(054). 205. 2900 www.facebook.com/CASURECOII www.facebook.com/CASURECOII casurecoii@yahoo.com

Del Rosario, Naga City, 4400

Invitation to Bid for Simplified Bidding

SB No. 2024-05-04

The CASURECO II ELECTRIC COOPERATIVE, INC. (CASURECO II) thru its Bids and Awards Committee (BAC) invites eligible bidders to participate in the simplified bidding (sealed canvass) for goods/items/services as specified below:

PARTICULARS	ESTIMATED	REFERENCE				
TARTICOLARS	BUDGET COST	RV No.	Date			
Supply and Delivery of Amorphous Core Distribution Transformer	1,910,000.00	227101	May 14, 2024			
Source of Fund: General Fund						

NO. **DESCRIPTION** QTY UNIT 1 Transformer, Pole Type, Conventional, Amorphous, 25 kVA, Cu-Cu Winding 5 pcs 2 Transformer, Pole Type, Conventional, Amorphous, 37.5 kVA, Cu-Cu Winding 6 pcs 3 3 Transformer, Pole Type, Conventional, Amorphous, 50 kVA, Cu-Cu Winding pcs

ACTIVITIES	SCHEDULE	VENUE
Advertisement/Publication	May 24, 2024	NEA Portal, CASURECO II Facebook
Advertisement/Fublication	May 24, 2024	Page, and website
Submission of Sealed Quotation	May 31, 2024 at 5:00 PM	CASURECO II Main Office
Bid Opening	June 03, 2024 9:00 AM	CASURECO II Main Office,
ва Орепіпд	June 03, 2024 9.00 AM	Conference Room

Instruction to Eligible Bidders/Suppliers:

1. Submission of sealed quotation shall be made either by courier or hand carried by the supplier or his duly authorized representative with label "RV No. 227101" on or before the stated date addressed to:

CASURECO II Bids and Awards Committee BAC Secretariat CASURECO II Electric Cooperative, Inc., Del Rosario, Naga City

- 2. The BAC will exclusively consider quotations submitted by <u>accredited</u> bidders. Please refer to the attached list for the necessary documents required for accreditation.
- 3. All interested bidder must submit signed quotation with complete details of information on the Terms and Conditions as attached herein:
- 4.CASURECO II reserves the right to accept or reject any bid, declare failure of bidding, or choose not to award all bids, any time prior to the contract award, without incurring any liability to the affected bidder.
- 5. For further queries and concern, you can contact us with the following contact details; BAC CP No. 09277725181, landline no. 054-205-2900 (local 2002) or you may send an e-mail at casureco2bac@yahoo.com
 -SIGNED-

ENGR. MARY FRANCE D. MORALES

BAC Chairperson

ENGR. EDGARDO R. PIAMONTE Acting General Manager

(0)

TERMS OF REFERENCE

Name of the Contract	:	Supply and Delivery of Amorphous Core Distribution Transformer
Source of Fund	:	IGF
Approved Budget of	:	Php1,910,000.00
the Contract (ABC)		

1. OBJECTIVE

The procurement of amorphous core distribution transformers aims to provide readily available units for emergency replacement of defective existing distribution transformers.

2. SCOPE OF REQUIREMENT

Below is the list of amorphous core distribution transformers required with their respective quantities.

No.	Description	Qty	Unit
1	Transformer, Pole Type, Conventional, Amorphous, 25 kVA, Cu-Cu Winding	5	pcs
2	Transformer, Pole Type, Conventional, Amorphous, 37.5 kVA, Cu-Cu Winding	6	pcs
3	Transformer, Pole Type, Conventional, Amorphous, 50 kVA, Cu-Cu Winding	3	pcs

3. APPROVED BUDGET OF THE CONTRACT (ABC)

The Approved Budget of the Contract (ABC) is **One Million Nine Hundred Ten Thousand Pesos (Php1,910,000.00)** inclusive of taxes, duties and delivered to CASURECO II Main Office, Brgy. Del Rosario, Naga City.

