ANDREW YULE & COMPANY LIMITED (A Government of India Enterprise) Chennai (Operation), Electrical Division 5/346 OLD MAHABALIPURAM ROAD PERUNGUDI, CHENNAI: 600 096

TENDER DOCUMENTS FOR SUPPLY OF 250KVA EARTHING TRANSFORMERS.

ANDREW YULE & CO. LTD. invites e-Tender under single stage two part system (Part I: Techno-Commercial Bid and Part II: Price Bid) for supply of 250 KVA Earthing transformers" Scope of Work / Technical Specification "as specified in this tender document.

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

We request you to submit your offer for the supply of 250 KVA Earthing transformers as per our specification as detailed below,

1. 250 KVA- 33KV/415VEarthing Transformers as per our specification(FO:3688) Qty-2 Nos

DELIVERY: within 3 months from the placement of our P/Order

Any clarification or additional information if required, the tenderer should call on us to get those things clarified.

The rate quoted should be firm.

VALIDITY: Your offer should be valid for acceptance for a minimum period of 90 days from the date of tender opening.

The buyer reserves the right to accept or reject any or all the tenders or to waive any informality, minor deviation or omission without assigning any reasons whatsoever.

AYCL reserves the right to accept or reject any tender.

1.	TENDER NO.	<u>T-36/2018-19</u>
2.	MODE OF TENDER	e-Procurement System Online submission of Part I - Techno- Commercial Bid and Part II - Price Bid through www.mstcecommerce.com/eprochome/aycl 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 CO/65/18-19/ET/466
4.	Date of publication of e-Tender through publication MSTC/AYCL websites and Central Public Procurement Portal	01.03.2019
5	Date of availability of NIT to the Vendors for downloading	01.03.2019
6	Earnest Money Deposit	 Earnest Money Deposit" of Rs.20,000 (Rupees Twenty Thousand only)should be paid by thro' NEFT/RTGS Other document as described in Annexure II& III
7	Date of Starting of e-Tender for submission of Online Techno-Commercial Bid and Price Bid at www.mstcecommerce.com/eprochome/aycl	01.03.2019-11.30 AM
8	Date of closing of Online e-tender for submission of Techno-Commercial Bid & Price Bid at www.mstcecommerce.com/eprochome/aycl	15.03.2019-12.00 PM
9	Last date of submission/ uploading details of EMD & other documents at <u>www.mstcecommerce.com/eprochome/aycl</u>	15.03.2019-12.00 PM
10	Date & time of opening of Part-I (Techno- Commercial Bid)	15.03.2019-12.05 PM
11	Date & time of opening of Part-II (Price Bid)	To be intimated to the eligible vendor separately by email.

List of Annexure

Important Instructions for E-procurement	Annexure-I
Terms& Conditions	Annexure-II
General Terms& Conditions	Annexure-III
Online Techno commercial terms	Annexure-IV
Price Sheet	Annexure-V
Manufacturing process	Annexure -VI
Specification& Bill of Materials	Annexure -VII
QAP	Annexure -VIII

Important Instructions for E-procurement

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

You are requested to read the Terms & Conditions (Annexure- II,III,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) <u>Registration</u>: 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 posses 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

- 1) 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).

1.	Mr. A T E Pandian
	Manager (Materials)
	Ph. No: (044) 2496-0793
En	nail: <u>atepandian@andrewyule.com</u>

Contact person (ANDREW YULE & COMPANY LTD):

2. Mr Kingsley Rueben Technical Assistant (EDP) Mobile No: 91 9884446378 Email: <u>reuben@andrewyule.com</u>

3. Mr. R.Tamilselvan Assistant Manager (Materials) Mobile. No: 91 9788520864 Email: tamilselvan@andrewyule.com

Contact person (E-Commerce, MSTC Ltd):

1. Mr. Vikash Kumar Jaiswal RegionalManager (ERO) MobileNo:9903042449 Email: <u>vikash@mstcindia.co.in</u>

2) Mr. Pritambiswas Assistant Manager (ERO) Mobile- 9903248755 Email:<u>pbiswas@mstcindia.co.in</u>

3) Mr. Mayank Jain Assistant Manager (ERO) Mobile- 9721277969 Email:<u>mhjain@mstcindia.co.in</u>

Help Desk No.: 033 22901004, will operate on all working days from 10 AM to 6PMfor online support to the vendors.

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 update 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: Uploading of EMD & other Documents:

Within specified Date & time the vendor must submit the documents as perthe Annexure. (Annexure II)

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 SOT.
- **b.** The process involves Electronic Bidding for submission of Techno Commercial Bid as well as Price Bid.
- C. The bidder(s) should submit their Techno Commercial Bids, upload payment details of EMD & other documents and Price Bid through online in MSTC website <u>www.mstcecommerce.com</u>→ e-procurement → Psu / Govt depts. → Login under AYCL→ My Menu → Auction Floor Manager → live event → Selection of the live event.

