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 20 MVA (66/11 KV) POWER TRANSFORMER.

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 20 MVA Power transformer Scope of Work / Technical Specification "as specified in this tender document.

Tender document may be downloaded from MSTC website www.mstcecommerce.com/eprochome/aycl. 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 16/20 MVA Power transformer as per our specification as detailed below,

1. 20 MVA- (66/11KV) Power Transformer as per our specification (FO: 3683) Qty-1 No

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.

Schedule of Tender

1.	TENDER NO.	T-04/2019-20
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/12/19-20/ET/47
4.	Date of publication of e-Tender through publication MSTC/AYCL websites and Central Public Procurement Portal	20.05.2019
5	Date of availability of NIT to the Vendors for downloading	20.05.2019
6	Earnest Money Deposit	 Earnest Money Deposit" of Rs.50,000 (Rupees Fifty 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	20.05.2019-11.00 AM
8	Date of closing of Online e-tender for submission of Techno-Commercial Bid & Price Bid at www.mstcecommerce.com/eprochome/aycl	04.06.2019-12.00 PM
9	Last date of submission/ uploading details of EMD & other documents atwww.mstcecommerce.com/eprochome/aycl	04.06.2019-12.00 PM
10	Date & time of opening of Part-I (Techno- Commercial Bid)	04.06.2019-12.05 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. Process of E-tender:

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).

Contact person (ANDREW YULE & COMPANY LTD):

1. Mr. A T E Pandian Manager (Materials) Ph. No: (044) 2496-0793

Email: atepandian@andrewyule.com

2. Mr Kingsley Rueben Technical Assistant (EDP) Mobile No: 91 9884446378

Email: reuben@andrewyule.com

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:pbiswas@mstcindia.co.in

3) Mr. Mayank Jain Assistant Manager (ERO) Mobile- 9721277969

Email:mhjain@mstcindia.co.in

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 www.mstcecommerce.com → 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 www.mstcecommerce.com/eprochome/aycl 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-00/19-20 (This document should be uploaded along with EMD)

Those bidders who had participated and qualified in our earlier tender or bidders in AYCL-Chennai approved vendor list need not submit the documents.

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.

	э
1. Name of the firm in full	:
2. Address, Telephone No., 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.	:
6. GST Registration No.	

8. Financial Ca	apacity	:	Year (2017-2018)
(a) Fixed ca	apital	:	
(b) Working	g capital	:	
knowledge an as may be de	nd belief and m	is-repre drew Y	lars furnished by me/us above are true to the best of my / our esentations of facts will render me/us liable to my/our action ule & Co. Ltd. (Chennai Operation) & have the sole discretion ure.
Place Date	: ;		(Signature of the Applicant) Office Stamp/Seal.
List of attachn	nents:		

7. I. T. Permanent Account No.:

The following documents are to be uploaded online at

www.mstcecommerce.com/eprochome/aycl

- 1. EMD : Rs. 50,000/= *
 - * Bidders may request for exemption from submitting EMD (Refer details given in General terms & conditions)
- 2. 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. The bidder should be an approved vendor of KPTCL for manufacturing/ repair of power transformer.
- 4. Present customer Profile to be uploaded
- 5. Should have experience in design, manufacture, testing and supply of Power transformers including after sales service activities.
- 6. The bidder shall have supplied 10 Nos. of oil filled transformers of assorted range& type up to 16 MVA, 110/132 KV class type within last 5 years (2013-14 to 2017-18)
- 7. Should have minimum 2nos of transformer of rating 16 MVA-110 KV or 20 MVA-66 KV or above in Service for minimum2 years. Bidders are requested to submit the Performance certificate for their highest rating of transformer.
- 8. Should be ready to demonstrate the capability of design & manufacture strength by conducting type test and short circuit test as per the contractual requirement.
- 9. Shall have a minimum turnover of Rs. 15 crores in transformer Manufacturing in the last three financial years. (2015-16, 2016-17 & 2017-18)
- 10. 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.

**Bidders are requested to submit the relevant approved documents.

*Proof should be uploaded.

OFFERS RECEIVED WITHOUT ANY OF THE ABOVE WILL BE REJECTED

***Note: Bidders who are in the AYCL empaneled list of suppliers for transformers up to 16 MVA, 110/132 KV need not submit the above documents.(Sl.no 4 to 10& Annexure II).Proof of turnover for year 2017-18 alone needs to be submitted.

GENERAL& TERMS AND CONDITIONS

1) EMD: Rs. 50,000.00 (Rupees Fifty 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 20 MVA (66/11 KV) POWER TRANSFORMERS

(To be filled online in mstc portal).