4. TECHNICAL SPECIFICATION

This specification establishes the physical characteristics and performance requirements of the unit. Bidder is required to state their compliance to the specification with evidence. Any form of evidence must be included in the Bidder's technical proposal and shall be used in the bid evaluation. The statement of compliance of the bidder without any evidence shall mean non-responsiveness of its bid.

SPECIFICATION			Statement of Compliance (Compliant/Not Compliant)	Proof of Evidence
Description	:	Pole mounted, single phase, overhead- type, oil immersed, high permeability grain oriented amorphous steel core, conventional double primary bushing distribution transformers.		
Quantity (25kVA)	:	5 pcs.		
Quantity (37.5kVA)	:	6 pcs.		
Quantity (50kVA)	:	3 pcs.		
Maximum altitude above sea level	:	1,000 meters		
Maximum ambient temperature	:	40 deg C		
Average ambient temperature	:	30 deg C		
Rated Primary Voltage	:	7620/13200GrdY Volts		
Full wave (BIL), Crest	:	95 kV		
Chopped wave (BIL), Crest	:	105 kV		
Min. time to Flashover	:	1.8 microseconds		
Secondary Voltage	:	240V (25 to 50kVA)		
Full wave (BIL), Crest	:	30kV		
Chopped wave (BIL), Crest	:	33 kV		
Min. time to Flashover	:	1.0 microsecond		
Tap Changer (off-circuit)	:	 Two (2) -2.5% tap above and two (2) - 2.5% taps below rated primary voltage. Tap 3 shall be the nominal tap. All tap ratings shall be at rated capacity De-energized operation only Clockwise direction from the highest to the lowest tap position Caution marking: Do Not Operate When Energized 		
Frequency	:	60 Hz		

Percent Impedance		2% with $\pm 10\%$ tolerance (25 to 50kVA);	
referri impedance	•	Difference in impedance between transformers of the same rating shall not exceed 7.5% of the specified value.	
Audible Sound Level			
50kVA and below	:	48 dB	
Maximum Allowable kVA)	e I	Losses (at Nominal Tap and Rated	
Core Loss (No-Load)) ir	watts	
25kVA	:	18	
37.5kVA	:	30	
50kVA	:	32	
Copper Loss (Full-Lo	oac	l) in watts	
25kVA	:	290	
37.5kVA	:	360	
50kVA	:	500	
Reference Temperature	:	30 deg C for Core Loss and 85 deg C for Copper Loss	
Tolerance for guaranteed values (Rejection)	:	10% for Core Loss and 6% for Total Losses	
Core Type	:	Shell Type	
Winding Materials (HV/LV)	:	Copper/Copper	
Insulating Oil	:	New Mineral (PCB Free) insulating oil for electrical apparatus, ASTM D3487	
Material/Finishes	:	Tank coating exceeds ANSI C75.12.31.2	
(Tank)		Shall be made of steel	
		Shall be of sealed type construction with a steel and bolted type cover	
		Shall be provided with usable gasket	
Tank Grounding Connector	:	Tank cover shall be grounded to the tank body using a copper strap adequately sized for short circuit rating of the transformer	
		Shall have an eyebolt- type grounding connector (8mm²-30mm²) made from tinned copper alloy material)	

			,
Support and	:	Shall have a support lug for pole	
Lifting Lugs		mounting.	
		Shall have a balance vertical lifting lugs	
		Shall be painted with two coats	
		Light gray paint, ANSI70	
		Gray, over a suitable prime coat	
Tank Marking	:	Shall have a black painted or	
		reflectorized and weatherproof sticker	
		(3" block letters) transformer kVA rating	
Primary Bushings	:	below the low voltage bushing. High voltage and neutral bushing:	
Timary Dusnings	•	(double bushing), made in porcelain	
		Shall be equipped with eyebolt-type	
		connectors made from tinned copper-	
		alloy material with stainless spring	
		washers, terminal connectors	
		Shall accommodate 8mm ² - 30mm ²	
		stranded copper conductors	
Secondary	:	Low voltage bushing (three bushing)	
Bushings		shall be made from high grade, wet	
		process porcelain, glazed entire exposed	
		surface, light gray color ANSI 70, Munsell notation 5BG 7.0/0.4,	
		It shall be designated as X1, X2 and X3	
		depending on secondary voltage rating	
		in accordance with IEEE std C57.12.20,	
		For 25-50kVA, conductor size 30mm ²	
		(AWG No. 2) solid to 700mm ²	
		(350kcmil) stranded copper conductor	
		that low voltage terminal can	
		accommodate.	
		Shall be equipped with tinned copper	
		alloy, eyebolt-type connectors or tinned spade terminal pads arrange for cable	
		vertical takeoff, size of terminal opening,	
		20.6mm (13/16 inch)	
Features	:	Meets or exceeds ANSI and NEMA	
		standards Namenlate (stainless steel) in	
		Nameplate (stainless steel) in accordance with IEEE Std. C57.12.00	
		properly attached on the tank with	
		technical specifications etched on the	
		surface and coated with black enamel;	