- **d.** The bidder should allow to run an application namely enApple 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.

s. 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.

ANDREW YULE & COMPANY LIMITED Chennai Operation, Electrical Division

General Information Ref. Tender No: T-36/18-19 (This document should be uploaded along with EMD)

The applicants are required to furnish full information to the queries included in this form. In giving the particulars, the supporting documents/certificates as called for per queries at places, must be tagged with the application for evidencing the information furnished in the application.

1. Name of the firm in full :

- 2. Address, Telephone No., Fax No. & E-mail
- Fax No. & E-mail : a) Address :
- b) Telephone No.

:

:

:

:

- c) Fax No. :
 - d) E-mail ID
- 3. Status of the organization :
- 4. Trade License No. (Please attach a photo copy of the license) :
- 5. <u>Banker's name</u>
 - (a) Name of the Bank
 - (b) Name of the Branch :
 - (c) Account No.

Note: A copy of Banker's Certificate to be attached.

- 6. GST Registration No.
- 7. I. T. Permanent Account No.:

8. Financial Capacity	:	Year (2016-2017)
(a) Fixed capital	:	
(b) Working capital	:	

I/we hereby certify that the particulars furnished by me/us above are true to the best of my / our knowledge and belief and mis-representations of facts will render me/us liable to my/our action as may be deemed fit by Andrew Yule & Co. Ltd. (Chennai Operation) & have the sole discretion to reject or accept my/our candidature.

		(Się	nature of the App Office Stamp/Sea	-
Place	:			
Date	•			

List of attachments:

The following documents are to be uploaded online at

www.mstcecommerce.com/eprochome/aycl

1. EMD : Rs. 20,000/= *

* Bidders may request for exemption from submitting EMD (Refer details given in General terms & conditions)

- Tender fee Rs: 200 /= should be paid by way of RGTS/ NEFT *
 * Bidders participating in the tender should upload the UTR details towards cost of tender document.
- 3. Present customer Profile to be uploaded.

4. Should have experience in design, manufacture, testing and supply of transformers including after sales service activities.

5. The bidder shall have supplied 10 nos of oil filled transformers of assorted range & type up to 3 MVA, 33 KV class type within last 5 years (2013-14 to 2017-18)

6. Should have minimum 2 nos of transformer of rating 3 MVA, 33 KV or above in Service for minimum 2 years. Bidders are requested to submit the Performance certificate for their highest rating of transformer.

7. Should be ready to demonstrate the capability of design &manufacture strength by conducting type test and short circuit test as per the contractual requirement.

8. Shall have a minimum turnover of Rs.2 crores in transformer Manufacturing in the last three financial years. (2015-16, 2016-17 & 2017-18)

9. The bidder should submit the documents as detailed below for Assessment of the supplier,

- a) Company profile
- b) Credentials along with details of execution of various rating of Power Transformer
- c) Copy of type and special test certificates
- d) List of technical competent person with specialization in related field
- e) Balance sheet for last three years (2015-16, 2016-17 & 2017-18)

*AYCL technical team will visit the bidder for assessment.

OFFERS RECEIVED WITHOUT ANY OF THE ABOVE WILL BE REJECTED

**Note: Bidders who are in the AYCL empaneled list of suppliers for transformers need not submit the above documents.(SI.no 3 to 9& Annexure II).Proof of turnover for year 2017-18 alone needs to be submitted.

GENERAL& TERMS AND CONDITIONS

1) EMD: Rs. 20,000.00 (Rupees Twenty thousand only), should be paid by way of RGTS/NEFT.

For bidders already enlisted with AYCL- Chennai Operation, 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 MSMED 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 RIGHTS OF THE COMPANY

Bidders who have quote other payment terms & condition having financial implication will be loaded as per Andrew Yule's norms.

We reserve the right to accept or reject any or all the tenders or to waive any informality, minor deviation or omission without assigning any reasons whatsoever.

Our Bank details for making RTGS payment.

Bank Name and Address	ALLAHBAD BANK CHENNAI ADYAR BRANCH 19,1 ST STREET, PADMANABHA NAGAR CHENNAI 600 020
IFSC Code	ALLA0211103
Account No	20276303182
Account Name	ANDREW YULE & COMPANY LIMITED

TECHNO-COMMERCIAL TERMS FOR SUPPLY OF 250 KVA EARTHING TRANSFORMERS

(To be filled online in mstc portal).