SL NO	TERMS & CONDITIONS	VENDOR RESPONSE
1	REQUIREMENT -Tender offers are invited for supply of 20 MVA Power transformers as detailed below.	AGREE
	1. 20 MVA- (66/11KV) Power Transformer as per our specification(FO: 3683) Qty-1 No	
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 , 	
	1) The bidder should execute the bank guarantee /DD in favor of Andrew Yule & Co .Ltd for Rs.50,000/=.	
	 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: 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: 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%	AGREE
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: As a guarantee towards performance of the transformer, the buyer will retain 10% of the invoice value for 48 months from the date of supply. Alternatively, the tenderer can execute a bank guarantee in the	AGREE
	format of the buyer for 10% of invoice value (Including GST) which shall be valid throughout the guarantee period of 48 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 48 months from the date of receipt of transformer or 42 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 bidder shall raise inspection call for components at the respective suppliers place. The bidder should offer the transformer for stage and final inspection (Refer QAP) at their works to KPTCL & AYCL. Regarding heat run test ,CPRI will also be witness the test along with KPTCL & AYCL.	AGREE

17	The transformer will be dispatched with Andrew Yule name plate	AGREE
	only.	
18	The rate quoted should be Ex-Your works (Inclusive of Packing, Forwarding) and the transformer will be dispatched to our customer with our name plate.	AGREE
19	The credit period will start from the date of receipt of material at Andrew Yule, Perungudi, Chennai.	AGREE
20	Transformer should be manufactured as per our Production process as mentioned in Annexure VI	AGREE
21	Transformer should be supplied as per our specification & Bill of materials as mentioned in Annexure VII	AGREE
22	Transformer will be inspected & Tested as per our QAP as mentioned in Annexure VIII	AGREE
23	PAYMENT TERMS: -Direct Credit In case it is agreed fill 24 with number of days of direct	Remarks Filed
24	Please indicate the number of days of direct credit. a) 90 % within 90 days from the date of receipt 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
25	PAYMENT TERMS: Against L/c Bidders, who wish to quote with L/c, enter AGREE IN 25 and fill 27 with number of days of credit. Bidders, who have entered agreed in 23 and filled credit days in 24 should enter Disagree in 25 and fill 27 with 0	Remarks Filed
26	If L/c payment term is selected then the L/c opening charges will be to the bidders account.	AGREE
27	Please indicate the number of days of credit against L/c a) 90 % within 90 days from the date of receipt 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
28	If a bidder select AGREE in both 23 and 25, their payment terms will be considered as direct credit.	AGREE
29	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 transformers up to 16 MVA, 110/132 KV need not submit the above documents.	Remarks Filed
30	The bidder shall have supplied 10 Nos. of oil filled transformers of assorted range & type up to 16 MVA, 110/132 KV class type within last 5 years (2013-14 to 2017-18) *Proof should be uploaded.	Remarks Filed
	**Those who are in the AYCL empaneled list of suppliers for transformers up to 16 MVA, 110/132 KV need not submit the above documents	

	related field e) Balance sheet for last three years (2015-16, 2016-17& 2017-18) *AYCL technical team will visit the bidder for assessment.	
	2017-18)	
	c) Copy of type and special test certificatesd) List of technical competent person with specialization in related field	
	b) Credentials along with details of execution of various rating of Power Transformer	
	Assessment of the supplier, a) Company profile	
34	**Those who are in the AYCL empaneled list of suppliers for transformers up to 16 MVA, 110/132 KV, Proof of turnover for year 2017-18 alone needs to be submitted The bidder should submit the documents as detailed below for	Remarks Filed
33	Shall have a minimum turnover of Rs. 15 crores in transformer Manufacturing in the last three financial years. (2015-16, 2016-17 & 2017-18)*Proof should be uploaded.	Remarks Filed
	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 up to 16 MVA, 110/132 KV need not submit the above documents.	
32	**Those who are in the AYCL empaneled list of suppliers for transformers up to 16 MVA, 110/132 KV need not submit the above documents. Should be ready to demonstrate the capability of design &	Remarks Filed
	Should have minimum 2 nos of transformer of rating 16 MVA-110 KV or 20 MVA-66 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.	Remarks Filed

Annexure-V

PRICE FORMAT FOR SUPPLY OF 20 MVA POWER TRANSFORMER

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	А	В	С	D	Landed Cost = a
1	20 MVA 66/11 KV Power Transformer as per our specification	1					

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.

(Production Process for 66KV to 132 KV)

FITTING	CHAMBER	REMARKS
1	Heating - 15hrs at 115°C Vacuum Pump - 3 hrs Heating - 6 hrs 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 - 12 hrs at 115°C Vacuum Pump - 3 hrs Heating - 6 hrs 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 - 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 A. P Testing, Proceed for Tanking
4	With Tank Heating - 18hrs at 115°C Vacuum Pump - 8 hrs Condensation to be recorded.	See for Condensation 100ml for 3(i.e. every 1 hrs) consecutive hrs oil filling under vacuum.

