

REQUEST FOR QUOTATION SVP No. 2023 – 007

10 March 2023

The People's Television Network, Inc. (PTNI), through its Bids and Awards Committee (BAC), invites interested bidders for the Small Value Procurement of Preventive Maintenance Services and Corrective Works for 2MV Power Distribution for the People's Television Network, Inc., Manila Office. The details of the project are as follows:

A .Name of the Project	Preventive Maintenance Services and Corrective Works for 2MV Power Distribution for the People's Television Network, Inc., Manila Office.
B. Source of Fund:	Corporate Budget (MOOE subs 2023)
C. Approved Budget for the Contract (ABC):	Eight Hundred Fifty-One Thousand Seven Hundred Sixty-Two Pesos Only (Php851,762.00)
D. Mode of Procurement:	Procurement will be conducted in accordance with Sec.53.9 (Small Value Procurement) of the Revised Implementing Rules and Regulations of Republic Act 9184, otherwise known as "The Government Procurement Reform Act"

E. Documentary Requirements:

Copies of the following eligibility requirements are also required to be submitted along With your quotation/proposal:

- 1. Mayor's/Business Permit (2023) or Official Receipt
- 2. PhilGEPS Registration Certificate
- 3. Income/Business Tax Return (2021)
- Omnibus Sworn Statement (duly signed); and if applicable:

 Notarized Secretary's Certificate in case of corporation, partnership, or cooperative.

*only the BIR Certificate of Registration shall be submitted in lieu of DTI Registration and Mayor's Permit.



Only Sealed bids / quotations from the eligible bidders will be opened and a contract will only be awarded to the Lowest Calculated and Responsive Bidder who was determined as such during post qualification.

Payment: within 30 calendar days after completion and acceptance.

Price Validity: All price quotations shall be considered as fixed prices and not subject to price escalation during contract implementation.

Delivery Period: Preventive Maintenance schedule must be on Holy Week, April 06, 2023 and/or April 07, 2023, on Holy Thursday and/or Good Friday. It must be a one (1) day work activities.

F. Description:

Preventive Maintenance Services and Corrective Works for 2MV Power Distribution for the People's Television Network, Inc., Manila Office.

*Please see attached for the Terms / Scope of works

Bids received in excess of the ABC shall be automatically rejected at the opening of quotations.

Sealed quotations may be submitted on or before 10:00am, 17 March 2023, at the Purchasing Office, Broadcast Complex, Visayas Avenue, Diliman, Quezon City.

The PTNI reserves the right to accept or reject any bid to annul the bidding process and to reject all bids at any time prior to contract award without thereby incurring any liability to the affected bidder or bidders.

Chairperson, BAC II-SVP

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PREVENTIVE MAINTENANCE SERVICES AND CORRECTIVE WORKS For 2MVA POWER DISTRIBUTION SYSTEM

~ Include ~

I. SUBSTATION PREVENTIVE MAINTENANCE

- 1. High voltage disconnecting switch (Meralco pole 34.5KV).
- 2. Electrical pole and transformer insulators
- 3. High Voltage/Medium Voltage (HV/MV) Switchgears (Power Fuses, Switches, Circuit breakers, Lightning Arrester and Isolators) with manual operation test, insulation resistance test and contact resistance test.
- 4. Six (6) units 333KVA Oil type distribution transformers
- 5. Aerial cable and underground cable wire hanger and support
- 6. Bus bars, terminal contact and termination box with insulation resistance test and contact resistance test.
- 7. Aerial Cable and Underground cable insulation test from PTNI Electric Pole, Transformer Vault to Main Power room
- 8. Thermographic scanning before and after service
- 9. Ground resistance testing on six (6) units 333KVA transformer, PTNI Electrical Pole grounding system, aerial cable and underground cable.
- 10. Switchgears and transformers bolt retightening (wire terminals, locknuts, washers, etc.)
- 11. Comprehensive electrical test on transformer windings:
 - a) Winding Resistance Test
 - b) Winding Insulation Resistance / Polarization Index Test
 - c) Turns Ratio Test
 - d) Excitation Current Test
 - e) Insulation Power Factor and capacitance Test
- 12. Transformer oil test:
 - a) Dielectric strength test (DST) or dielectric voltage breakdown (DVB) test
 - b) Transformer Oil Dissolve Gas Analysis (DGA)
 - c) Oil quality test
- II. REPAIR LOAD BREAK SWITCH (LBS) LOOSE TERMINAL CONNECTOR OF PTNI ELECTRICAL POLE. (Replace if necessary)
- III. REPAIR BURNED TERMINAL CONNECTOR OF 333 KVA TRANSFORMER NO. 4
- IV. RESOLVE HIGH TEMPERATURE OF 333 KVA TRANSFORMER NO. 3 SECONDARY CONNECTOR AND AERIAL CABLE SLEEVE
- V. TRANSFORMER OIL RECONDITIONING, DEGASIFICATION AND PURIFICATION