SL	TERMS & CONDITIONS	VENDOR
NO		RESPONSE
1	 REQUIREMENT -Tender offers are invited for supply of Earthing transformers as detailed below. 1. 250 KVA -33KV/415VEarthing Transformers as per our specificationQty-2 Nos 	AGREE
	specification 2ty-2 Nos	
2	Validity period of the offer: Your offer should be valid for acceptance for a minimum period of 90 days from the date of tender opening.	AGREE
3	Security Deposit-	AGREE
	a) The EMD amount of the successful Bidder will be retained as security deposit towards the execution of the contract and the same will be released after completion of contract.	
	 b) If the bidder is exempted from paying EMD vide clause no 1 of Annexure III then on being awarded the contract , 	
	 The bidder should execute the bank guarantee /DD in favor of Andrew Yule & Co .Ltd for Rs.20, 000/=. 	
	 For bidders already enlisted with AYCL- Chennai Operation, having outstanding amount more than the Security deposit amount then it will be adjusted towards Security Deposit. 	
4	ARBITRATION If any dispute arises between the company and the contractor, as to the terms and conditions of the agreement or method of compliance thereof, the procedure as laid down in Indian Arbitration & Consolidation Act 1996 will be adhered to.	AGREE
5	RIGHTS OF THE COMPANY Bidders who have quote other payment terms & condition having financial implication will be loaded as per Andrew Yule's norms.	AGREE
	The company reserves the right to accept any tender irrespective of whether it is lowest or otherwise or to reject any or all tenders without assigning any reason thereof. Affordability of the rates is also a criterion in finalizing the offer.	
6	FORCE MAJEURE In case of strike, accident, natural calamity, acts of god and other unforeseen contingencies causing stoppage of production at Andrew Yule Factory, Andrew Yule reserves the right to cancel and/or modify this contract without liability for compensation and/or claim of any description.	AGREE

7	Legal condition: Any contract entered against this tender will be as per the following legal condition	AGREE
	It is recorded that this purchase order / contract / agreement is executed and concluded by and between the parties hereto at premises No.5/346, Old Mahabalipuram Road, Perungudi, Chennai 600 096 and in the event any dispute arises out of this agreement between the parties only the appropriate Civil Court in the City of Kolkata shall have the exclusive jurisdiction to entertain, try and determine the said proceedings in exclusion of all other courts.	
8	Risk purchase clause:	AGREE
0	The company reserve 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.	AGREE
9	Liquidated damage :	AGREE
	If the delivery is delayed beyond the date of scheduled date of dispatch in the purchase order, penalty will be levied @ 0.5% per week subject to a maximum of 10%	
10	If there is any variation in the techno commercial terms as entered/agreed in the online bid and uploaded documents, then the details entered/agreed in the online bid will be the final.	AGREE
11	Performance Bank Guarantee:	AGREE
12	As a guarantee towards performance of the transformer, the buyer will retain 10% of the invoice value for 24 months from the date of supply. Alternatively, the tenderer can execute a bank guarantee in the format of the buyer for 10% of invoice value (Including GST) which shall be valid throughout the guarantee period of 24 months from the date of supply with a claim period of another 3 months counted from the date of expiry of the guarantee period.	
12	Guarantee: The transformer should be guaranteed for 24 months from the date of dispatch or 18 months from the date of commissioning whichever is earlier. During the period if the product is found defective due to any of the above reason you shall undertake to repair the same at FREEOF COST.	AGREE
13	Non-Disclosure Agreement: The bidder on being awarded the contract has to execute a Non-disclosure Agreement as per the buyers prescribed format.	AGREE
14	Any reworks at site including leak and replacement/repair of failed components are in supplier scope.	AGREE
15	Any major failure at site, which requires the transformer to be brought back to works for rectification, will be to supplier account. This will also include taking back the transformer and installing at site after rectification. Any defect during guarantee period due to inferior materials or faulty workmanship will be rectified or replaced by the supplier at free of cost.	AGREE

16	The transformer after testing at supplier premises will be brought to AYCL Chennai works for carrying out routine test and any other tests as specified by the customer. The supplier has to consider the cost of transportation of the same including assembling and dismantling for the above tests. AYCL will provide crane facility. Any failure on the above tests due poor workmanship will be to supplier account.	AGREE
17	 Stage Inspection: The assembled core in locked condition with the transformer tank should be brought to AYCL- Chennai works for stage inspection of our customer. To and fro freight charges for transporting the assembled core along with the tank from your works to AYCL – Chennai works and back to your works including 2-3 days of halting at AYCL works will be to your account. 	AGREE
18	The bidder's should have to submit the following documents of CRGO lamination(Core) during our customer inspection at AYCL- Chennai works, a. Invoice of supplier b. Mill test certificate c. Packing list d. Bill of lading e. Bill of entry certificate	AGREE
19	The transformer will be dispatched with Andrew Yule name plate only.	AGREE
20	The rate quoted should be F.O.R. Chennai (Inclusive of Packing, Forwarding and Insurance)	AGREE
21	Transformer should be manufactured as per our Production process as mentioned in Annexure VI	AGREE
22	Transformer should be supplied as per our specification & Bill of materials as mentioned in Annexure VII	AGREE
23	Transformer will be inspected & Tested as per our QAP as mentioned in Annexure VIII	AGREE
24	PAYMENT TERMS: -Direct Credit In case it is agreed fill 25 with number of days of direct	Remarks Filed
25	 Please indicate the number of days of direct credit. a) 90 % within 90 days from the date of dispatch of Transformer. b) 10% after guarantee period (Andrew Yule payment terms is minimum 90 days direct credit. If the offered payment terms is less than 90 days , bids will be opened at the sole discretion of Andrew Yule & price will be loaded as per Andrew Yule norms) 	Remarks Filed
26	PAYMENT TERMS: - Against L/c Bidders, who wish to quote with L/c, enter AGREE IN 26 and fill 28 with number of days of credit. Bidders, who have entered agreed in 24 and filled credit days in 25 should enter Disagree in 26 and fill 28 with 0	Remarks Filed
27	If L/c payment term is selected then the L/c opening charges will be to the bidders account.	AGREE

