload Documents* in document library. Multiple documents can be uploaded. Maximum size of single document for upload is 5 MB.
- **g**. Once documents are uploaded in the library, vendors can attach documents through *Attach Document* link against the particular tender. For further assistance please follow instructions of vendor guide.
- **h**. In all cases, bidder should use their own ID and Password along with Digital Signature at the time of submission of their bid.
- **i.** During the entire e-tender process, the bidders will remain completely anonymous to one another and also to everybody else.
- **j.** The e-tender floor shall remain open from the pre-announced date & time and for as much duration as mentioned above.
- **k.** Techno-Commercial bid will be opened electronically on specified date and time as given in the NIT. Bidder(s) can download Technical Comparative statement.
- **I.** Price bid will be opened electronically on specified date and time given in the NIT. Bidder(s) can download Price Comparative statement.
- **m.** All entries in the tender should be entered in online Technical & Commercial Formats without any ambiguity.
- **n**. All electronic bids submitted during the e-tender process shall be legally binding on the bidder. Any bid will be considered as the valid bid offered by that bidder and acceptance of the same by the Buyer will form a binding contract between Buyer and the Bidder for execution of supply. Such successful tenderer shall be called hereafter **SUPPLIER**.
- **o.** It is mandatory that all the bids are submitted with Digital Signature Certificate otherwise the same will not be accepted by the system.
- **p**. Buyer reserves the right to cancel or reject or accept or withdraw or extend the tender in full or part as the case may be without assigning any reason thereof.

- **q.** No deviation of the terms and conditions of the tender document is acceptable. Submission of bid in the e-tender floor by any bidder confirms his acceptance of terms & conditions for the tender.
- **r**. Unit of Measure (UOM) is indicated in the e-tender Floor. Rate to be quoted should be in Indian Rupee as per UOM indicated in the e-tender floor/tender document.

E-tender cannot be accessed after the due date and time mentioned in NIT.

All notices / corrigendum and correspondence to the bidder(s) shall be sent by email only during the process till finalization of tender by ANDREW YULE & COMPANY LTD / MSTC LTD. Hence the bidders are required to ensure that their corporate email I.D. provided is valid and updated at the stage of registration of vendor with MSTC. Bidders are also requested to ensure validity of their DSC (Digital Signature Certificate).

Any order resulting from this open e-tender shall be governed by the terms and conditions mentioned therein.

No deviation to the technical and commercial terms & conditions are allowed.

ANDREW YULE & COMPANY LTD has the right to cancel this e-Tender without assigning any reason thereof.

The online tender should be submitted strictly as per the terms and conditions and procedures laid down in the website <u>www.mstcecommerce.com/eprochome/aycl</u> of MSTC Ltd.

The bidders must upload all the documents required as per terms of NIT. Any other document uploaded which is not required as per the terms of the NIT shall not be considered.

The bid will be evaluated based on the filled-in technical & commercial formats.

Bidders are requested to read the vendor guide and see the video in the page www.mstcecommerce.com/eprochome/mstc of MSTC Ltd. to familiarize them with the system before bidding.

Annexure II

General Information

The following are to be submitted to Sr. Manager (Materials), Andrew Yule, Electrical Division, Kolkata Operation, Switchgear Unit, in a sealed envelope.

1. EMD Rs: 50000/-

*Bidder may request for exemption from submitting EMD (Refer details given in Sl. No 1 of Annexure-IV, General terms & condition).

2. Tender Fees Rs: 500/-

Our Bank details for making RTGS payment.

Bank Name and Address	IDBI BANK, GROUND FLOOR 101, PARK
	STREET, KOLKATA, WEST BENGAL-700016
IFSC Code	IBKL0000012
Account No	01210300000718
Account Name	ANDREW YULE & COMPANY LIMITED

Annexure-III

<u>TECHNO-COMMERCIAL TERMS</u> (*To be filled online in MSTC portal*).

	(<u>To be filled online in MSTC portal</u>).	
SL NO	TERMS & CONDITIONS	VENDOR RESPONSE
1	 The price quoted should be firm & FOR destination to different stores basis, Insurance & Packing will be the scope of vendor. The following costs/charges will be under the scope of vendor: 1)Collection of defective transformer from stores of CESC & transportation of the transformers from stores to the factory of vendor. 2)To undertake repairing work as per the schedule. 3) The repaired transformers are to be transported from vendor's factory to different stores of CESC. The vendor will take the responsibility of stores inspection at different CESC stores. 	AGREE
2	GST rate and GST number to be indicated by the bidder.	REMARKS
3	Liquidated damage - If the delivery is delayed beyond the date of scheduled date of dispatch in the purchase order, penalty will be levied @ 1/2% per week subject to a maximum of 5% subject to force majeure conditions. Please confirm acceptance.	AGREE
4	Guarantee: Material supplied should be guaranteed against all manufacturing defects, poor workmanship, and defective raw material for a minimum period of 3 months from the date of supply. During the period if the product is found defective due to any of the above reason, the bidder shall undertake to make good by replacing/repair with new material at his own cost.	AGREE
5	Payment Terms: 60 days credit from the date of receipt of "accepted challan of respective stores of CESC". How-ever acceptance of any deviation of payment will be at the sole discretion of AYCL & if the deviation is accepted price of bidders who quote other terms will be loaded as per AYCL norms. Any advance payment terms will not be accepted.	REMARKS
6	Risk purchase clause: The company reserves the right to impose risk purchase clause as "For delay in execution / supply we shall have every right to do the same through some other agency/s which shall deemed fit and the additional cost of the same (Incidental/Consequential) shall be to your account which with respect to our intimation or observation whatsoever. Please confirm acceptance.	AGREE
7	Arbitration clause: All disputes relating to this offer or relating to the price of the goods supplied hereunder or otherwise arising between the seller and buyer shall be subject to and referred to the court or competent jurisdiction situated within the limits of the city of Kolkata neither the seller nor the buyer shall take or adopt any legal proceedings to enforce any claim against the order relating to this order or arising there from in any court other than the court of competent jurisdiction within the limit of the city of Kolkata.	AGREE
8	Validity of offer: Offer should be valid for a minimum period of 6 months from bid submission date.	AGREE
9	Validity of price: Your quoted rate & commercial terms should be valid for a minimum period of 12 months from the date of tender opening (Rate Contract).	AGREE