	_		
		. serial no.,	
		. class,	
		. number of phases,	
		. frequency,	
		. voltage rating,	
		. kVA rating,	
		. temperature rise deg C,	
		. polarity,	
		. percent impedance,	
		. BIL,	
		. total weight in kg.,	
		. connection diagram,	
		. name of manufacturer,	
		. type of insulating liquid,	
		. date/year manufactured	
		. full load copper loss in watts	
		. core loss in watts	
		All energized hardware i.e. bolts; nuts	
		and washers shall be made of tinned copper alloy material such as silicon	
		bronze.	
Others	:	The kVA rating shall be continuous and based on not exceeding either a 65 deg C	
		(average) winding temperature rise or	
		an 80 deg C hottest-spot temperature	
		rise above an ambient of 30 deg C. The	
		temperature rise of insulating oil shall not exceed 65 deg C when measured	
		near the top of the tank.	
		The transformer shall be guaranteed to	
		have the loading capability in	
		accordance with ANSI/IEEE STD	
		C57.92, latest revision. The transformer shall withstand the	
		mechanical and thermal stresses	
		produce by external short-circuit	
		currents specified in IEEE Std.	
		C57.12.00, latest revision. Cooling class,	
	1	self-cooled (OA or ONAN)	

5. CODE AND STANDARD

- 5.1. The following specifications, standard and code apply for Distribution Transformers:
 - IEEE Std C57.12.00
 - IEEE Std C57.12.20
 - IEEE Std C57.12.70
 - IEEE Std C57.12.90
 - ANSI/IEEE Std C57.92
 - NEMA Standard Publication No. TR1
 - ASTM D3487
 - NEA Distribution Transformer Handbook
- 5.2. The physical and performance requirements of the unit, based on the internationally recognized standards, are acceptable only if the requirements of such standards are equivalent to or exceed the requirements and specified codes and standards quoted in this document.

6. TEST RESULT

- 6.1. The winning bidder shall submit to CASURECO II copies of the Manufacturer's test certificate for each transformer to be supplied with the following tests:
 - · Winding resistance measurement
 - · Ratio Test
 - Polarity Test and Phase Relation
 - Load losses, No-load losses, and Excitation Current at rated voltage and frequency.
 - Impedance Voltage and Load Loss Measurement
 - Induced Potential Test (Low-frequency Dielectric Test)
 - Dielectric Test of Insulating Oil
 - Mechanical (Leak Test)
 - Insulation Resistance Test.
 - Non-PCB of Insulating Oil (Certificate from the Accredited DENR Testing Laboratory Facility)
- 6.2. For the design (or type) test, a certified Manufacturer's test report shall be submitted by the supplier to CASURECO II which contains the following:
 - Temperature Rise
 - · Lightning Impulse
 - Insulation Power Factor
 - Short Circuit Capability

7. INSPECTION AND TESTING

- 7.1. All delivered distribution transformers will undergo standard cooperative testing with the presence of the CASURECO II Quality Assurance Team. All failed distribution transformers must be replaced with new units within fifteen (15) calendar days. Any incurred costs shall be shouldered by the supplier. The inspection and testing shall consist of the following:
 - Visual
 - Insulation Resistance
 - Ratio Test
 - Core and Copper Loss
 - Winding Resistance Test