28	Please indicate the number of days of credit against L/c a) 90 % within 90 days from the date of dispatch of Transformer. b) 10% after guarantee period (Andrew Yule payment term is minimum 90 days direct credit. For bidders offering L/c payment terms, bids will be opened at the sole discretion of Andrew Yule & price will be loaded as per Andrew Yule norms)	Remarks Filed
29	If a bidder select AGREE in both 24 and 26, their offer will not be accepted.	AGREE
30	Qualifying Requirement: Should have experience in design, manufacture, testing and supply of Power transformers including after sales service activities.*Proof should be uploaded. **Those who are in the AYCL empaneled list of suppliers for	Remarks Filed
31	transformers need not submit the above documents The bidder shall have supplied 10 Nos. of oil filled transformers of assorted range& type up to 3 MVA, 33 KV class type within last 5 years (2013-14 to 2017-18) *Proof should be uploaded. **Those who are in the AYCL empaneled list of suppliers for	Remarks Filed
32	transformers need not submit the above documents Should have minimum 2 nos of transformer of rating 3 MVA,33 KV or above in Service for minimum 2 years. Bidders are requested to submit the Performance certificate for their highest rating of transformer.* Proof should be uploaded . **Those who are in the AYCL empaneled list of suppliers for	Remarks Filed
33	transformers need not submit the above documents Should be ready to demonstrate the capability of design & manufacture strength by conducting type test and short circuit test as per the contractual requirement. **Those who are in the AYCL empaneled list of suppliers for	Remarks Filed
34	transformers need not submit the above documents Shall have a minimum turnover of Rs. 2 crores in transformer Manufacturing in thelast three financial years. (2015-16, 2016-17 & 2017-18)* Proof should be uploaded . **Those who are in the AYCL empaneled list of suppliers for transformers, Proof of turnover for year 2017-18 alone needs to be submitted	Remarks Filed
35	 The bidder should submit the documents as detailed below for Assessment of the supplier, a) Company profile b) Credentials along with details of execution of various rating of Power Transformer c) Copy of type and special test certificates d) List of technical competent person with specialization in related field e) Balance sheet for last three years (2015-16, 2016-17& 	Remarks Filed

	*AYCL technical team will visit the bidder for assessment. **Those who are in the AYCL empaneled list of suppliers for transformers need not submit the above documents.(SI.no 33 a- e). Proof of turnover for year 2017-18 alone needs to be submitted	
36	EMD : Rs . 20,000/= * UP LOADED * Bidders may request for exemption from submitting EMD (Refer details given in General terms & conditions)	Remarks Filed
37	Tender fee Rs: 200 /= should be paid by way of RGTS/ NEFT * UP LOADED * Bidders participating in the tender should upload the UTR details towards cost of tender document.	Remarks Filed
38	Andrew Yule Scope of Supply 1. Name Plates	AGREE
39	Delivery: within 3 months from the placement of our P/Order	Remarks Filed

Annexure-V

PRICE FORMAT FOR SUPPLY OF 250 KVA EARTHING TRANSFORMERS

SI. NO	DESCRIPTION	Quantity	BASIC PRICE PER NO (Rs)	CGST (In %) (If not applicabl e please enter Zero)	SGST (In %)(If not applicable please enter Zero)	IGST (In %)(If not applicable please enter Zero)	Landed cost per No (In Rs)
		Nos	A	В	С	D	Landed Cost = a
1	250KVA 33KV/415V Earthing Transformers as per our specification	2					