10	Proper loading in the price shall be made by us for important terms	AGREE
	e.g. "payment terms" cost of deliver to the destination, GST, others	
	having financial implication.	
11	EMD to be paid by DD/RTGS within scheduled date. Please mention DD no.	REMARKS
	or RTGS details in the remarks.	
12	EMD to be adjusted against the outstanding dues between the bidder &	REMARKS
	AYCL. Please write accepted in the remarks field if agreed.	
13	EMD to be waived as bidder's turnover more than Rs50crore. Please	REMARKS
	mention the turnover of last year in the remarks. Also upload supporting	
	document.	
14	EMD to be waived as per vendor's attached MSME certificate. Copy of	REMARKS
	certificate to be attached.	
15	AYCL reserves the right to terminate the contract at any time if the bidder	AGREE
	fails to deliver the goods within schedule delivery period or major contract	
	terms & conditions are violated by the supplier/bidder.	
16	Copy of Test certificate must attach with Tax In-voice.	AGREE
17	As per attached Vendor Registration Form, New Vendor has to register with	AGREE
	AYCL. However, Existing vendor needs no further registration.	
18	Bidders should submit a DD for Rs: 500 /= in favour of ANDREW YULE &	REMARKS
	CO.LTD, Payable at Kolkata towards cost of tender document or may submit	
	in the form of cash. In case DD, please mention the DD no. otherwise write	
	CASH. In case of NEFT transfer please mention the UTR no.	

Annexure-IV

GENERAL TERMS AND CONDITIONS

1)EMD: By way of Cash Receipt/ Demand Draft drawn in favour of M/S ANDREW YULE & CO.LTD Payable at KOLKATA. Bank Guarantee from any Nationalized / Scheduled / Multinational Bank for the EMD amount can also be accepted.

For bidders already enlisted with AYCL- Electrical Division, having outstanding amount more than the EMD amount or who have already submitted the EMD against our earlier tenders or those who have security deposit with Andrew Yule may apply for adjustment of the same.

Bidders who are MSME units may apply for exemption from furnishing EMD by making a specific request in writing and enclosing the necessary document in support of the same.

Bidders whose turnover is more than Rs: 50 crores may apply for exemption from furnishing EMD by making a specific request in writing and enclosing the necessary document in support of the same.

If reason for non-submission of EMD or adjustment against the outstanding balance for EMD is not mentioned in Techno-commercial bid of tender, the tender will be rejected.

2)The bidder will have to submit the following documents by end of tender submission date.

- a) Duly filled up vendor enlistment Form (Enclosed)
- b) List of Customers
- c) Annual turnover of last three years i.e. 2018-19,2017-18 & 2016-17.
- d) Copy of P/L account of last three years i.e. 2018-19,2017-18 & 2016-17.

The above details are not required for vendors/bidders who are existing vendors of AYCL. For new vendors, vendor enlistment process will be followed by AYCL prior to finalization of techno-commercial bids.

Price bid will be opened for the techno commercially qualified bidders only.

3)Tender fee Rs 500/- in the form of DD/pay order in favour of "Andrew Yule & Co Ltd" to be submitted within 00/00/0000 to AYCL office at 14, Mayurbhanj Road, Kolkata-700023.

Addendum/amendments/corrigendum

Before the last date of submission of tenders, AYCL may modify any of the contents of the tender notice, tender documents by issuing amendment/addendum/corrigendum. Any addendum/amendments/corrigendum issued by AYCL shall be part of the tender document & it shall be published in the e-procurement portal of www://mstcecommerce.in. How-ever AYCL shall bear no responsibility or liability arising out of non receipt of the same in time or otherwise. Bidders are requested to visit the site frequently to check whether there is any related corrigendum or not.

DETAILED SCOPE OF WORK

1.00: Scope:

This covers technical assessment and full estimation, activities and works involved in complete repairs, testing and safe delivery of the transformers to the concerned store.

Repairer will have to make their own arrangement for to and fro transportation of men, materials and machines etc. including loading and unloading / lifting / shifting at their own expense under this contract. Repairer will also be responsible for safe keeping of materials at their own cost.

2.00: Repair Work:

The repair work shall involve opening of transformer covers, de-tanking core & coil assembly, cleaning / washing of dust and dirt from all parts including core, tank, radiators etc., replacement of defective / damaged parts, with new ones, re-assembly of transformer, filling oil etc. and making the transformer ready for all routine test.

3.00: Location of different distribution transformers:

i) The defective transformers are lying in different stores of CESC in the state of Karnataka.ii) The followings are different stores and approximate no. of defective transformers.

a)	V V Mohalla	25 KVA	– 01 Nos.
		63 KVA	01 No.
b)	Chamrajnagar	25 KVA	03 Nos.
		63 KVA	01 No.
		100 KVA	01 No.
c)	Hassan	63 KVA	03 Nos.
		100 KVA	01 No.
d)	C R Patna	25 KVA	01 No.
		100 KVA	02 Nos.
e)	Medikeri	63 KVA	01 No.
f)	Hunsur	25 KVA	2 Nos
		100 KVA	3 Nos
g)	Sakalesgapura	25 KVA	2 Nos
		63KVA	1 Nos
h)	N.R.Mohalla	25 KVA	2 Nos
i)	Arsikere	63 KVA	5 Nos
j)	Nagamongala	100KVA	6 Nos
k)	Kollegala	25KVA	1 No.
		100KVA	4 Nos.
		TOTAL	41 Nos.