TECHNICAL SPECIFICATIONS& BILL OF MATERIALS



BILL OF MATERIALS LIST

RATING: 16/20 MVA

VOLTAGE: 66/11 KV

TAPPINGS:+5% to -15% in steps of 1.25% (OLTC)

Impedance: 10% (IS tol)

Vector Group: Dyn11

Rev – R0 Quantity: 1

A) Major Materials

1) Core (Make: POSCO / NLMK / KRYFS / Eqlt.)

Core Weight :18736.2kgs

Core frame :561 ø / 1215 (cc) / 1670 (LL)

Max. Steel width :550 Min. steel width :245 No. of steps : 12

Core building type : Vertical step lap with 5 blades

Thickness of steel : 0.27mm

Guide Hole : 16ø hole Yoke and limbs

Core loss : 0.74W/Kg 1.5T

Core insulation Kit (2mm, 1mm, 0.5mm PB with 12mm listed): 1 set

Core clamps: 2051Kgs [10&12 mm thick plate]

Core Belt:

For Yoke :Resiglass Tape (Thick = 0.3mm; Width = 40mm) For Limb :Petstrap (Thick = 1.27mm; Width = 19mm)

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

1. Max. Specific resistance at 20° C: 0.017241Ω /cm³

2. Grade of paper : 1.2 - 2M / 5B2 - 2H1 / 5A2 - 1M3

H.V :5815 Kgs (3Bunched Copper)

H.V tap :1435Kgs L.V :4651Kgs

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

HV Main (Bare / Covered Dia) : 500 Strands Ø 0.5mm, Ø15 / 21.5mm–17.5 Kgs. HV Tap (Bare / Covered Dia) : 19 Strands Ø 0.072inch, Ø 9.2 / 15.5 mm - 110 Kgs.

LV Main(Inner) :65 x 6 mm 3 Mts-11 Kgs.

LV Neutral(Inner): 50 x 6 mm 7 Mts - 18 Kgs

LV Phase (Outer) : 75 x 8 mm - 160 Kgs

LV Neutral (Outer) Earthing : 75 x 8 mm - 53.5 Kgs

4. Insulating Materials:

Base wood (Density 1.2kg/m³): \emptyset 561 / 1194 mm, 50mm Thick, = 3 Nos.

Make: Peramalli Wallace /WIP / Lamtuff)

Angle ring 1 - TIII PCB (Make: Raman Boards/Senapathy): Ø D1-811, D2-1180mm,

T=3mm, L=120mm -6Nos

Angle ring 2 - TIII PCB (Make: Raman Boards/Senapathy): ø D1-1079, D2-

1180mm,T=3mm, L=120mm -6Nos

Angle washer – TIII PCB (Make: Raman Boards /Senapathy):L=1410mm,B=1430mm,T=3mm – 3 Nos

Clamping Ring (PWR): ø 591 /1180 mm, 50mm Thick, = 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, Switching Connection pad & Flitch plate insulation. – 1set

Condenser Ring :HV- ID:845mm, OD:1045mm = 6 Nos.

HV Tap- ID: 1109mm, OD: 1169mm = 6 Nos.

(Wood Thick = 10mm; Density 1.2kg/cm³ With aluminum crepe paper wrapping)

Total Insulation: 1250Kgs. (core kit, winding kit & coil assembly kit)

(Make: Raman Boards/Senapathy)

B) Winding Details: -

SL.NO	DESCRIPTION	L.VWINDING	H.V MAIN	H.V TAPP
1)	Type	Single Layer	Continuous Disc	Continuous Disc
		Double Helical	Winding	Winding
2)	ID	587mm	843mm	1107mm
3)	OD	775mm	1047mm	1171mm
4)	Height	1446mm (Incl Spiral Effective)	1430mm	1216mm
5)	No. of Parallel Cond.	2N 32A	2 Above	2 Above
6)	Size of conductor(mm)	5.7 x2.4 (0.5) (PICC)	10.3 x 1.4 (0.25, 0.65) (3 Bunched)	11.3 x 1.6 (1.0) (PICC)
7)	Spacer	Turn 1-51 = 3 mm Turn 51-92 = 4 mm	Sec 1 - 34 = 5 mm Sec 34 - 59 = 4 mm Sec 59 - 92 = 5 mm	All - 7 mm
8)	Connection	STAR	DEL	TA
9)	No Of Sections / Turns	92	92 Disc	64 (32 top+32 bot)
10)	No. Layer / Turns / Disc	1	9	6

C) Tank and fittings:

Tank : L = 5370mm; W = 1550mm; H = 2910mm

Plate Thickness: [Bottom = 12mm; Side Wall = 8mm; Cover = 10mm;

Curb : 16mm

Conservator : 5 thick plates

Total weight :8020 Kgs[Tank, cover, cons & under base]

5. OLTC: D III. 200: 110/80. 18.17.0.

Easun M.R make

6. Bushings:

A) H.V line end (HP):

Rating :72.5 KV/800A

BCT dimension : 120mm

Creepage distance :1825mm 3 nos

Lead type :Solid Stem
Make : M/S / CGL/ABB

B) L.V line side and neutral (H.P): .