8. WARRANTY AND AFTER SALES

- 8.1. The Supplier guarantees that the units are brand new, complete, and free from defects in both materials and workmanship. The Supplier also warrants that the unit is substantially conforms to the applicable specifications, documentation, and samples.
- 8.2. To assure that the units are free from manufacturing defects, a warranty shall be required from the Supplier for a minimum period of one (1) year after installation.
- 8.3. The Supplier shall provide technical support on the supplied unit.
- 8.4. The distribution transformer provided by the Supplier shall be inspected and tested by Quality Assurance Team upon receipt of the warehouse before acceptance. Should there be any delivered transformer that do not pass the coop standard, CASURECO II shall immediately notify the supplier in writing within seven (7) calendar days and the Supplier shall make the necessary replacement at its own expense, within fifteen (15) calendar days.

9. QUALIFICATIONS

- 9.1. Eligibility Requirements:
 - DTI Business name registration/Securities and Exchange Commission (SEC) registration certificate/Cooperative Development Authority (CDA) registration certificate, whichever is applicable;
 - CASURECO II Accredited Supplier;
 - Mayor's/Business Permit (current and valid);
 - Income/Business Tax Return;
 - Omnibus Sworn Statement (duly notarized)

10. MODE OF PAYMENT

100% of the Contract Price shall be processed within thirty (30) days upon completion of delivery of all items, submission of all required documents, and issuance of end-user's certificate acceptance.

11. DELIVERY PERIOD

11.1. Fifteen (15) calendar days upon receipt of approved Notice to Proceed and Purchase Order.

12. CONDITIONS

- 12.1. The bidder shall indicate the cost per unit in the financial proposal.
- 12.2. The distribution transformer delivered shall have test report as per indicated at Item No. 6.
- 12.3. The price shall remain the same as quoted regardless of any changes in market price prior to delivery, if any.

TECHNICAL WORKING GROUP

-SIGNED-

IVAN CHRISTIAN T. CARIÑO

Member

GIL EDDIE L. SERRANO JR.

Member

-SIGNED-

-SIGNED-

ENGR. ALBERTO J. REVILLA

Member

JONEL BRABANTE

End-user

-SIGNED-

ENGR. RICHARD L. PRECONCILLO

Co-Chairman

-SIGNED-

ENGR. WENDYL P. BORROMEO

Chairman

Date :	Annex A
Omnibus Sworn Statement	
	_
REPUBLIC OF THE PHILIPPINES)	
CITY/MUNICIPALITY OF) S.S.	

AFFIDAVIT

I, [Name of Affiant], of legal age, [Civil Status], [Nationality], and residing at [Address of Affiant], after having been duly sworn in accordance with law, do hereby depose and state that:

1. Select one, delete the other:

If a sole proprietorship: I am the sole proprietor of [Name of Bidder] with office address at [address of Bidder];

If a partnership, corporation, cooperative, or joint venture: I am the duly authorized and designated representative of [Name of Bidder] with office address at [address of Bidder];

2. Select one, delete the other:

If a sole proprietorship: As the owner and sole proprietor of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to represent it in the bidding for (the above-captioned materials/services) of the Camarines Sur II Electric Cooperative, Inc. (CASURECO II);

If a partnership, corporation, cooperative, or joint venture: I am granted full power and authority to do, execute and perform any and all acts necessary and/or to represent the [Name of Bidder] in the bidding for (the above-captioned materials/services), of the Camarines Sur II Electric Cooperative, Inc. (CASURECO II), as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate issued by the corporation or the members of the joint venture)];

3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units,

foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, <u>by itself or by relation</u>, <u>membership</u>, <u>association</u>, <u>affiliation</u>, <u>or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;</u>

- 4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
- 5. *[Name of Bidder]* is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. Select one, delete the rest:

If a sole proprietorship: I am not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

If a partnership or cooperative: None of the officers and members of [Name of Bidder] is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

If a corporation or joint venture: None of the officers, directors, and controlling stockholders of [Name of Bidder] is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