a) **PRODUCTION PROCESS**

- 1. Core assembly to be done as per the drawing/Specification.
- 2. Core loss to be checked after core building and compared with design specifications.
- 3. Coil winding to be done as per the winding sheet and winding diagram.
- 4. In case of tapping, binding of conductors to be done in such a way that two consecutive tapping should not come in the same bay/division.
- 5. Continuity check to be done for all the coils.
- 6. Brazing of conductor to be done with proper care, Cleaning of Carbon deposits thoroughly and insulation of Conductor to be done properly.
- 7. Coils to be Pre-shrinked and the heights to be compared with design specifications. Continuity check to be done for all coils before taking up for assembly.
- 8. Core coil assembly to be done as per the drawing and Ratio test to be carried out
- 9. Lead termination to be done as per the drawing.
- 10. Lead out points to be done with due care in such a way that no scissoring effect should come between the tap leads.
- 11. Send for processing
- 12. Refer *Process* table below:-
- 13. Assembling of accessories as per OGA drawing.
- 14. Offer for Testing/Inspection.
- 15. Dismantling of accessories as per drawing.
- 16. Painting & Wiring as per drawing.
- 17. Packing & Dispatch.

FITTING	CHAMBER	REMARKS
1	Heating - 12 hrs at 115°C Vacuum Pump - 3 hrs Condensation to be recorded.	Fitting All fasteners tightening uniformly, Yoke bolt checking for 2KV, Looseness of coil- Check and Pack accordingly
2	Heating - 8 hrs at 115°C Vacuum Pump - 3 hrs Condensation to be recorded.	Fitting All fasteners tightening uniformly, Yoke bolt checking for 2KV, Looseness of coil- Check and Pack accordingly
3	Heating - 6 hrs at 115°C Vacuum Pump - 3 hrs Condensation to be recorded.	Fitting All fasteners tightening uniformly, Yoke bolt checking for 2KV, Looseness of coil- Check and Pack accordingly A . P Testing, Proceed for Tanking
4	With Tank Heating - 12 hrs at 115°C Vacuum Pump - 4 hrs Condensation to be recorded.	See for Condensation 100ml for 3 (i.e. every 1 hrs) consecutive hrs oil filling under vacuum.

Annexure-VII

TECHNICAL SPECIFICATIONS& BILL OF MATERIALS

YULE ANDREW YULE & COMPANY LTD	BILL OF MATERIALS LIST	F.O NO : 3688 RATING : 250 KVA VOLTAGE: 33KV/ 415 V TAPPINGS:+7.5% to -7.5% in steps of 2.5% (OCTC) Z0 Imp = 146 Ω/ph Imp : 4% (HV-LV) (with IS tol) Vector Group : ZNyn11 Rev – R0
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A) Major Materials

1) Core (Make: POSCO / NLMK / KRYFS / Eqlt.) Core Weight : 722.6kgs Core frame : 167ø /500(cc) / 775(LL) mm Max. Steel width : 160 mm Min. steel width : 70 mm No. of steps : 6 Nos Thickness of steel : 0.27mm Core loss : 0.84W/Kg 1.5T Core insulation Kit : (2mm & 3mm PB) - 1 set Core clamps: 171Kgs [125 x 6mm Channel]

2. COPPER: (Make: COPRAL / NSR / SHREE CABLES)

1. Max. Specific resistance at 20°C: $0.017241\Omega/cm^3$ 2. Grade of paper: 1.2 - 2M / 5B2 - 2H1 / 5A2 - 1M3H.V1: 309 KgsH.V2: 575 KgsL.V : 132 Kgs

3. Connection Copper :(Make: GIC / SHERATRAN)

HV Main & Tap (Bare / Covered Dia) :single strand 4.6/6.6ø-12 Kgs. LV Line :19 strands 1.8mmø 9/11ø - 8 Kgs.

4. Insulating Materials:

Base wood (Density 1.25 g/cm³): 167/550ø mm, 15Thick, 3 Nos
Make: Peramalli Wallace /WIP / Lamtuff
Clamping Ring (PW): 207/547ø, Thick -45mm, -3 Nos.
Winding Kit : Spacers (Edge rounded), Dovetail runner, Packing Strip Distance piece - 1 set
Coil Assy Kit : Blocks (Edge rounded), Cylinder, Rectangular runner, Common Block (edge rounded), Washer, Segment,

Total Insulation: 130Kgs.

B) V	Winding details: -			
SL.NO	DESCRIPTION	L.VWINDIN G	H.V 1	H.V 2
1)	Туре	Spiral Winding	Continuous Disc	Continuous Disc
2)	ID	378 mm	203 mm	430 mm
3)	OD	394 mm	314 mm	541 mm
4)	Height	651 mm (includes spiral effect 19mm)	63	2 mm
5)	No. of Parallel Cond.	4[2N,2A]	ONE	ONE
6)	Size of conductor(mm)	8.8X3.3(0.4) (IPCC)	5.0 x 1.6 (0.7) (IPCC)	5.0 x 1.6 (0.7) (IPCC)
7)	Spacer	Not Applicable	Disc 01-30 = 03mm Disc 36-37 = 18mm Disc 37-72 = 03mm	Disc 01-30 = 03mm Disc 36-37 = 18mm Disc 37-72 = 03mm
8)	Connection	STAR	INTE	R STAR
9)	No of Disc / Layers	ONE	Main=2 x 30 Disc Tap = 2 x 6Disc	Main=2 x 30 Disc Tap = 2 x 6 Disc
10)	Turns / Layer - Disc	34 Turns	23 + 11/12(max)	23 + 11/12(max)