Rating :36 KV/2000A

Creepage distance :900 mm 4 Nos

Make :CJI/GENESIS

Metal Part :Length=817, M42x3 WITHOUT TOP CONNECTING LUG

C) CT TERMINAL BOX

Make : Sukrut / Hindustan Engineers

4 Terminals - 2nos

7. WTI CT:

Type : cotton tape insulation

A) LV WTI C.T: 1No

Ratio :1050/1A
Burden :10VA
Accuracy class : 3
ID :160 mm min
OD :210 mm max
HT :40 mm max

B) H.V WTI C.T: 1 No

Ratio :175/1A Burden :10 VA

Accuracy class : 3

ID : 200 mm min OD : 260 mm max HT : 40 mm max

8. Fittings:

A. Oil temperature indicator with RRD of RTD,4-20 mA D.C dual output for SCADA purpose

Make : Precimeasure

Quantity : 1 Set
Size : 150mm
No of contacts : 2 (alarm &trip)
Capillary length : 6 mts
Model : Rectangular

i) Dial type indicator: 1 No (Model: 1007)

ii) PT100 sensor : 1 No

iii) CCU With Dual 4-20 mA output : 1 NO iv) Remote Indicator with dual 4-20mA output : 1 NO

B. Winding temperature indicator with RRD of RTD, 4-20 mA D.C dual output for SCADA

purpose

Make : Precimeasure

Quantity : 2 Set Size : 150mm

No of contacts :4 (Alarm ,Trip, Fan control & Spare)

Capillary length : 6 mts Model : Rectangular

i) Dial type indicator : 1 No (Model: 1007)

ii) PT100 sensor : 1 No

iii) CCU With Dual 4-20 mA output : 1 NO iv) Remote Indicator with dual 4-20mA output : 1 NO

The above WTI should have a below heater suitable for 1A rated WTI CT for 18° C gradient.

C) Buchholz relay:

Make : VIAT/PRESS N FORGE/Yogya

Quantity : 1 No Size :80mm

No of contacts: 2 (alarm &trip)

D) C.S Rollers 250 mm dia flanged: 4 Nos

E) Silica gel breather

Make : Press & Forge / Yogya

Size : 4.75 Kgs (For main transformer) -2 No Size : 0.5 Kgs (For O.L.T.C) - 1 No

F) Magnetic oil level gauge:

Make :Sukrutudyog/Viat/Yogya

Size : 250mm 1 no

No of contacts : 1 (low level alarm)

Model : S010

G). Valves I.(MATERIAL:G.M)(TYPE:GATE) With Locking Rod(As per IS 778)

(Make: Manixon/Mala/Apex)

Drain valve : 80 mm FL/FL 1 NO Isolating valve : 80 mm FL/FL 2 NOS Isolating valve for OLTC 2 NOS : 25 mm FL/FL Filter valve : 50 mm FL/FL 2 NOS Sampling valve (Top,Mid&Bot) : 20 mm FL/FL 3 NOS Main cons. drain valve : 25 mm FL/FL 1 NO OLTC Cons. drain valve : 25 mm FL/FL 1 NO. OLTC suction valve ... 20 mm FL/FL 1 NO .. 80 MM FL/FL 1 NO OIL Drain valve (FPS) For Nitrogen injection .. 25 mm FL/FL 4 NOS

(II. MAERIAL: C. I) TYPE: BUTTERFLY (Make: Petson/Viat)

Radiator valve (std. size : 80 mm12 NOS

10) PRESSED STEEL RADIATORS: (1.2mm Thick Sheet)

Quantity: 6 Nos.

NA :2200mm Width :520mm No. of sections/ Radiators :15

11) PAINT (Polyurethane):15 LTS/coat

Touchup Paint : 5 Ltrs Light grey as per s. no 631 of IS 5

12) TRANSFORMER OIL - As per IEC 60296

Total :17075 LTS 10% extra :1708 LTS

Upto Transport Level: 14500 LTS

13) TERMINAL CONNECTORS

A) HV: 3 NOS (Suitable for : Alu., ACSR/ Brass Spade With Alu., ACSR) B) LV: 3 NOS(Suitable for : Alu., ACSR/ Brass Spade With Alu., ACSR)

14) PRESSURE RELIEF VALVE:

Make: SUKRUT UDYOG/VIAT

Type: Model **T 6** (FOR TFR) : 1 NO Model **T 3** (FOR OLTC) : 1 NO Operating pressure:**0.49** Kg/sq.cm

15) SUPPORT INSULATOR (EPOXY)(33 KV) : 6 NOS

16) CRIMPINGLUG (Material: Copper) : 51 NOS

17) WIRING CABLES:

2 Core, 2.5mm²PVC Insulated Copper Cable:30MTS (APPROX)

3 Core, 2.5mm² PVC Insulated Copper Cable: 20MTS (APPROX)

4 Core, 2.5mm² PVC Insulated Copper Cable: 7 MTS (APPROX)

2 Core; 4.0mm² PVC Insulated Copper Cable: 14MTS (APPROX)

18) **CABLEGLAND**:

SIBG 1619 :18 NOS. SIBG 2125 :2 NOS.