For the

Peoples Television Network Inc. (PTNI)

they

GENERAL INFORMATION

The People's Television Network Inc. requires Professionals Services and Contractor to perform Repair and Preventive Maintenance Services on Transformer Vault with 6 units 333Kva Pole Type Distribution Transformer, Distribution Voltage Service (34.5Kv) and High Voltage/Low Voltage (HV/LV) Service Underground Installation, HV/LV Switchgears and Insulators.

B. GENERAL REQUIREMENTS

The contractor shall provide and responsible on labor, tools, equipment, devices and materials, Supervision required to carry out all preventive maintenance services as in the General Information.

The contractor must have already performed the same services with another client

C. STANDARD

Any Transformer Vault Preventive Maintenance Services program should be performed in accordance with accepted industry standards and work / safety practices. This includes.

- 1. Bureau of Fire Protection
- 2. Philippine Electrical Code
- 3. Meralco Standards: Electrical Design

D. SCOPE OF WORK

AIR DISCONNECTING SWITCHES / LOAD BREAK SWITCH:

- 1. Inspect and clean isolators, insulators and conductors.
- 2. Terminal contact/connection bolt retightening. Apply standard torque to avoid damage on terminal contact/connection.
- When using solvents as cleaning de-agent. Ensure they are manufacturer recommendation.
 Where abnormal environment conditions exist, more frequent inspection and cleaning may be required.
- 4. Check operation of the arc blades. Ensure proper cleaning of the main contacts. Inter-phase linkages and rods operation should be inspected to make sure that the linkage has not been bent or distorted/dislocate. Secure and ensure fastenings are intact.
- 5. Toggle latch positioning to the switch operating linkage should be observed on all closed switches to verify the locked mechanism is in a closed position.
- Operate switch manually several times to ensure proper operation. Do the same in a motor driven switch if power-operated. Ensure that all moving parts are properly secured and lubricated
- 7. Replace any poor/loosed wire and terminal, due to wear and tear and sometimes excessive moisture.

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8. Phase contact resistance testing should be performed. Results should be recorded and analyzed to ensure proper contact is being made. If the contact resistance of the switch exceeds recommended minimum, immediately repair or replace if necessary.

POWER FUSE:

- 1. **Improper Fuse-** Check the fuse installed based on the recommended technical manual for the equipment operation and standard. If incorrect fuse is installed, replace it with the right fuse.
- 2. **Corrosion-** Check for corrosion on the fuse holder terminals and contacts or the fuse itself. If corrosion is present, remove it with fine sandpaper.
- 3. Improper Fit- Check for contact between the fuse and fuse holder. Be sure no air gaps in between the fuse and the clips/cap on a clip-type or plug type fuse holder, to avoid loosed contact.
- 4. **Open Fuse-** Check fuses for opens. If any fuse is open, repair the open fuse if possible and replace it if necessary.

ELECTRICAL POLE INSULATOR, ISOLATOR AND LIGHTING ARRESTER:

- 1. **Insulator/Isolator-** Check condition of clamps, bolts and nuts securing drive parts. Clean and inspect porcelain insulators/isolators. Check split pins in clevis and oil all clevis pins. Clean and lubricate auxiliary switch contacts.
- 2. Lightning Arrester- Wash diverting housing. Check for damage porcelain housing and deformation of corona or stress ring

TRANSFORMERS:

- 1. Transformers-after de-energizing and grounding the transformer, clean all coils, connections, and insulators of loose dust or dirt deposits with a vacuum cleaner and blower. Examine/inspect the transformer for signs of overheating, deterioration, arcing, loose or broken parts, or other abnormal conditions. Ensure all connections are tightened.
- 2. Clean enclosure of any dust and dirt accumulations and ensure that vent openings are free from obstruction and dirt. If cooling fans are installed, examine for proper operations and lubricate as necessary.
- 3. Conduct comprehensive test on transformer windings and oil quality.
- 4. Inspect and examine the transformer tank, bushings, insulators, and surges arrestor for any cracks or broken/damaged parts, burned/arcing and oil leakages.
- 5. Clean all bushings, insulators, and surge arrestors of any dirt or dust accumulation.
- 6. Bolt tighten all conductor connections. Apply standard torque.
- 7. Perform a ground resistance test to ensure a value of 25 ohms or less.

