



**ILOILO I ELECTRIC COOPERATIVE INC.**

( I L E C O – I )

BRGY. NAMOCON, TIGBAUAN

ILOILO

**INVITATION TO BID NO. 2024-010**

***“PURCHASE OF DISTRIBUTION TRANSFORMERS FOR YEAR 2024”***

- Iloilo I Electric Cooperative Inc. (ILECO-I) through its Bids and Awards Committee (BAC), invites interested bidders to participate in the **Public Bidding** of the Project, **“Purchase of Distribution Transformers for Year 2024”** in accordance with the Republic Act (RA) 10531 and Republic Act (RA) 9184 and its Revised Implementing Rules and Regulations. The ILECO I, through the FY 2024 Reinvestment Fund for Sustainable Capital Expenditure (RFSCE) intends to apply the sum of **TWENTY-ONE MILLION SEVEN HUNDRED SIXTY-TWO THOUSAND PESOS (21,762,000.00)** being the Approved Budget for the Contract (ABC) to payments under the contract for the Project. The period for the performance of the obligations under the Contract shall not go beyond the validity of the corresponding appropriations for the Project.

Item no.	Unit	Item Description	Qty	Unit Cost	Total Cost	Non Refundable Fee	Completion Schedule	Source of Fund
1	pc	Transformer, Distribution, Amorphous Type, 15 KVA, 13.2/7.62 KV, 120/240V	15	90,000.00	1,350,000.00	Php 25,000.00	<ul style="list-style-type: none"> <li>Atleast 50% percent in total quantity within 60 calendar days from receipt of Notice to Proceed.</li> <li>Full Delivery within 120 calendar days from receipt of Notice to Proceed.</li> </ul>	RFSCE
2	pc.	Transformer, Distribution, Amorphous Type, 25 KVA, 13,200/7,620 KV, 120/240 Volts	91	112,000.00	10,192,000.00			
3	pc.	Transformer, Distribution, Amorphous Type, 37.5 KVA, 13,200/7,620 KV, 120/240 Volts	39	140,000.00	5,460,000.00			
4	pc.	Transformer, Distribution, Amorphous Type, 50 KVA, 13,200/7,620 KV, 240/480 Volts	28	170,000.00	4,760,000.00			

**Php  
21,762,000.00**

- The ILECO-I BAC shall conduct the meeting for Pre bid and opening of the Documents and Bid Offer at the given address and schedule below **Face-to-Face**. Authorized attendees, including representatives of bidders, must be physically present at the ILECO-I Employees’ Hall, Brgy. Namocon Tigbauan Iloilo.

Availability of Bidding Documents	Pre-Bid Conference	Submission of Bid/Bid Opening
September 16, 2024 to October 8, 2024 from Monday to Friday only from 8:00 A.M. to 5:00 P.M	September 23, 2024 at 1:30 P.M. (Monday)	October 8, 2024 at 9:00 A.M (Tuesday)

- The Prebid-Conference is on **September 23, 2024 (Monday), 1:30 PM** at the ILECO-1 Main Office, Employees’ Hall, Brgy. Namocon Tigbauan Iloilo, which shall be open to prospective bidders.

4. Bids must be duly received by the BAC Secretariat through manual submission at the office address indicated below on or before **9:00 AM of October 8, 2024. Late Bids shall not be accepted.**
5. All Bids must be accompanied by a Bid Security in any acceptable forms and in the amount stated in the Bidding Documents. The Submission and Opening of Bids will be on **October 8, 2024 (Tuesday), 9:00 AM at ILECO-1 Main Office, Employees' Hall, Brgy. Namocon Tigbauan Iloilo.** Bids shall contain the Eligibility and Technical Documents, as well as the Financial Documents prescribed in the Bidding Documents which will be opened in the presence of the bidder's representatives.