19) FANS: 24 inches; 700 RPM;0.24 Kw;3phase,415V 6Nos (4main+ 2standby)

Make : MARATHON

20) FIRE PROTECTION SYSTEM (AS per the Annexure-I)

Make: CTR Quantity: 1 No

21)Gaskets: 1 set

1) 6 mm Thick Sheet – 7 Nos 2) 12mm Thick Sheet – 5 Nos

22) Hardware's: 1 set

HDG – External; SS with Spring Washer – Internal

23) ANNUNCIATOR: 18 Window

Quantity: 1 No

24) Aluminum crepe paper (for condenser ring) as per their catalogue K-71-1E (1)

Make :M/s Weidman,Switzerland / Cinduscorp

Quantity :3 Roll (Approx)

Specification: 135 g/m²

Width - 50 mm Inner dia – 50 mm Outer dia – 135 mm

25) Milinex Paper

Quantity :2 Roll (Approx)

26) Crepe paper Type 55/85 mm as per their catalogue K-51-E (1)

Make :M/s. Weidman, Switzerland / Raman Boards

Quantity :25 Roll (Approx)

27) MS Yoke Washer $24 \times 62 \text{mm} = 32 \text{ Nos}$

28) Brazing Rod as per EUTECROD 1805 - 5 Kgs

Make: L&T Size: 1/8"

29) Pressure Disc: 28 Nos

Size: Ø60mm

30) Pressure Screw: 28 Nos

Size: M36x4, 220mm Long

31) Permawood Listel

Size :2440 x 60 x 45

Quantity: 10 Nos

- 32) Toughened Glass(Prismatic)
 - a) $310 \times 52 \times 8 = 2Nos$
 - b) 424 52 x 8 = 2 Nos
- 33) MS Fan Guard 24" = 6 Nos
- 34) Firefly Gasket 85 x 120 x 3mm = 48 Nos
- 35) Brass Washer 3/8" for OLTC = 102 Nos
- 36) Brass Hex Nut M42
 - a) Full Nut : 1 No
 - b) Check Nut: 1 No
 - c) Washer :2 Nos
- 37) Gas Collection for Buchholz relay:
 - a) Copper Tube: 1/4" x 3/8"x 3.25 Mtr Long. = 1no.
 - b) Brass Nipple: 1/4" x3/8" BSP. = 1no.
 - c) Brass Nut: 3/8" BSP with 9.7mm Hole. = 2nos.

38) MARSHALLING BOX as per below table (Size: $850x403x1500\text{-}\ 3.15\text{Thick}$ (LXBXH)) – 1 No

18	TS	THERMOSTAT	0-100 Deg C , 230V
17	HS	KIOSK HEATER SWITCH	230V;5A;TOGGLE SWITCH
16	KH	KIOSK HEATER	10W,230V
15	LS	KIOSK LAMP (CR.)	11W,CFL
14	LS	KIOSK LAMP SWITCH	230V;5A;TOGGLE SWITCH
13	TE1 to TB3	TERMINAL BLCCKS	1100V/V4CAT/CBT NUT %STUD NICKFL COATED BRASS
12	FA1 to FA6	COOLING FANS	700R.P.M.;240W;415V;24* S.ZE
11	LK1 to LK2	LNKS	TYPE : NS
10	FS19-FS20	FUSES FOR AUXILLARY SUPPLY	44.
9	FS1-FS18	FUSES FOR FANS	2A
8	CSS3-8	CONTROL SELECTOR SWITCH (MAIN/STANDBY/TEST/DEF)	2PO F 4WAY 230V;25A
7	CSS1	CONTROL SELECTOR SWFCH (MANUAL/AUTO/REMOTE/CFF)	3PO F 4V/AY 230V;25A
6	TDR1 &: TDR2	TME DELAY RELAYS	230V; 0-30 SFC
5	FCU1 TO FCU6	FAN CONTROL UNIT WITH BI-METAL OVER LOAD RELAYS (5KG+3NC AUX.)	230V;10A,Re ay: 0.56-0.84A
۷	02	MAIN SUPPLY CONTROL CONTACTOR (1NO+1NO)	230V;164
3	01	MAIN SUPPLY CONTROL CONTACTOR (4ND+2NC)	2307;164
2	CR1	CONTROL RELAY FOR SINGLE PHASING PROTECTION (1NO+1NC)	415V;10A
1	NCB	MINIATURE CIRCUT BREAKER FOR MAIN	415V;16A
L. 10.	REFERENCE	DESCRIPTION	RAT NG