- 7. [Name of Bidder] complies with existing labor laws and standards; and
- 8. [Name of Bidder] is aware of and has undertaken the following responsibilities as a Bidder:
 - a) Carefully examine all of the Bidding Documents;

- b) Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
- c) Made an estimate of the facilities available and needed for the contract to be bid, if any; and
- d) Inquire or secure Supplemental/Bid Bulletin(s) issued for the [Name of the Project], if any.
- 9. [Name of Bidder] did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
- 10. In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.

of	IN WITNESS WHEREOF, I have hereunto affixed m (month), (year) at the City of		_day
		Affiant	
& SS	SUBSCRIBED AND SWORN to before me the subscriber of the affiant exhibited to me (any of the follows ID with picture) No/s and valid until _	wing: Passport, Driver's License	
		NOTARY PUBLIC UNTIL_ PTR. No TIN_	_
Page Book	No e No k No es (year)		

CAMARINES SUR II ELECTRIC COOPERATIVE, INC. (CASURECO II) Del Rosario, Naga City

BIDS AND AWARDS COMMITTEE

CHECKLIST FOR THE SUPPLY AND DELIVERY OF AMORPHOUS CORE DISTRIBUTION TRANSFORMER

A. SCOPE OF REQUIREMENTS

No.	Description	Qty	Unit					
1	Transformer, Pole Type, Conventional, Amorphous, 25 kVA, Cu-Cu Winding	5	pcs					
2	Transformer, Pole Type, Conventional, Amorphous, 37.5 kVA, Cu-Cu Winding	6	pcs					
3	3 Transformer, Pole Type, Conventional, Amorphous, 50 kVA, Cu-Cu Winding 3 pcs							
App	Approved ABC : Php1,910,000.00							

B. ELIGIBILITY REQUIREMENTS

SPECIFICATIONS	Statement of Compliance (Compliant/Not Compliant)
DTI Business name registration/Securities and Exchange Commission (SEC) registration certificate/Cooperative Development Authority (CDA) registration certificate, whichever is applicable	
CASURECO II Accredited Supplier	
Mayor's/Business Permit (current and valid);	
Income/Business Tax Return	
Omnibus Sworn Statement (duly notarized)	
RESULT:	

C. TECHNICAL REQUIREMENTS

SPECIFICATION			Statement of Compliance (Compliant/Not Compliant)	Proof of Evidence
Description	:	Pole mounted, single phase, overhead-type, oil immersed, high permeability grain oriented amorphous steel core, conventional double primary bushing distribution transformers.		
Quantity (25kVA)	:	5 pcs.		
Quantity (37.5kVA)	:	6 pcs.		
Quantity (50kVA)	:	3 pcs.		
Maximum altitude above sea level	:	1,000 meters		
Maximum ambient temperature	:	40 deg C		
Average ambient temperature	:	30 deg C		
Rated Primary Voltage	:	7620/13200GrdY Volts		
Full wave (BIL), Crest	:	95 kV		
Chopped wave (BIL), Crest	:	105 kV		
Min. time to Flashover	:	1.8 microseconds		
Secondary Voltage	:	240V (25 to 50kVA)		
Full wave (BIL), Crest	:	30kV		
Chopped wave (BIL), Crest	:	33 kV		
Min. time to Flashover	:	1.0 microsecond		

Tap Changer (off-circuit)	:	 Two (2) -2.5% tap above and two (2) - 2.5% taps below rated primary voltage. Tap 3 shall be the nominal tap. All tap ratings shall be at rated capacity De-energized operation only Clockwise direction from the highest to the lowest tap position Caution marking: Do Not Operate When Energized 			
Frequency	:	60 Hz			
Percent Impedance : 2% with ±10% tolerance (25 to 50kVA); Difference in impedance between transformers of the same rating shall not exceed 7.5% of the specified value.					
Audible Sound Level					
50kVA and below	:	48 dB			
Maximum Allowable Losses (at Nominal Tap and Rated kVA)					
Core Loss (No-Load) in wat	Core Loss (No-Load) in watts				
25kVA	:	18			
37.5kVA	:	30			
50kVA	:	32			
Copper Loss (Full-Load) in	Copper Loss (Full-Load) in watts				
25kVA	:	290			
37.5kVA	:	360			
50kVA	:	500			
Reference Temperature	:	30 deg C for Core Loss and 85 deg C for Copper Loss			