**Unsealed or unmarked bid envelopes shall also be rejected. In addition, bid offers received in excess of the ABC shall likewise be automatically rejected.**

6. Representatives from each bidder/company must submit their **notarized letter of Authorization (LOA)** during the Pre-bid conference and Opening of Bids. Failure to comply the above-mentioned will automatically mean disqualification. Only those who have paid the Non-refundable fee in the amount specified above shall be allowed to participate in the discussion during the Prebid Conference and have their bid offers opened.
7. Bidding will be conducted through open competitive bidding procedures using a non-discretionary "pass/fail" Criterion.
8. The Bidder must have an experience of having Single Largest Completed Contract (SLCC) that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC. Suppliers/Contractor completed project must be substation projects with Certificate of Final Inspection and Acceptance.
9. Suppliers/Contractors who intend to participate shall be immediately **disqualified under the following cases:** (a) suppliers/contractors whose contracts were previously **terminated** by ILECO 1 due to its failure to comply with its contractual obligation; (b) suppliers / contractors with (b.1) **ongoing or** (b.2) **un-finish projects or with at least** (b.3) **at least 10% negative slippage** with ILECO I; (c) suppliers/contractors with pending case filed with ILECO 1 and (d) contractors/suppliers which was previously **blacklisted** either by ILECO 1 or any government agencies, should be automatically disqualified from participating in any competitive public bidding to be or presently being undertaken by ILECO I.
10. Interested bidders may obtain further information from the ILECO-1-BAC Secretariat through the contact details given below.
11. The ILECO-I reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract as indicated in the National Electrification Administration (NEA) Revised Procurement Guidelines and Simplified Bidding Procedures for Electric Cooperatives IRR-RA 10531 (2017) and in the Implementing Rules and Regulations (IRR) of Republic Act (RA) 9184, otherwise known as the "Government Procurement Reform Act".

The results of the bidding shall be submitted to the ILECO-I Head of Procuring Entity (HoPE) for final decision and awarding of BIDS. The decision of the HoPE shall be deemed final and executory.

12. For further information, please refer to:  
*ILECO-I BAC Secretariat*  
*Iloilo I Electric Cooperative, Inc. (ILECO-I)*  
*Namocon, Tigbauan, Iloilo*  
*Email Add: [bac.ileco1@gmail.com](mailto:bac.ileco1@gmail.com)*  
*Mobile No.: 0917-156-3079*  
*ILECO-I Website: [ileco1.com](http://ileco1.com)*

*P. Star – September 16, 2024*

(sgd.) ENGR. EDWIN C. FIGUEROA, PEE  
*BAC Chairperson*



**ILOILO 1 ELECTRIC COOPERATIVE, INC.**  
**( I L E C O – 1 )**  
 Namucon, Tigbauan Iloilo  
*Bids and Award Committee (BAC)*

**“PURCHASE OF DISTRIBUTION TRANSFORMERS FOR YEAR 2024”**

**A. TECHNICAL SPECIFICATIONS**

<b>SPECIFICATION</b>	
<b>DISTRIBUTION TRANSFORMERS</b>	<b>Specification</b>
Place of manufacture	Must belong to OECD Countries
Phase	Single Phase
Type of installation	Overhead Type, Pole Mounted
Primary Voltage Rating	7620/13200Y V
Tap settings	Two (2) - 2 1/2 % taps above and two (2) -2 1/2 % taps below rated primary voltage
Secondary voltage rating	120/240 V & 240/480V
Frequency	60 Hz
kVA rating	15-50kVA
Maximum Altitude above sea level	1000m
Maximum ambient temperature	40 °C
Average ambient temperature	30 °C
Applicable standard	IEEE STD ANSI/IEEE STD C57.91 NEMA STD ASTM STD
Insulation level (HV side)	
Full wave (BIL), crest	95 kV
Chopped wave, crest	105 kV
Minimum time to flashover	1.8 μs
Applied voltage test (kV rms)	34 kV
Induced Voltage test (kV rms)	17 kV
<b>Insulation level (LV side)</b>	
Full wave (BIL), crest	30 kV
Chopped wave, crest	33 kV
Minimum time to flashover	1.0 μs
Applied voltage test (rms)	34 kV
Induced Voltage test (rms)	17 kV
Percent Impedance	15-75 kVA = 2.0 ± 10 %
<b>LOSSES</b>	
Reference temperature	30 °C for No- load loss 85 °C for Load loss
Tolerance for actual losses over guaranteed losses	10 % for No-load loss