4.00: Material:

a) Transformer Oil – Shall be purchased by the repairer.

- b) Bushing and Metal parts Shall be procured from reputed firms, conforming to relevant IS.
- c) Winding -- HV / LV defective coil / coils shall be replaced by new coils, corresponding to the original design of the transformer and identical voltage, so that electrical / mechanical characteristics of the repaired transformers shall remain same as that of original transformers.
- d) Painting -- All metallic surfaces exposed to weather and requiring paint shall be given suitable primary coat and two coats of finished paint.

5.00: Inspection and testing:

All the tests and inspections shall be conducted at the works of the repairer. Each and every repaired transformer shall be tested for all the routine tests after repairs as per standard.

ASSESSMENT AND ESTIMATES OF THE REPAIRS

1.00: Assessment:

- a) The firm shall make necessary arrangements to lift the transformers immediately on receipt of intimation, but not later than 7 days from the intimation.
- b) The joint inspection shall be carried out at repairer premises where transformers are dismantled. The repairer shall ensure that his engineer is always present for joint inspection. He will also ensure that particulars of coils are mentioned in the report.
- c) On the basis of joint inspection report, a cost estimate for the inspected whole lot shall be prepared by AYCL on the basis of unit rate and it should be countersigned by the repairer.
- d) The joint inspection report shall clearly indicate whether a particular item being provided is against replacement of defective or damaged or missing part / parts.

2.00: Approval:

- a) One copy of approved cost estimate shall be retained by him for his record and second copy shall be attached by him along with the bill after satisfactory repairs and testing to facilitate verification of the bills.
- b) The repairer should ensure that the repairs have been carried out strictly as per estimate and identical original design of the transformers.
- c) Based on approved Cost Estimate, final Purchase Order will be issued to L1 bidder.

Annexure-VII

PRICE SHEET

a) As per below format: (25, 63, 100KVA)

Sl. No.	Description of Work	Qty	UOM	Unit Rate (Rs.)
	<u>25 KVA- 12 NOS</u>			
1	H V Bushing (each)	1	Nos	
2	L V Bushing (each)	1	Nos	
3	H V Connector (inner connection of H V Bushing) (each)	1	Nos	
4	L V Connector (inner connection of L V Bushing) (each)	1	Nos	
5	HT Gasket (each)	1	Nos	
6	LT Gasket (each)	1	Nos	
7	Top Cover Gasket (each) for 25 kVA DT	1	Nos	
8	Replacement of each L V Coil after deducting salvage value of old coils for 25 kVA DT	1	Nos	
9	Replacement of each H V Coil after deducting salvage value of old coils for 25 kVA DT	1	Nos	
10	Supply of transformer oil for top-up (Rs. Per Litre)	1	Litres	
11	Oil filtering (Rs. Per litre)	1	Litres	
12	Ovening Charges per DT for 25 kVA DT	1	Nos	
13	Testing Charges in-house and customer end, if any per DT for 25 kVA DT	1	Nos	
14	Material handling charges including transport per DT for 25 kVA DT	1	Nos	
15	Labour Charge for total assembly per DT for 25 kVA DT	1	Nos	
16	Painting Charges per DT for 25 kVA DT	1	Nos	
	<u>63 KVA – 12 NOS</u>			
17	H V Bushing (each)	1	Nos	
18	L V Bushing (each)	1	Nos	
19	H V Connector (inner connection of H V Bushing) (each)	1	Nos	
20	L V Connector (inner connection of L V Bushing) (each)	1	Nos	
21	HT Gasket (each)	1	Nos	
22	LT Gasket (each)	1	Nos	
23	Top Cover Gasket (each) for 63 kVA DT	1	Nos	
24	Replacement of each L V Coil after deducting salvage value of old coils for 63 kVA DT	1	Nos	
25	Replacement of each H V Coil after deducting salvage value of old coils for 63 kVA DT	1	Nos	
26	Supply of transformer oil for top-up (Rs. Per Litre)	1	Litres	

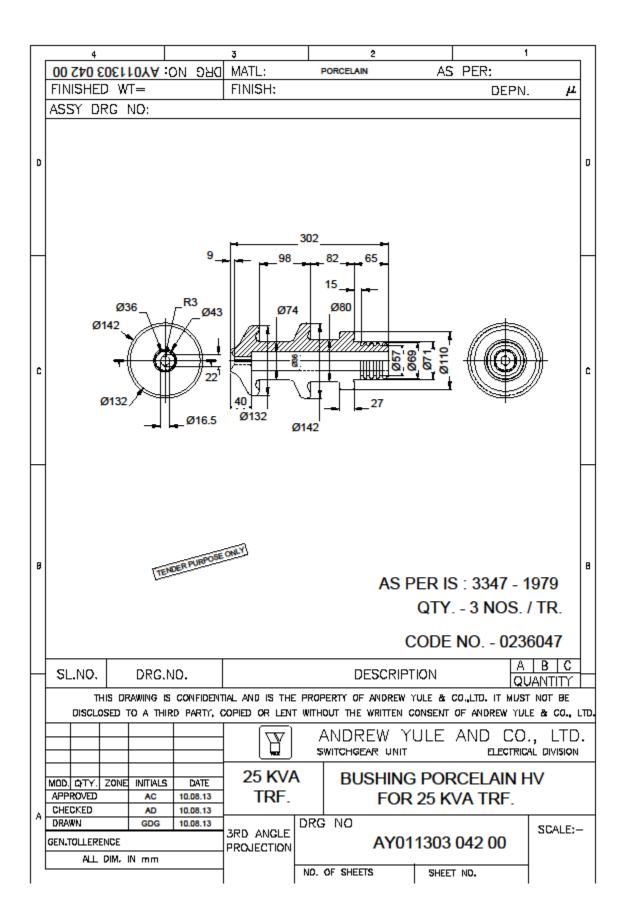
27	Oil filtering (Rs. Per litre)	1	Litres
28	Ovening Charges per DT for 63 kVA DT	1	Nos
29	Testing Charges in-house and customer end, if any per DT for 63 kVA DT	1	Nos
30	Material handling charges including transport per DT for 63 kVA DT	1	Nos
31	Labour Charge for total assembly per DT for 63 kVA DT	1	Nos
32	Painting Charges per DT for 63 kVA DT	1	Nos
	<u>100 KVA – 17 NOS</u>		
33	H V Bushing (each)	1	Nos
34	L V Bushing (each)	1	Nos
35	H V Connector (inner connection of H V Bushing) (each)	1	Nos
36	L V Connector (inner connection of L V Bushing) (each)	1	Nos
37	HT Gasket (each)	1	Nos
38	LT Gasket (each)	1	Nos
39	Top Cover Gasket (each) for 100 kVA DT	1	Nos
40	Replacement of each L V Coil after deducting salvage value of old coils for 100 kVA DT	1	Nos
41	Replacement of each H V Coil after deducting salvage value of old coils for 100 kVA DT	1	Nos
42	Supply of transformer oil for top-up (Rs. Per Litre)	1	Litres
43	Oil filtering (Rs. Per litre)	1	Litres
44	Ovening Charges per DT for 100 kVA DT	1	Nos
45	Testing Charges in-house and customer end, if any per DT for 100 kVA DT	1	Nos
46	Material handling charges including transport per DT for 100 kVA DT	1	Nos
47	Labour Charge for total assembly per DT for 100 kVA DT	1	Nos
48	Painting Charges per DT for 100 kVA DT	1	Nos