C) Tank and fittings:

Tank : L =1780mm; W = 730mm; H =1475mm Plate Thickness : [Bottom =10mm; Side Wall = 5mm; Cover = 10mm; Curb : 12mm Conservator :3 thick plates Total weight : 1303 Kgs[Tank, cover, cons & under base]

5. OCTC: Alwaye / Paragoan - 1 No. Rating : 33 KV /100A/7 POS/200kvp/6 Deck

6. Bushings (Make: CJI / Genesis):A) H.V line end: 3 NosRating: 52KV/1000ACreepage distance: 1300mm

B) L.V-line side and neutral: 4 Nos Rating: 3.6KV/630A Creepage distance : 90mm C) H.V Neutral bushing :1 Nos Rating:36KV/1000A C.D: 900mm

D) L.V Ext. Neutral bushing: - 1NO

Rating: 3.6KV/250A C.D : 90mm

E) WTI C.T Bushing : 3Nos Rating : 1.1KV/ 250A

F) C.T TERMINAL Board: 1Nos Ref. Drg. No: CS-TB-SM2-S1 Execution: A 6 Terminals

7. Current Transformer (Make: M/s Kappa):

Type: cotton tape insulationA) HV Neutral C.T: 2NoRatio: 400-200/5ABurden: 40VAAccuracy class: 5P20, 500VA for 0.5secID: 120mm minOD: 290mm maxHT: 205mm max

8. Fittings:

A. Oil temperature indicator: 1 set : 150mm Size No of contacts : 2 (alarm &trip) Capillary length : 3 mts Model : Round Dial type indicator: 1 No Make : Precimeasure/Perfect Control B) Buchholz relay (REED Type): 1 no Make : ATVUS Size : 25mm No of contacts : 2 (alarm &trip)

C) C.IRollers (Without Bearing)150 mm Dia Flanged: 4 Nos

D) Silica gel breather(Press N forge/ Yogya) Size : 1.5 Kgs (For main transformer) - 1No

F) Magnetic oil level gauge	:1 no
Make	: Sukrut udyog/Viat
Size	: 100mm
No of contacts	: 1 (low level alarm)
Model : S04	

G). Valves I.(MATERIAL:G.M)(TYPE:Globe) (As per IS 778) (Make : Manixon/ Mala)

Drain valve	:50 mm	FL/FL	1	NOS
Filter valve (Top & Bot)	: 40 mm	FL/FL	2	NOS
Main cons. drain valve	: 20 mm	FL/FL		1 NOS
Isolating valve	: 25 mm	FL/FL		2 NOS

10) PRESSED STEEL RADIATORS: (1.2mm Thick Sheet) Quantity : 2 Nos.C/C Distance:1100mmWidth : 300mmNo. of sections/ Radiators : 13

11) PAINT (Light grey): 4 LTS/coatShade No: 631 of IS5

12) TRANSFORMER OIL – As per IS 335 Total : 1900LTS

13)CRIMPING LUG (Material: Copper) : 21 NOS

14) WIRING CABLES :(7 Strands, Resistance @ 20°C)

0.68Ø, 2 Core, 2.5mm² PVC Cable: 3MTS (APPROX) - (Max. resistance = $7.4\Omega/\text{km}$) 0.68Ø, 4 Core, 2.5mm² PVC Cable: 5MTS (APPROX) - (Max. resistance = $7.4\Omega/\text{km}$) 0.86Ø, 4 Core; 4.0mm² PVC Cable: 6 MTS (APPROX) - (Max. resistance = $4.6\Omega/\text{km}$)

15) SUPPORT INSULATOR (EPOXY) 22 KV : 2 NOS

16) CABLEGLAND: SIBG 1619 :5 NOS.