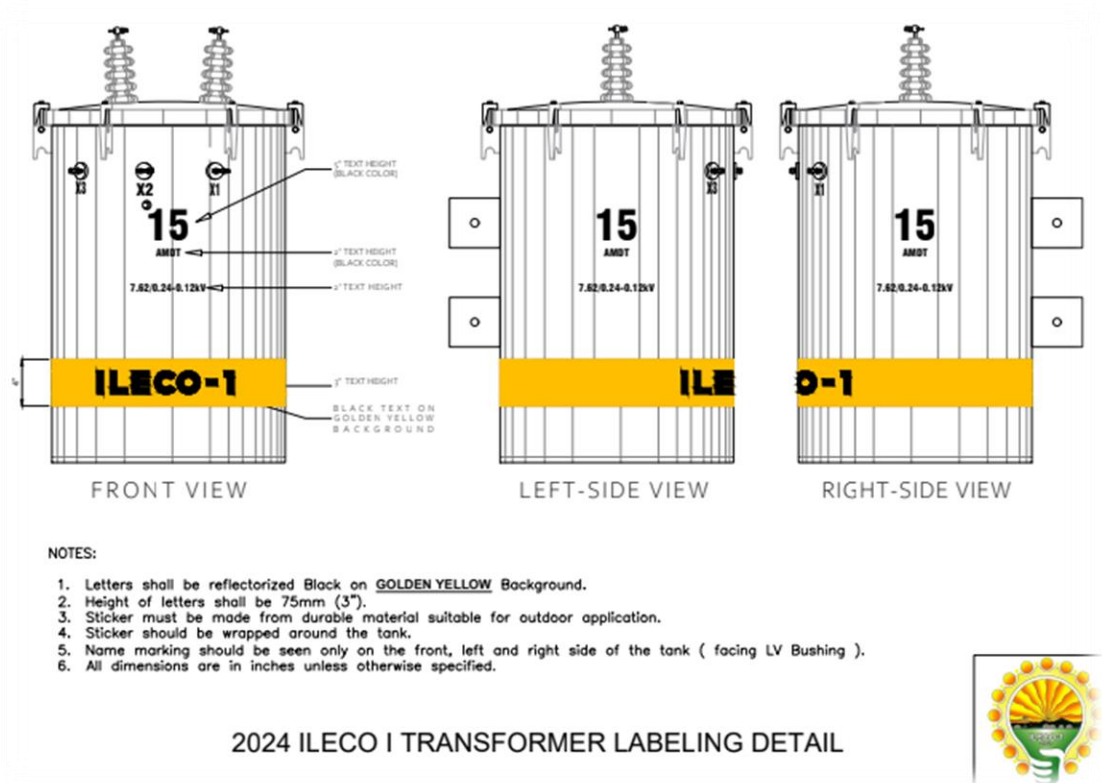
Short circuit rating	6% for Total losses
Loading Capability	Per ANSI/IEEE C57.12.00
Audible Sound level limit	Per ANSI C57.91 50 KVA and below = 48 dB
<b>CONSTRUCTION</b>	
Cooling class	ONAN
Core	Amorphous Steel
Coil	Copper - Copper Winding
<b>Primary Bushing</b>	
Number	2
Mounting	Cover-mounted
Voltage class	15 kV
Creepage	255mm (10 in)
Color	ANSI 70 gray
Designation	H1 and H2 for transformer rated 7620/13200Y V
<b>Insulation Level</b>	
60 Hz, Dry one - minute withstand	35 kV
60 Hz, Wet Ten second withstand	30 kV
Impulse, Full Wave Dry Withstand (1.2 x 50 micro sec.)	95 kV
<b>Secondary Bushing</b>	
Number	3 or 4
Mounting	Side - wall mounted
Insulation class	1.2 kV class, 30 kV BIL
Color	ANSI 70 gray
Designation	X1, X2 and X3/ X1, X2, X3, X4
Arrangement	Per ANSI C57.12.20
<b>Insulation Level</b>	
60 Hz, Dry One minute withstand	10 kV
60 Hz, Wet Ten second withstand	6 kV
Impulse, Full Wave Dry Withstand (1.2 x 50 $\mu$ s)	30 kV
<b>Bushings Terminals</b>	
HV Bushings and HV Neutral Bushing	
<b>Bushing Terminals</b>	
Type	Tinned copper - alloy eyebolt - type connector with stainless steel spring washer
Conductor range	8mm <sup>2</sup> ( AWG No. 8) solid to 30 mm <sup>2</sup> (AWG No. 2) stranded copper conductor
<b>LV Bushing</b>	
Type	5- 100 kVA = tinned copper - alloy eyebolt - type connector with stainless steel spring washer 15 kVA and below = 14 mm <sup>2</sup> (AWG No. 6) solid to 100 mm <sup>2</sup> (AWG No. 4/0) Stranded copper conductor 25-50 kVA = 30 mm <sup>2</sup> (AWG No. 2) solid to 400 mm <sup>2</sup> stranded copper conductor