b) L1 will be evaluated based on summation of cost of 16 items from Sl No 1 to 16 for 25KVA distribution transformer repairing. Similarly, for 63KVA transformer repairing, L1 will be determined on the basis of summation of cost of items from Sl no 17 to 32. Also for 100KVA transformer repairing, L1 will be determined based on summation of cost of items from Sl No 33 to 48. To & fro transportation cost will be taken into account for determination of L1 for repairing of 25KVA, 63KVA & 100KVA transformers respectively. After L1 determination, the transformers will be taken by the L1 bidder at their cost from the different stores of CESC & the transformers will be accumulated at their factory for joint inspection.

c) For each item, unit quantity is mentioned. Total quantity of defective transformers =41 nos. Therefore, actual item wise quantity requirement shall be ascertained only after joint inspection of all the defective 28 nos transformers in presence of AYCL representative.

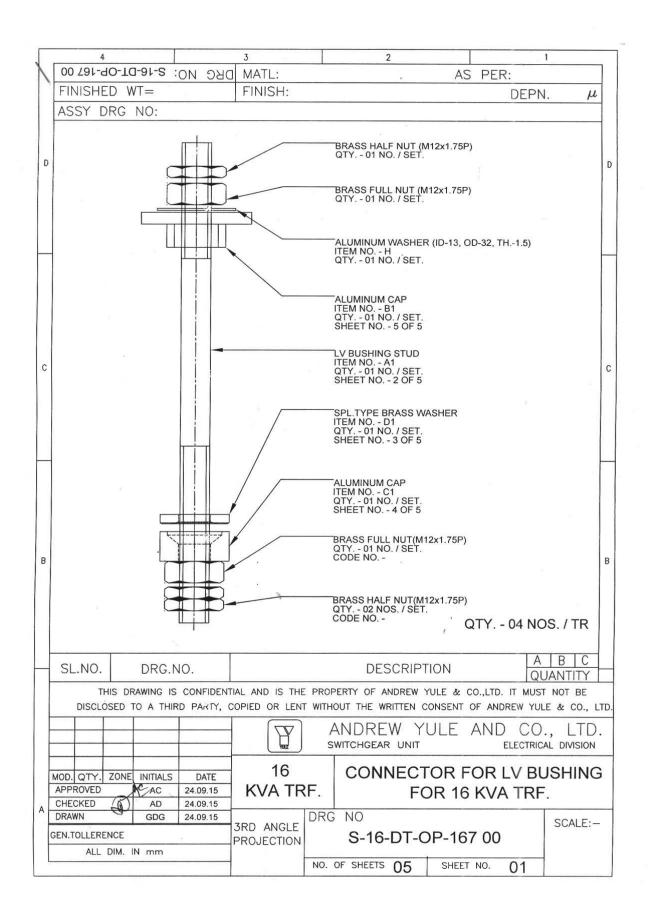
Annexure-VIII

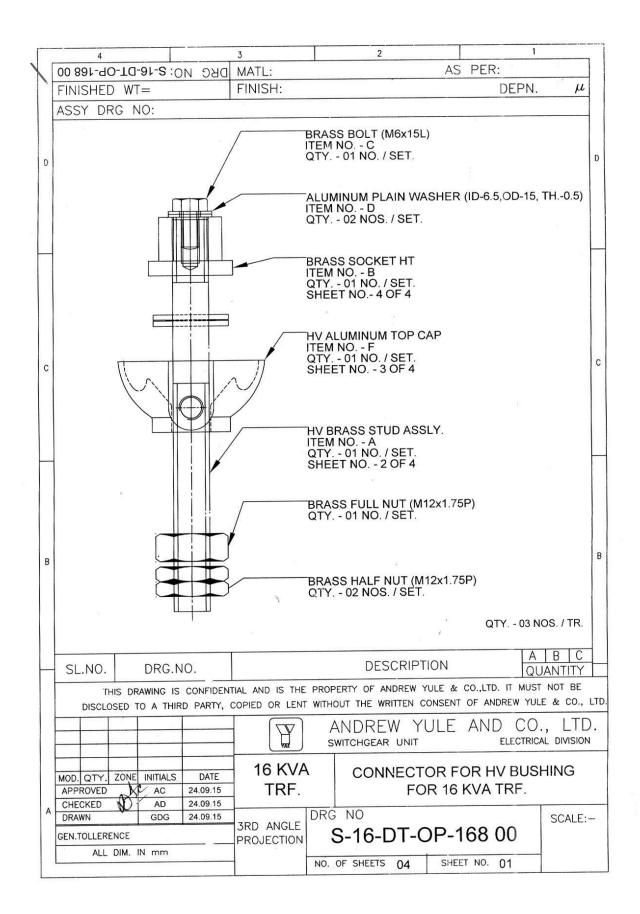
DRAWINGS AS REFERENCE FOR QUOTING



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	v	VINDING	SHEET DET	TAILS			
					SHEET 1 OF 2 REV 0		
JOB N	O:60036/TRF	QTY.: 1	REF:	- DT/025	ONAN 11/0.433/T1		
KVA:25	INPUT / OUTPUT	11000/433	PHASE 3	FREQ: 50 Hz			
				ECTION NO :-	1		
NO. OF PHASE.			6	3			
CONNECTION.				STAR			
PHASE VOLTS.				433			
WINDING TYP				LAYER WOUND:			
WINDING SENS		NO			ONSTRUCTION);		
COIL NO.			· · · · · ·	1			
DISC, NO.				NA			
TURNS/ COIL.		T	OTAL TURNS =	: 148 ; 1 COIL	> 148 T/COIL :		
TURNS/ LAYE	R OR DISC.			37 T/L) ->PLAI			
BARE ALU, ST			-	.95 mm X 3.65 mm			
	NSULATED SIZE.		0.40 D.I		5 X 4.05		
COND. ARRAN			0.00 101	1W X 1 D			
INTER LAYER			5 MIL KR	AFT PAPER BET.	LAYERS		
INTER LAYER		3 MM(T) 2			EEN 2ND & 3RD LAYER		
WINDING LEN	GTH			359 / COIL;			
EP.				2X 3 MM			
IP.				N.A			
CRT.				NA			
TRANSPOSITIO	ON DETAILS.			NA			
AXIAL LENGT				365 MM			
RADIAL DEPTH	ł.			30.00			
ID. & OD.			91	MM & 132 M	M		
INS. ALU. WT.	(Kg.)			3 x 4.7 KG			
NO. OF LEAD X	LENGTH.		1	As per requirement	-		
		Winding Dire	ction (For front	Bobin M/C) : R-L			
NOTE		Use proper fe	Use proper fevicol adhesive & make the coil as solid as tight as possible.				
1. ALL DIMENS	IONS ARE IN m.m. UN	LESS OTHER	WISE SPECIFIE	D			
2. REFER SHEET		SECTION	2				
	AD WITH 2.5 mill Kra		3 lavers & Com	on Tane			
	per 10 mill retained with						
				ELRO	REW YULE & CO. LTD. TRICAL DIVISION DLKATA 700023		
					Winding Sheet Details		
SL NO.	REVISION	BY	DATE	FILE	SCALE		
PREPARED BY		THIS DRAWIN	NG IS STRICTLY	CONFIDENTIAL.			
CHECKED BY				RTY OF ANDREW	A4		
CHECKED BY		REPRODUCE	D IN PART OR W	HOLE WITHOUT	A4		
APPROVED BY		COMPANY'S	WRITTEN PERMI	ISSION.			