39) RTCC as per below table (Size610x610x2312 – 3thk): 1 Set

6 FS,LK FUSE & LINK STD 6 HS SWITCH FOR HEATER 240V,8A ELITE 4 H HEATER 240V,40W SURYA	5 HS SWITCH FOR HEATER 240V,5A ELITE 4 H HEATER 240V,40W SURYA
4 H HEATER 240V,40W SURYA	
	A I I HAMP 240V40W FILES
3 L LAMP 240V,40W PHILES 2 DOMOBIDG SUPPLY MINIATURE CIRCUIT BREAKER 64,2P 226V PHILES	

36	TCL	SIGNALING LAMP FOR TAP CHANGER IN LOCAL MODE 110V AC
35	TCCSH	SIGNALING LAMP FOR 110V AC TAP CHANGER CONTROL SUPPLY ON 110V AC
34	TCMSH	SIGNALING LAMP FOR 415V TAP CHANGER SUPPLY ON 110V AC
33	TCRL	SIGNALING LAMP FOR TAP CHANGER IN REMOTE LOCAL 110V AC
32	TCPBZ	BUZZER FOR TAP CHANGER IN PROGRESS 110V AC
31	VP	VOLTAGE RATIO PLATE
30	TCPL	TAP CHANGER PROGRESS LAMP (ANBER) 110V AC
29	ANNUN	ANNUNCIATOR(370X130)
28	SL10	SIGNALING LAMP FOR COOLER CONTROL IN REMOTE 230V AC
27	SL9	SIGNALING LAMP FOR COOLER CONTROL IN LOCAL AUTO 230V AC
26	SL8	SIGNALING LAMP FOR COOLER CONTROL IN LOCAL MANUAL 230V AC
25	SL7	SIGNALING LAMP FOR FAN COOLER CONTROL 415V AC MAIN SUPPLY ON 230V AC
24	SL6	SIGNALING LAMP FOR FAN 6 'ON' 230V AC
23	SL5	SIGNALING LAMP FOR FAN 5 'ON' 230V AC
22	SL4	SIGNALING LAMP FOR FAN 4 'ON' 230V AC
21	SL3	SIGNALING LAMP FOR FAN 3 'ON' 230V AC
20	SL2	SIGNALING LAMP FOR FAN 2 'ON' 230V AC
19	SL1	SIGNALING LAMP FOR FAN 1 'ON' 230V AC
18	TCRS	SIGNALING LAMP FOR TAP CHANGER IN REMOTE SCADA OPERATION 110V AC
17	SSS	SEQUENCE CONTROL SELECTOR SWITCH (IND/OFF/MAS/FOL)
16	VSS	VOLTMETER SELECTOR SWITCH
15	TCSIS	TAP CHANGER SUPPLY ISOLATED SWITCH
14	CSS2	FAN AUTO/MANUAL/OFF SELECTOR SWITCH
1.3	CSS9	RTCC/SCADA SELECTOR SWITCH
12	RPB	RAISE PUSH BUTTON (RED) (S3)
11	ACPB	ALARM CANCEL PUSH BUTTON (GREEN)
10	REPB	REMOTE EMERGENCY PUSH BUTTON
9	LPB	LOWER PUSH BUTTON (BLUE) (S4)
8	LLR	INDICATION LAMP FOR LOWER LIMIT OF OLTC REACHED
7	ULR	INDICATION LAMP FOR UPPER LIMIT OF OLTC REACHED
6	OTIRR	OTI REMOTE REPEATER (DIGITAL TYPE WITH 3 DIGIT DISPLAY)
5	WTIRR1	WTI REMOTE REPEATER 1 (DIGITAL TYPE WITH 3 DIGIT DISPLAY)
4	WTIRR2	WTI REMOTE REPEATER 2 (DIGITAL TYPE WITH 3 DIGIT DISPLAY)
3	~	AC VOLTMETER (0-15ky for 11ky REF)
2	TPI	TAP POSITION INDICATOR (20thA OUTPUT) SUITABLE FOR SCADA
1	PIL	PANEL IDENTITY LABEL(RTCC 16/20 MVA 66/11KV TRANSFORMER)
SLNO	REF.	PART DENOMINATIONS