17) Gaskets: 1) 6 mm Thick Sheet - 5 Nos;2) 10 mm Thick Sheet - 3 No : 1 set

18) Hardware's: HDG – External; SS with Spring Washer – Internal: 1 set

19) Glands for Cable Box SIBG 6675 - 2 Nos

20) HVTERMINAL CONNECTOR -3 Nos

			Event Cat				
			Event D			and the second	
Event no		Event close date &		Prebid start date & time	Tender Type	Opening Type	
	& time	time	& time	Prebid end date & time		Act.Status	
AYCL/Electrical Division CO/65/18- 19/ET/466	01.03.2019 - 11:30 AM	15.03.2019 -12:00 PM	01.03.2019 - 11:35 AM	No Prebid Meet	Open	Itemwise Activated	
Mode			TOE Start Time		TOE End Time	in the second second	
	ical Cum Price Bid		2019-03-15 12:0	5:00.0	2019-06-30 00	00:00.0	
	Ray and		Tender Committ	tee Members			
Contact Person		Designation	Department	Email	Mobile No.	Telephone	
Tamilselvan En		Engineer(Material)	Electrical Division CO	tamilselvan@andrewyule.com	9788520864	24960793	
Kingsly Reuben	м	Assistant	Electrical Division CO	reuben@andrewyule.com	9884446378	24960793	
40			Lot Det	ails			
Sno	Lot no	Lot name	Quantity	Uom	Description of I	tem	
	Loc IIIo		Quartery				
1	1	250KVA EARTHING TRANSFORMERS	2.0	NO	250KVA 33KV/415V Earthing Transformers as per our specification		
1.1	TECHNO COMME	RCIAL CONDITIONS	4. 1			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
				arthing transformers as detailed t	elow. 1.250 KVA	-33KV/415V	
				Component : Agree Only	104	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
2			ould be valid for	acceptance for a minimum perio	d of 90 days from	the date of tende	
2	opening. Compoi	nent : Agree Only			1		
4	Andrew Yule & Co .Ltd for Rs.20, 000/=. 2) For bidders already enlisted with AYCL- Chennai Operation, having outstanding amount more than the Security deposit amount then it will be adjusted towards Security Deposit. Component : Agree Only ARBITRATION If any dispute arises between the company and the contractor, as to the terms and conditions of the agreeme or method of compliance thereof, the procedure as laid down in Indian Arbitration & Consolidation Act 1996 will be adhered to. Component : Agree Only						
5	RIGHTS OF THE COMPANY Bidders who have quote other payment terms & condition having financial implication will be loade as per Andrew Yule norms. The company reserves the right to accept any tender irrespective of whether it is lowest or otherwise or to reject any or all tenders without assigning any reason thereof. Affordability of the rates is also a criterion in						
- N	finalizing the offer. Component : Agree Only						
6	FORCE MAJEURE In case of strike, accident, natural calamity, acts of god and other unforeseen contingencies causing stoppag of production at Andrew Yule Factory, Andrew Yule reserves the right to cancel and/or modify this contract without liability for compensation and/or claim of any description. Component : Agree Only						
7	purchase order / Mahabalipuram F parties only the a the said proceed Risk purchase cla shall have every (Incidental/Conso	contract / agreement is koad, Perungudi, Chenn appropriate Civil Court ir ings in exclusion of all o iuse: The company rese right to do the same thr equential) shall be to yo	e executed and co ai 600 096 and in a the City of Kolki ther courts. Com rive the right to in rough some other	will be as per the following legal norduded by and between the par the event any dispute arises ou ata shall have the exclusive juris: ponent : Agree Only mpose risk purchase clause as " I agency/s which shall deemed fi with respect to our intimation o	ties hereto at prei t of this agreemen diction to entertain For delay in execu t and the addition	mises No.5/346, 6 t between the n, try and determining tion / supply we	
		ponent : Agree Only ge : If the delivery is de	laved beyond the	date of scheduled date of dispa	tch in the purchas	e order, penalty	
9	be levied @ 0.5%	6 per week subject to a	maximum of 109	6 Component : Agree Only		4	
10		f there is any variation in the techno commercial terms as entered/agreed in the online bid and uploaded documents, then th letails entered/agreed in the online bid will be the final. Component : Agree Only					
11	value for 24 mon buyer for 10% of	ths from the date of sup invoice value (Including	pply. Alternatively g GST) which sha	rformance of the transformer, th , the tenderer can execute a bai able throughout the guaran bunted from the date of expiry of the second second second second second second the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	nk guarantee in th ntee period of 24 i	e format of the months from the	
	commissioning w	Guarantee: The transformer should be guaranteed for 24 months from the date of dispatch or 18 months from the date of commissioning whichever is earlier. During the period if the product is found defective due to any of the above reason you shal undertake to repair the same at FREEOF COST. Component : Agree Only					
	Non-Disclosure A	sclosure Agreement: The bidder on being awarded the contract has to execute a Non-disclosure Agreement as per the					
14		prescribed format. Component : Agree Only works at site including leak and replacement/repair of failed components are in supplier scope. Component : Agree Only					
	Any major failure at site, which requires the transformer to be brought back to works for rectification, will be to supplier account. This will also include taking back the transformer and installing at site after rectification. Any defect during guarantee period due to inferior materials or faulty workmanship will be rectified or replaced by the supplier at free of cost. Component : Agree Only						
16	The transformer other tests as sp assembling and c workmanship will	ecified by the customer. lismantling for the abov be to supplier account.	The supplier has e tests. AYCL will Component : Ag		tation of the same e on the above te	including sts due poor	
	Stage Inspection for stage inspecti	The assembled core in on of our customer. To	locked condition and fro freight cl	with the transformer tank shoul harges for transporting the asser including 2-3 days of halting a	nbled core along v	with the tank from	