JOB NO : 6003 KVA : 25 NO. OF PHASE. CONNECTION. PHASE VOLTS. WINDING TYPE. WINDING TYPE. WINDING SENSE. COIL NO. DISC. NO. TURNS / COIL. TURNS / COIL. TURNS / COIL. TURNS / COIL. TURNS / LAYER OR DIS BARE ALU. COND. SIZE COND. INS. & INSULAT COND. ARRANGEMENT INTER LAYER DUCT. WINDING LENGTH EP. IP. CRT. TRANSPOSITION DETA AXIAL LENGTH. RADIAL DEPTH. ID. & OD. INS. ALU. WT. NO. OF LEAD X LENGT NOTE	E.		1 REF :- P 11000 / 433 NORMAL (AS	DT 025 PHASE 3 SECTION 3 DELT 11000	FREQ : NO :- 2	1 0.433 50Hz	T1		
NO. OF PHASE. CONNECTION. PHASE VOLTS. WINDING TYPE. WINDING SENSE. COIL NO. DISC. NO. TURNS / COIL. TURNS / COIL. TURNS / COIL. TURNS / LAYER OR DIS BARE ALU. COND. SIZE COND. INS. & INSULAT COND. ARRANGEMENT NTER LAYER INSULAT NTER LAYER DUCT. WINDING LENGTH EP. P. CRT. TRANSPOSITION DETA XIAL LENGTH. RADIAL DEPTH. D. & OD. NS. ALU. WT. NO. OF LEAD X LENGT	E.			SECTION 3 DELT	NO :- 2 A	50Hz			
20NNECTION. PHASE VOLTS. WINDING TYPE. WINDING SENSE. 20IL NO. DISC. NO. TURNS / COIL. TURNS / COIL. TURNS / LAYER OR DIS 3ARE ALU. COND. SIZE 20ND. INS. & INSULAT 20ND. ARRANGEMENT NTER LAYER INSULAT 20ND. ARRANGEMENT NTER LAYER DUCT. WINDING LENGTH 2P. P. CRT. TRANSPOSITION DETA WIAL LENGTH. RADIAL DEPTH. D. & OD. NS. ALU. WT. NO. OF LEAD X LENGT	E.		NORMAL (AS	3 DELT	A				
Connection. Phase volts. Winding type. Winding sense. Coll No. Disc. No. TURNS / Coll. TURNS / Coll. TURNS / LAYER OR DIS BARE ALU. COND. SIZE COND. INS. & INSULAT COND. ARRANGEMENT NTER LAYER INSULAT NTER LAYER INSULAT NTER LAYER DUCT. WINDING LENGTH EP. P. CRT. TRANSPOSITION DETA XIAL LENGTH. RADIAL DEPTH. D. & OD. NS. ALU. WT. NO. OF LEAD X LENGT	E.		NORMAL (AS	3 DELT	A				
20NNECTION. PHASE VOLTS. WINDING TYPE. WINDING SENSE. 20IL NO. DISC. NO. TURNS / COIL. TURNS / COIL. TURNS / LAYER OR DIS 3ARE ALU. COND. SIZE 20ND. INS. & INSULAT 20ND. ARRANGEMENT NTER LAYER INSULAT 20ND. ARRANGEMENT NTER LAYER DUCT. WINDING LENGTH 2P. P. CRT. TRANSPOSITION DETA WIAL LENGTH. RADIAL DEPTH. D. & OD. NS. ALU. WT. NO. OF LEAD X LENGT	E.		NORMAL (AS	DELT					
VINDING TYPE. VINDING SENSE. VINDING SENSE. COIL NO. DISC. NO. TURNS / COIL. TURNS / COIL. TURNS / LAYER OR DIS SARE ALU. COND. SIZE COND. INS. & INSULAT COND. ARRANGEMENT NTER LAYER INSULAT NTER LAYER INSULAT NTER LAYER DUCT. WINDING LENGTH EP. P. CRT. TRANSPOSITION DETA XIAL LENGTH. RADIAL DEPTH. D. & OD. NS. ALU. WT. NO. OF LEAD X LENGT	E.		NORMAL (AS						
VINDING TYPE. VINDING SENSE. 2011 NO. 2015 NO. URINS / COIL. URINS / COIL. URINS / LAYER OR DIS ARE ALU. COND. SIZE 20ND. INS. & INSULAT 20ND. ARRANGEMENT NTER LAYER INSULAT NTER LAYER INSULAT NTER LAYER DUCT. VINDING LENGTH 32. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.	E.		NORMAL (AS	11000					
WINDING SENSE. COIL NO. COIL NO. COISC. NO. TURNS / COIL. TURNS / COIL. TURNS / LAYER OR DIS SARE ALU. COND. SIZE COND. INS. & INSULAT COND. ARRANGEMENT NTER LAYER INSULAT NTER LAYER INSULAT NTER LAYER DUCT. WINDING LENGTH SP. P. CRT. TRANSPOSITION DETA VIAL LENGTH. RADIAL DEPTH. D. & OD. NS. ALU. WT. NO. OF LEAD X LENGT	E.		NORMAL (AS		1: 				
Coil No. Disc. No. Turns / Coil. Turns / Coil. Turns / Layer or Dis Sare Alu. Cond. Size Cond. INS. & Insulat Cond. Arrangement NTER Layer Insulat NTER LAYER INSULAT NTER LAYER DUCT. MINDING LENGTH EP. P. CRT. TRANSPOSITION DETA WIAL LENGTH. RADIAL DEPTH. D. & OD. NS. ALU. WT. NO. OF LEAD X LENGT	E.		NORMAL (AS	CROSS - C	WER;				