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8. Transformer data (such as, voltage, current, and temperature readings) should be recorded on a regular basis in order to determine operating conditions of the transformer. Peak, or redline, indicators should be recorded and reset.

OIL CIRCUIT BREAKER:

- 1. External-Inspect the enclosure for signs of oil leakage. Clean external bushings assemblies and examine for signs of deterioration, tracking, and loose or broken parts. Observe oil gauge to ensure device is operating properly and measuring the oil level accurately.
- 2. **Insulating Oil Test**-Conduct a dielectric screen test of the insulating fluid. Based on the results of this test, filter or replace oil as required. Heavy carbon content can indicate potential contact wear and should be investigated further.
- 3. **Internal**-Since the contacts for oil circuit breakers are not readily accessible for inspection, the contact resistance should be tested as a minimum.
- 4. For a better and easy maintenance work on the oil circuit breaker contacts we require to untank the circuit breaker oil, parts and accessories. This is to avoid and eliminate contamination of oil.
- 5. Auxiliary Devices-Operating mechanisms should be maintained as with air circuit breakers. Where applicable, examine oil level indicators, sight glasses, oil lines, gaskets, and tank lifters for proper conditions. Repair or replace if necessary.

AERIAL AND UNDERGROUND CABLE:

- 1. Checking the integrity and condition of ground and aerial connections, cable joints and splices.
- 2. Inspecting the cleanliness and physical condition of cable.
- 3. Clearing dust, debris and other contaminant deposits from termination joint and outer surfaces.
- 4. Conducting contact resistance tests on terminations, insulation resistance tests between ground connections and conductors, to assess damage or wear.
- 5. Testing for defective electrical contacts and joints with infrared thermal scanning. Joints that register temperature rise need to be cleaned and re-torqued before re-testing.

SURGE ARRESTOR:

- 1. Clean and inspect porcelain for signs of damage or deterioration. Repair or replace as necessary.
- 2. Examine arrestor leads for damage and/or deterioration and corrosion.
- 3. Other suggested tests are 60 cycles spark over and hold tests, watts-loss and leakage current tests, insulation resistance tests, and grounding electrode circuit resistance tests.

THERMOGRAPHIC/INFRARED INSPECTION AND ULTRASONIC DETECTION:

- 1. An infrared or thermographic scanning, inspection should be performed before and after the preventive maintenance and repair service.
- 2. The infrared scanning shall identify the potentially dangerous conditions; such as, lose or dirty connections, overloaded or imbalanced circuits, or improperly installed equipment.
- 3. Effective infrared surveys require specialized equipment and should be performed only by qualified technicians.
- 4. Experience and training are required to accurately identify problem conditions and possible causes so that specific recommendations can be made to correct the situation.
- 5. Evaluation and recommendations must submit to PTNI for immediate action.

E. TEST RESULTS/ REPORTS/RECOMMENDATION

- 1. Submit evaluation, service report and discuss the result/analysis/recommendations. Must be certified by **Professional Electrical Engineers (PEE).**
- 2. Certificate of completion and acceptance shall be issued after the completion of preventive maintenance services.

F. GENERAL CONDITIONS

- 1. Prospective service bidders are required to conduct site inspection. To determine all necessary consideration and include the same in their proposal of any activities.
- 2. Extra precautionary measures shall be observed. Otherwise, any damage incurred due to the fault of the service contractor shall be replaced with a new one and must be restored to its original form for the account of the contractor.
- 3. If in case minor repair and the parts can be replace on a given allowable time, contractor/service provider must provide parts and/or conduct necessary repair and must provide separate quotation for the extra repair and parts replacement.
- 4. If major repair and parts replacement exceed the given allowable time the contractor/service provider must restored the original set-up and/or provide any means to obtain the normal operation and must provide separate quotation.
- 5. Always observed Safety Precautionary Measure and worksite cleanliness.
- PTNI is not liable to any loss or damaged to any tools and equipment used during the preventive maintenance period.
- 7. As Covid 19 pandemic Health Protocol must be observed, wearing Face Mask, Face shield and health certificate to all service personnel.
- 8. Service personnel must submit fully vaccinated I.D. against covid 19

G. DELIVERY DATE / WORK COMPLETION

Preventive Maintenance schedule must be on Holy week April 6, 2023 and/or April 7, 2023, on Holy Thursday and/or Good Friday. It must be a one-day work activities.

H. TERMS OF PAYMENT

Full Payment is thirty (30) days upon completion and acceptance on preventive maintenance services.

I. WARRANTY

Six (6) month warranty on workmanship services and parts replacement.

Prepared by:

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Electrical Engineer

Buildings and Grounds Unit

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