			Event L	Details	the second		
Event no	Event start date & time	Event close date & time		Prebid start date & time Prebid end date & time	Tender Type	Opening Type Act.Status	
AYCL/Electrical Division CO/12/19- 20/ET/47	20.05.2019 - 11:00 AM	04.06.2019 -12:00 PM	20.05.2019 - 11:05 AM	No Prebid Meet	Open	Itemwise Activated	
<u>Mode</u> -Tender Techn	TOE Start Time						
		5				L. .	
Contact Person		Designation	Department Electrical Division	Email	Mobile No.	Telephone	
Tamilselvan		Engineer(Material)	CO Electrical Division	tamiiseivan@andrewyuie.com	9788520864	24960793	
Kingsly Reuben	М	Assistant	CO	reuben@andrewyule.com	9884446378	24960793	
ino	Lot no	Lot name	Quantity Lot De	Uom	Description of I	rem	
	Localo		Quartery	Com	20 MVA 66/11 H		
	1	20 MVA 66/11 KV Power Transformer	1.0	NO	Transformer as specification		
.1	TECHNO COMME	RCIAL TERMS	and the state of t		рреспесион		
1	REQUIREMENT - Power Transform Validity period of	Tender offers are inv er as per our specific	cation(FO:3683) Qt	0 MVA Power transformers as de ty-1 No Component : Agree Only r acceptance for a minimum peri			
3	contract and the 3 no 1 of Annexure Andrew Yule & C amount more that ARBITRATION If for method of con	same will be released III then on being avo o .Ltd for Rs.50,000/ on the Security depos any dispute arises be appliance thereof, the	d after completion warded the contract =. 2) For bidders a it amount then it was etween the compar	sidder will be retained as security of contract. b) If the bidder is ex t, 1) The bidder should execute siready enlisted with AYCL- Cheni will be adjusted towards Security ny and the contractor, as to the t down in Indian Arbitration & Con	tempted from payir the bank guarante nai Operation, havi Deposit. Compone terms and condition	g EMD vide clause /DD in favor of ng outstanding nt : Agree Only is of the agreement	
5	as per Andrew Yo otherwise or to re	COMPANY Bidders w ule norms. The comp	any reserves the ri rs without assignir	er payment terms & condition ha ight to accept any tender irrespen ig any reason thereof. Affordabili	ctive of whether it i	s lowest or	
6	FORCE MAJEURE of production at	In case of strike, aç	cident, natural cala Andrew Yule rese	mity, acts of god and other unfo	reseen contingenci odify this contract	es causing stopp without liability f	
7	Legal condition: / purchase order / 'Mahabalipuram R parties only the a the said proceedi	Any contract entered contract / agreemen load, Perungudi, Che appropriate Civil Courings in exclusion of all	against this tende t is executed and o nnai 600 096 and i t in the City of Koll Il other courts. Cor	r will be as per the following lega concluded by and between the pain the event any dispute arises or kata shall have the exclusive juris nponent: Agree Only impose risk purchase clause as "	arties hereto at pre ut of this agreemer sdiction to entertain	mises No.5/346, of the between the n, try and determ	
8	(Incidental/Conse whatsoever, Com	equential) shall be to ponent : Agree Only	your account which	er agency/s which shall deemed to the with respect to our intimation of	or observation		
9	be levied @ 0.5%	per week subject to	a maximum of 10	ne date of scheduled date of disp. % Component : Agree Only			
10				as entered/agreed in the online I Component : Agree Only	oid and uploaded d	ocuments, then t	
11	value for 48 mon buyer for 10% of date of supply wi Agree Only	ths from the date of invoice value (Include this claim period of a	supply. Alternative ding GST) which shanother 3 months of	performance of the transformer, to ly, the tenderer can execute a ba- nall be valid throughout the guara- counted from the date of expiry of	ank guarantee in the antee period of 48 of the guarantee pe	e:format of the months from the riod . Componen	
12	the date of comm reason you shall	nissioning whichever undertake to repair t	is earlier. During the same at FREEO	8 months from the date of receip ne period if the product is found F COST. Component: Agree Only	defective due to an	y of the above	
13	Non-Disclosure A buyers prescribed	greement: The bidde format. Component	r on being awarde : Agree Only	d the contract has to execute a N	Non-disclosure Agre	ement as per the	
14				ir of failed components are in sup			
15	account. This will period due to infe Agree Only	also include taking t erior materials or faul	back the transform ty workmanship w	to be brought back to works for er and installing at site after rect ill be rectified or replaced by the	fication. Any defect supplier at free of	t during guarante cost. Component	
	for stage and fina the test along wit	l inspection (Refer Q h KPTCL & AYCL. Co	AP) at their works mponent : Agree (at run test ,CPRI w		
17	The rate quoted s	should be Ex-Your wo	orks (Inclusive of P	me plate only. Component : Agre lacking, Forwarding) and the tran		patched to our	
	Louisian and saidth as a						
19	The credit period		ate of receipt of ma	aterial at Andrew Yule, Perungud ion process as mentioned in Ann			