DISC. NO. TURNS / COIL. TURNS / LAYER OR DIS BARE ALU. COND. SIZE COND. INS. & INSULAT COND. ARRANGEMENT INTER LAYER INSULAT INTER LAYER DUCT. WINDING LENGTH EP. P. CRT. TRANSPOSITION DETA AXIAL LENGTH. RADIAL DEPTH. D. & OD. NS. ALU. WT. NO. OF LEAD X LENGT	E.			PER SINGLE	OIL CONSTRU	CTION);			
TURNS / COIL. TURNS / LAYER OR DIS BARE ALU. COND. SIZE COND. INS. & INSULAT COND. ARRANGEMENT NTER LAYER INSULAT NTER LAYER INSULAT NTER LAYER DUCT. MINDING LENGTH EP. P. CRT. TRANSPOSITION DETA AXIAL LENGTH. RADIAL DEPTH. D. & OD. NS. ALU. WT. NO. OF LEAD X LENGT	E.			2, 3					
TURNS / LAYER OR DIS BARE ALU. COND. SIZE COND. INS. & INSULAT COND. ARRANGEMENT INTER LAYER INSULAT INTER LAYER DUCT. MINDING LENGTH EP. P. CRT. TRANSPOSITION DETA AXIAL LENGTH. RADIAL DEPTH. D. & OD. NS. ALU. WT. NO. OF LEAD X LENGT	E.			NA					
ARE ALU. COND. SIZE 20ND. INS. & INSULAT 20ND. ARRANGEMEN' NTER LAYER INSULAT NTER LAYER DUCT. MINDING LENGTH EP. P. CRT. TRANSPOSITION DETA XIAL LENGTH. RADIAL DEPTH. D. & OD. NS. ALU. WT. NO. OF LEAD X LENGT	E.		TOTAL TURS -	6512 ; 2	COILS> 3256	5 T/COIL;			
Cond. INS. & Insulat Cond. Arrangement NTER Layer Insulat NTER Layer Duct. Minding Length Ep. P. Crt. Transposition Deta Axial Length. Radial Depth. D. & OD. NS. Alu. WT. NO. OF LEAD X LENGT			(25	i L X130.5 T/L)	->PLAIN COIL				
Cond. Arrangement Inter Layer Insulat Inter Layer Duct. Winding Length Ep. P. Crt. Transposition Deta Axial Length. Radial Depth. D. & OD. INS. ALU. WT. NO. OF LEAD X LENGT	TED SIZE			1.00 mm	DIA				
NTER LAYER INSULAT NTER LAYER DUCT. MINDING LENGTH EP. P. CRT. TRANSPOSITION DETA AXIAL LENGTH. RADIAL DEPTH. D. & OD. NS. ALU. WT. NO. OF LEAD X LENGT		Ε.	0.2	3 mm DPC ;	1.23 mm DIA				
NTER LAYER DUCT. WINDING LENGTH EP. P. CRT. TRANSPOSITION DETA AXIAL LENGTH. RADIAL DEPTH. D. & OD. NS. ALU. WT. NO. OF LEAD X LENGT	IT.			N.A					
WINDING LENGTH EP. P. CRT. TRANSPOSITION DETA AXIAL LENGTH. RADIAL DEPTH. D. & OD. INS. ALU. WT. NO. OF LEAD X LENGT	TION.		3 MILEPOXY DO	TTED KRAFT	PAPER BET. AL	L LAYERS ;			
EP. P. CRT. TRANSPOSITION DETA AXIAL LENGTH. RADIAL DEPTH. D. & OD. INS. ALU. WT. NO. OF LEAD X LENGT		3 MM (T) X 163.5 MM (L	DUCT STRIP		&13TH LAY	ER- 20		
P. CRT. TRANSPOSITION DETA AXIAL LENGTH. RADIAL DEPTH. D. & OD. INS. ALU. WT. NO. OF LEAD X LENGT				75.0 / C	DIL				
CRT. TRANSPOSITION DETA AXIAL LENGTH. RADIAL DEPTH. D. & OD. INS. ALU. WT. NO. OF LEAD X LENGT				NA					
TRANSPOSITION DETA AXIAL LENGTH. RADIAL DEPTH. ID. & OD. INS. ALU. WT. NO. OF LEAD X LENGT				NA					
Axial Length. Radial Depth. D. & Od. NS. Alu. WT. No. of Lead X Lengt			NA						
Radial Depth. D. & Od. NS. Alu. WT. No. of Lead X Lengt	AILS.		NA						
D. & OD. NS. ALU. WT. NO. OF LEAD X LENGT			(2X164 MM) + 10 MM X1 = 338 mm /335 mm (SHRUNK);						
ID. & OD. INS. ALU. WT. NO. OF LEAD X LENGT			36 mm						
NO. OF LEAD X LENG			153 mm & 225 mm						
	(Kg.)			3 x 9					
NOTE	TH.			As per requi	rement.				
NOTE			ction (For front bol						
		Coils to be va	rnished at last la	vers having goo	d adhision, bindin	g properties			
			Fevicol Adhesive				a		
			NSIONS ARE IN r			ECIPIED			
		2. REFER SH		FOR SEC					
			ALL STARTING		ially 1.5 mm Kra	lit paper &			
			th 11 KV grade G	_	d Tachaisiana				
		4 . Make the	coils by highly skil	ed & experience	d Technicians				
			VULE & CO. LID	_					
			RICAL DIVISION			NAME	DATE		
	1 1	THE KOL	KATA - 700083	PREPARED			24.09.2014		
	IL	TITLE : WINDING	G SHEET DETAIL	S CHECKED B			24.09.2014		
NO. REVISION BY			SCALE	APPROVED			24.09.2014		
HIS DRAWING IS STRICTLY						NO. A4-W8-25	OPTCL		