Tolerance for guaranteed values (Rejection)	:	10% for Core Loss and 6% for Total Losses	
Core Type	:	Shell Type	
Winding Materials (HV/LV)		Copper/Copper	
Insulating Oil		New Mineral (PCB Free) insulating oil for electrical apparatus, ASTM D3487	
Material/Finishes (Tank)		Tank coating exceeds ANSI C75.12.31.2	
		Shall be made of steel	
		Shall be of sealed type construction with a steel and bolted type cover	
		Shall be provided with usable gasket	
Tank Grounding Connector		Tank cover shall be grounded to the tank body using a copper strap adequately sized for short circuit rating of the transformer	
		Shall have an eyebolt- type grounding connector (8mm ² - 30mm ²) made from tinned copper alloy material)	
Support and Lifting Lugs	:	Shall have a support lug for pole mounting.	
		Shall have a balance vertical lifting lugs	
		Shall be painted with two coats	
		Light gray paint, ANSI70	
		Gray, over a suitable prime coat	
Tank Marking		Shall have a black painted or reflectorized and weatherproof sticker (3" block letters) transformer kVA rating below the low voltage bushing.	
Primary Bushings		High voltage and neutral bushing: (double bushing), made in porcelain	

		Shall be equipped with eyebolt-type connectors made from tinned copper-alloy material with stainless spring washers, terminal connectors Shall accommodate 8mm²-30mm² stranded copper conductors	
Secondary Bushings	:	Low voltage bushing (three bushing) shall be made from high grade, wet process porcelain, glazed entire exposed surface, light gray color ANSI 70, Munsell notation 5BG 7.0/0.4, It shall be designated as X1, X2 and X3 depending on secondary voltage rating in accordance with IEEE std	
		C57.12.20, For 25-50kVA, conductor size 30mm² (AWG No. 2) solid to 700mm² (350kcmil) stranded copper conductor that low voltage terminal can accommodate.	
		Shall be equipped with tinned copper alloy, eyebolt-type connectors or tinned spade terminal pads arrange for cable vertical takeoff, size of terminal opening, 20.6mm (13/16 inch)	
Features	:	Meets or exceeds ANSI and NEMA standards Nameplate (stainless steel) in accordance with IEEE Std. C57.12.00 properly attached on the tank with technical specifications etched on the surface and coated with black enamel; serial no.,	
		. class, . number of phases,	

	. frequency,
	. voltage rating,
	. kVA rating,
	. temperature rise deg C,
	. polarity,
	. percent impedance,
	. BIL,
	. total weight in kg.,
	. connection diagram,
	. name of manufacturer,
	. type of insulating liquid,
	. date/year manufactured
	. full load copper loss in watts
	. core loss in watts
	All energized hardware i.e. bolts; nuts and washers shall be made of tinned copper alloy material such as silicon bronze.
Others	The kVA rating shall be continuous and based on not exceeding either a 65 deg C (average) winding temperature rise or an 80 deg C hottest-spot temperature rise above an ambient of 30 deg C. The temperature rise of insulating oil shall not exceed 65 deg C when measured near the top of the tank.

	The transformer shall be guaranteed to have the loading capability in accordance with ANSI/IEEE STD C57.92, latest revision.	
	The transformer shall withstand the mechanical and thermal stresses produce by external short-circuit currents specified in IEEE Std. C57.12.00, latest revision. Cooling class, self-cooled (OA or ONAN)	
RESULT:		

D. FINANCIAL BID

No.	Description	Unit Cost	Qty	Unit	Total Cost
1	Transformer, Pole Type, Conventional, Amorphous, 25 kVA, Cu-Cu Winding		5	pcs	
2	Transformer, Pole Type, Conventional, Amorphous, 37.5 kVA, Cu-Cu Winding		6	pcs	
3	Transformer, Pole Type, Conventional, Amorphous, 50 kVA, Cu-Cu Winding		3	pcs	
Tot	tal Financial Bid:				