Transformer will be inspected & Tested as per our QAP as mentioned in Annexure VIII Component: Agree Only 23 PAYMENT TERMS: -Direct Credit In case it is agreed fill 24 with number of days of direct Component: Remarks Field Please indicate the number of days of direct credit. a) 90 % within 90 days from the date of receipt 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 PAYMENT TERMS: Against L/c Bidders, who wish to quote with L/c, enter AGREE IN 25 and fill 27 with number of days of credit. Bidders, who have entered agreed in 23 and filled credit days in 24 should enter Disagree in 25 and fill 27 with 0 Component: Remarks Field 26 If L/c payment term is selected then the L/c opening charges will be to the bidders account. Component: Agree Only Please indicate the number of days of credit against L/c a) 90 % within 90 days from the date of receipt 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
23] PAYMENT TERMS: -Direct Credit In case it is agreed fill 24 with number of days of direct Component: Remarks Field Please indicate the number of days of direct credit. a) 90 % within 90 days from the date of receipt 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 PAYMENT TERMS: -Direct Squinst L/c Bidders, who wish to quote with L/c, enter AGREE IN 25 and fill 27 with number of days of credit. Bidders, who have entered agreed in 23 and filled credit days in 24 should enter Disagree in 25 and fill 27 with 0 Component: Remarks Field 26 Iff L/c payment term is selected then the L/c opening charges will be to the bidders account. Component: Agree Only Please indicate the number of days of credit against L/c a) 90 % within 90 days from the date of receipt 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
Please indicate the number of days of direct credit. a) 90 % within 90 days from the date of receipt 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 PAYMENT TERMS: Against L/c Bidders, who wish to quote with L/c, enter AGREE IN 25 and fill 27 with number of days of credit. Bidders, who have entered agreed in 23 and filled credit days in 24 should enter Disagree in 25 and fill 27 with 0 Component: Remarks Field 26 If L/c payment term is selected then the L/c opening charges will be to the bidders account. Component: Agree Only Please indicate the number of days of credit against L/c a) 90 % within 90 days from the date of receipt of Transformer. b) 27 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
25/credit. Bidders, who have entered agreed in 23 and filled credit days in 24 should enter Disagree in 25 and fill 27 with 0 Component: Remarks Field 26 If L/c payment term is selected then the L/c opening charges will be to the bidders account. Component: Agree Only Please indicate the number of days of credit against L/c a) 90 % within 90 days from the date of receipt of Transformer. b) 27 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
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Please indicate the number of days of credit against L/c a) 90 % within 90 days from the date of receipt 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
28 If a bidder select AGREE in both 23 and 25, their payment terms will be considered as direct credit. Component: Agree Only
Qualifying Requirement: Should have experience in design, manufacture, testing and supply of Power transformers including 29 after sales service activities.*Proof should be uploaded. **Those who are in the AYCL empaneled list of suppliers for transformers up to 16 MVA, 110/132 KV need not submit the above documents. Component: Remarks Field
The bidder shall have supplied 10 Nos. of oil filled transformers of assorted range & type up to 16 MVA, 110/132 KV class type 30 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 up to 16 MVA, 110/132 KV need not submit the above documents Component: Remarks Field
Should have minimum 2 nos of transformer of rating 16 MVA-110 KV or 20 MVA-66 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 up to 16 MVA, 110/132 KV need not submit the above documents. Component : Remarks Field
Should be ready to demonstrate the capability of design & manufacture strength by conducting type test and short circuit test 32 as per the contractual requirement. **Those who are in the AYCL empaneled list of suppliers for transformers up to 16 MVA, 110/132 KV need not submit the above documents. Component: Remarks Field
Shall have a minimum turnover of Rs. 15 crores in transformer Manufacturing in the last three financial years. (2015-16, 2016-33 17 & 2017-18)*Proof should be uploaded. **Those who are in the AYCL empaneled list of suppliers for transformers up to 16 MVA, 110/132 KV, 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 34 technical competent person with specialization in related field e) Balance sheet for last three years (2015-16, 2016-178, 2017-18) *AYCL technical team will visit the bidder for assessment. **Those who are in the AYCL empaneled list of suppliers for transformers up to 16 MVA, 110/132 KV need not submit the above documents.(Sl.no 34 a to e). Proof of turnover for year 2017-18 alone needs to be submitted. Component: Remarks Field
35 EMD: Rs. 50,000/= * UP LOADED * Bidders may request for exemption from submitting EMD (Refer details given in General terms & conditions) Component: Remarks Field
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. Component: Remarks Field
37 Andrew Yule Scope of Supply 1. Nitrogen Injection Fire Protection System 2. Name Plates Component : Agree Only
38 Delivery: within 3 months from the placement of our P/Order Component : Remarks Field
The bidder should be an approved vendor of KPTCL for manufacturing/ repair of power transformer. *Bidders are requested to submit the relevant document of approval*Proof should be uploaded. Component: Remarks Field
Formula Details
For Lot ::1: 20 MVA 66/11 KV Power Transformer
a) BASIC PRICE PER NO (In Rs), b) CGST (In %) (If not applicable please enter Zero), c) SGST (In %) (If not applicable please enter Zero), d) GST (In %) (If not applicable please enter Zero)
Formula Entered by user ==> a