WINDING SPECIFICATION FOR *** 63KVA DISTRIBUTION TRANSFORMER AGAINST BESCOM SPEC.

VOL. RATIO: 110000/433 PHASE: THREE TYPE: HV-O/D, BARE BUSHING WOUND: DW (AL.)					
VECTOR GROUP : DYN-11 RISE : 35/			TAPS : NIL		COOLING : ONAN
1 224	Roll and a state of the state o				cooning totall
8	DESCRIPTION	1	L.V WINDING	H.	V WINDING
L					
01	TURNS PER PHASE		96		4224
02	TURNS PER COIL		96		1056
03	COILS PER LIMB		01		04
04	TURNS PER LAYER		48		56
05	NO. OF LAYERS		02		19
06	CONDUCTOR (BARE)		MMX 4.95 MM) DPC		MM DIA DPC
07	CONDUCTOR (COV.)	2(9.95 N	AM X 5.30 MM)	1.	98 MM DIA
08	INTER LAYER INSULATION	7 MI	LL KRAFT PAPER	3 MILL EPO	OXY DOTTED KRAFT PAPER
09	AXIAL LENGTH	493	+ 11 (T) / 510 MM	115.5 MM	/ 480 MM (SHRUNK)
10	INSIDE DIAMETER		112 MM		177 MM
11	OUTSIDE DIAMETER		155 MM		255 MM
12	RESISTANCE PER PH AT 75 °C		15.111 milli Ω		42.396 Ω
13	INSULATED WEIGHT		32 KG.		57 KG
	COIL TO COILCLEARANCE		N/A		6.4 MM
14					
15	END CLEARANCE		10 MM		25 MM
15	CONNECTION		STAR		DELTA
17	WINDING DIRECTION(FOR FRONT FEED M/C)		R-L		R-L
18	SPACERS PER CIRCLE		6		6

PERFORMANCE FIGURES :

LOAD LOSS : 840 WATT (GUARANTED) % Z : 4.5% +/- 10% TOL.