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10	The transformer will be dispatched with Andrew Yule name plate only. Component : Agree Only
	The rate quoted should be F.O.R. Chennai (Inclusive of Packing, Forwarding and Insurance) Component : Agree Only
21	Transformer should be manufactured as per our Production process as mentioned in Agnexure VI Component : Agree Only
22	Transformer should be supplied as per our specification & Bill of materials as mentioned in Annexure VII Component : Agree Only
23	Transformer will be inspected & Tested as per our QAP as mentioned in Annexure VIII Component : Agree Only
24	PAYMENT TERMS: -Direct Credit In case it is agreed fill 25 with number of days of direct Component : Remarks Field
25	Please indicate the number of days of direct credit. a) 90 % within 90 days from the date of dispatch of Transformer. b) 10% after guarantee period (Andrew Yule payment terms is minimum 90 days direct credit. If the offered payment terms is less than 90 days, bids will be opened at the sole discretion of Andrew Yule & price will be loaded as per Andrew Yule norms) Component : Remarks Field
26	PAYMENT TERMS: - Against L/c Bidders, who wish to quote with L/c, enter AGREE IN 26 and fill 28 with number of days of credit. Bidders, who have entered agreed in 24 and filled credit days in 25 should enter Disagree in 26 and fill 28 with 0 Component : Remarks Field
27	If L/c payment term is selected then the L/c opening charges will be to the bidders account. Component : Agree Only
28	Please indicate the number of days of credit against L/c a) 90 % within 90 days from the date of dispatch of Transformer. b) 10% after guarantee period (Andrew Yule payment term is minimum 90 days direct credit. For bidders offering L/c payment terms, bids will be opened at the sole discretion of Andrew Yule & price will be loaded as per Andrew Yule norms) Component Remarks Field
29	If a bidder select AGREE in both 24 and 26, their offer will not be accepted. Component : Agree Only
30	Qualifying Requirement: Should have experience in design, manufacture, testing and supply of Power transformers including lafter sales service activities.*Proof should be uploaded.**Those who are in the AYCL empaneled list of suppliers for transformers need not submit the above documents Component : Remarks Field
31	The bidder shall have supplied 10 Nos. of oil filled transformers of assorted range& type up to 3 MVA, 33 KV class type within last 5 years (2013-14 to 2017-18) *Proof should be uploaded. **Those who are in the AYCL empaneled list of suppliers for transformers need not submit the above documents Component : Remarks Field
32	Should have minimum 2 nos of transformer of rating 3 MVA,33 KV or above in Service for minimum 2 years. Bidders are requested to submit the Performance certificate for their highest rating of transformer.*Proof should be uploaded. **Those who are in the AYCL empaneled list of suppliers for transformers need not submit the above documents Component : Remark Field
33	Should be ready to demonstrate the capability of design & manufacture strength by conducting type test and short circuit test as per the contractual requirement. **Those who are in the AYCL empaneled list of suppliers for transformers need not submit the above documents Component : Remarks Field
34	Shall have a minimum turnover of Rs. 2 crores in transformer Manufacturing in thelast three financial years. (2015-16, 2016-1 & 2017-18)*Proof should be uploaded. **Those who are in the AYCL empaneted tof suppliers for transformers, Proof of turnover for year 2017-18 alone needs to be submitted Component : Remarks Field
	The bidder should submit the documents as detailed below for Assessment of the supplier, a)Company profile b) Credentials along with details of execution of various rating of Power Transformer c) Copy of type and special test certificates d) List of technical competent person with specialization in related field e) Balance sheet for last three years (2015-16, 2016-17& 2017- 18) *AYCL technical team will visit the bidder for assessment. **Those who are in the AYCL empaneled list of suppliers for transformers need not submit the above documents.(Sl.no 33 a-e). Proof of turnover for year 2017-18 alone needs to be submitted Component : Remarks Field
36	EMD : Rs. 20,000/= * UP LOADED * Bidders may request for exemption from submitting EMD (Refer details given in General terms & conditions) Component : Remarks Field
37	Tender fee Rs: 200 /= should be paid by way of RGTS/ NEFT * UP LOADED * Bidders participating in the tender should uploa the UTR details towards cost of tender document. Component : Remarks Field
	Andrew Yule Scope of Supply 1.Name Plates Component : Agree Only
39	Delivery: within 3 months from the placement of our P/Order Component : Agree Only
	Formula Details
	For Lot ::1 : 250KVA EARTHING TRANSFORMERS
	PER NO (In Rs), b) CGST (In %) (If not applicable please enter Zero), c) SGST (In %) (If not applicable please enter Zero), d) not applicable please enter Zero)

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