Terminal markings	per ANSI C57.12.70
Polarity	Additive
<b>Tank</b>	
Construction	Sealed - type with steel cover and reusable gasket
Color	ANSI Gray
Cover grounding	Copper ground strap connected to the tank body, sized for the short -circuit rating of the transformer
<b>Grounding</b>	
Tank Grounding	Tinned copper alloy, eyebolt-type connector to accommodate 8 mm <sup>2</sup> (AWG No. 8) to 30 mm <sup>2</sup> (AWG No. 2) stranded copper conductors Located near the base of the tank
Support lugs	Per ANSI C57. 12.20
Lifting lugs	Permanently attached near the top of the tank Designed with safety factor of 5
Core - coil lifting facility	Shall be provided
Correct oil level marking	shall be provided
<b>Markings</b>	
kVA marking	KVA rating marking is indicated by reflectorized weather proof 3-inches black printed sticker.
Body	see separate design
<b>Tap Changer</b>	
Design	Provided with external operating handle mounted on the tank wall
Operation	De-energized operation only Clockwise direction from the highest to the lowest tap position
<b>Markings</b>	
Tap position and caution sign	Tap position marked with reflectorized, non-weathering decals at least 25 mm (1.0 inch) high, with numeral "1" assigned to the highest tap Caution marking: " Do Not Operate When Energized"
<b>Pressure Relief Valve</b>	
Design	Provided with a pull ring for manually reducing pressure to atmospheric level using a standard hot stick. It shall be capable of withstanding a static pull force of 11.34 kG( 25 pounds) for one minute without permanent deformation
Venting and Sealing Characteristics	Venting pressure = 69 kPa ( 10psig)±13 kPa (gauge) (2psig) Resealing pressure = 42 kPa (gauge) (6psig) minimum Zero leakage from reseal pressure to - 56 kPa (gauge) (8 psig) Flow at 103 kPa (gauge) (15 psig) = 16.5 L/s (35 SCFM) minimum, corrected for air pressure of 101 kPa (14.7 psi) (absolute) and air temperature of 21°C
Enclosure integrity	Completely Assembled transformer enclosure shall be of sufficient strength to withstand an internal pressure 49 kPa (gauge) (7 psig) without permanent distortion Can withstand an internal pressure of 138 kPa (gauge) (20 psig) without rupturing or displacing

Insulating Liquid	components (excluding the cover gasket and gasket oil leaks) of the transformer Unused mineral oil meeting the requirements of the latest revision of ASTM D3487. With Certification of PCB-Free Oil from manufacturer.
Hardware (bolts, nuts and washer)	All energized hardware shall be made of tinned copper alloy material All other hardware shall be hot-dip galvanized
<b>Nameplate</b> Material Information	Aluminum Serial Number Class Number of phases Frequency Voltage Rating kVA rating Temperature rise, °C Polarity Percent impedance BIL Total weight, kg Connection diagram Name of Manufacturer Installation and operating instruction reference The word "Transformer" Type of insulating liquid (generic name) Conductor material for each winding Equipment identification number
<b>Test</b> Routine Test	Winding resistance measurement tests Ratio Test Polarity Test and phase Relation 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)
Design (or Type ) test	Certified test report to be submitted: Temperature rise Lightning Impulse Insulation Power Factor Insulation Resistance

Rating (KVA)	Maximum Transformer Losses		
	No Load Loss (Watts)	Load Loss (Watts)	Total Losses (Watts)
15	15	195	210
25	18	290	308
37.5	30	360	390
50	32	500	532

Rating (KVA)	Sec Voltage	Specification
15	120/240 V	Double (2) bushing primary, three (3) bushing secondary
25		
37.5		
50	240/480 V	Double (2) bushing primary, four (4) bushing secondary



**Additional Requirement/s:**

Atleast three (3) complete test results per kVA rating within 3 years (2022-2024) from the date of testing.