TANK DETAILS :

TANK : 855 MM (L) X 340 MM (W) X 870	WT OF TANK & FITTINGS :	RADIATOR: 600 X 226 X 4 F - 2
MM (H)	150 KG	NOS. ON H.V SIDE
TRANSFORMER OIL : 170 LTR	TOTAL WEIGHT OF	OVER ALL : 1060 MM (L) X 910
	TRANSFORMER : 570 KG	MM (W) X 1320 MM (H)

VOL. RATIO : 110000/433	PHASE : THREE	TYPE : O/D BUSHING	WOUND: DW(AL.)
VECTOR GROUP : DYN-11	RISE : 35/40 DEG. C	TAPS : NIL	COOLING : ONAN

WINDING SPECIFICATION FOR *** 100 KVA DISTRIBUTION TRANSFORMER(BESCOM)

PERFORMANCE FIGURES :- :

LOAD LOSS :1200 W (C) / 1224W(G) : % Z : 4.40 (C) / 4.50 +/-10% TOL.(G)

SL	DESCRIPTION	L.V WINDING	H.V WINDING
01	TURNS PER PHASE	73	3212
02	TURNS PER COIL	73	803
03	COILS PER LIMB	01	04
04	TURNS PER LAYER	36.5	47.3
05	NO. OF LAYERS	02	17
06	CONDUCTOR SIZE (BARE)	2(12.70 MM X 5.20MM)	2.11 MM DIA
07.	INSULATION	0.3 MM DPC	0.23 MM DPC
08	CONDUCTOR SIZE (COVERED)	2(13.0 MMX 5.50 MM)	2.34 MM DIA
09.	CONDUCTOR PLACEMENT	1W X 2D	SINGLE
07	INTER LAYER INSULATION	10 MIL KRAFT PAPER	2X2.5 MILL E.D KRAFT PAPER
08	AXIAL LENGTH	492 MM / 499 MM	114 MM (470 MM SHRUNK)
09	INSIDE DIAMETER	124.5 MM	190 MM
10	OUTSIDE DIAMETER	169.5 MM	270 MM
11	RESISTANCE PER PH AT 75 ° C	8.989 milli Ω	22.957 Q
12	WEIGHT (BARE/ COVERED)	35.8 KG/ 38.0 KG	64.74 KG / 70 KG
13	CLEARANCE BETWEEN COILS	N/A	6.4 MM
14.	END CLEARANCE	10.5 MM	25 MM
15.	TYPE OF COIL	LA YER WOUND	CROSS OVER
16.	CONNECTION	STAR	DELTA
17.	I^2R LOSS AT 75 ° C & EDDY LOSS	499 WATT	637 WATT
18.	STRAY LOSS	6	4 WATT

TANK DETAILS :-

TANK : 900MMX355 MM X 900/910	CONSERVATOR : 200 MM DIA X 620	RAD. : 600X226X3 FINS- 4 NOS.
MM	MM (L)	
HT BUSHING MOUNTED : ON SIDE	VOL. OF OIL : 215 LTR	RAD. POS 2 NOS ON LT SIDE & 2
WALL		NOS. ON HT SIDE
LT BUSHING MOUNTED : ON SIDE	WT. OF TANK WITH RAD. :180 KG	TOTAL WT. OF TRANSFORMER : 720
WALL		KG.

ANDREW YULE & COMPANY LIMITED NAME OF THE UNIT.....

Application for Enlistment Form

The application form should be submitted along with the registration fee of Rs.100/- (Rupees Hundred) only by crossed Postal Order/Bank Draft No...... dated...... in favour of Andrew Yule & Company Ltd.

1)	Date of Advertisement for Registration	:
2)	Name of the Firm in Full	:
3)	Address of the Firm a) b) c) d) e)	:
4)	Telephone/Telegram/Fax No./E-mail a) b) c) d) e)	:
5)	Status of the Organization	:
6)	Whether Manufacturer/Contractor/Fabricator/Sub- Contractor/Stockist/Agent/Dealer	:
7)	Item for which enlistment is sought	:
8)	Banker's Name a) b) c)	:
Note:	Confidential Report of financial position will be reque Bankers	ested for by AY & Co. Ltd from the

9)	Trade License No. (Please attach a Xerox copy)	:
10)	Factory License No. (Please attach a Xerox copy)	:
11)	Whether registered as an SSI Unit. If yes, Registration No. (Please attach a Xerox copy)	:
12)	Sales Tax Registration No. a) b) (Please attach a Xerox copy of Registration Certificate)	:
13)	I.T. Permanent Account No.	:
14)	Photo copies of current I.T. & Tax clearance Certificates are to be attached	:
15)	Whether the applicant is already enlisted in this enterprise. If so, the details are to be furnished stating the types of jobs executed, etc. i.e.	:
	(a) Description of the job (b) Year (c) Amount &(d) Authorized by	:
16)	Whether the applicant is enlisted with any other Public Sector Undertaking/other reputed manufacturers. If so, the details are to be furnished	:
17)	Financial Capacity (Year) a)	:
	b) (Copies of Balance Sheet & Profit & Loss A/c for last 3 years should be attached)	:
18)	Technical capacity (i) (ii)	:

- 19) Manpower on Rolls Total Manpower in Roll: a)
 - b)
 - C)
 - d)
 - e)
- 20) Name & Residential address of : Partners/Directors/Proprietors, as the case may be

- 21) Whether any Govt. Servant(s) or dismissed : Employee(s) of Andrew Yule & Co. Ltd/any other Govt. Undertaking is in employment under the applicant
- 22) Whether the applicant or any of its : Partners/Directors has been banned or removed from the approved list of suppliers by the Enterprise or Undertaking/any other Enterprise or Undertaking in the past

I/We hereby certify that the particulars furnished by me/us above are true to the best of my/our knowledge and belief and misrepresentations of facts will render me/us liable to any action as may be deemed fit by Andrew Yule & Co. Ltd......Unit/Division have the sole discretion to reject or accept my/our candidature for enlistment.

1

Place:

(Signature of the Applicant) Office Stamp/Seal

Date:

FOR OFFICE USE ONLY

(a)	Technical assessment of capabilities to perform as per Units's /Divisions's requirements. (To be done and signed by Technical Dept.)
(b)	Financial Strength analysis to be made and signed by Finance.
(c)	Comments to Banker's Confidential Report to be made and signed by Finance (to be attached)
(d)	Purchase Dept's Recommendation (to be made by Purchase Dept.)
(e)	Tender Committee's comments for approval.

Sd/-

(Signature of the members of Tender Committee)

TO BE ALLOTTED BY PURCHASE DEPT.

Reg.....

Folio Ref. No.....

Enlistment Register