FLECO
First Laguna Electric Cooperative, Inc.
Power to Improve Lives

National Highway, Brgy. Lewin, Lumban, Laguna
Tel Nos. (049) 501-4478/501-5008
https://www.facebook.com/FLECOINC/
fleco_1973@yahoo.com

Invitation to Apply for Eligibility and to Bid for Simplified Bidding

The First Laguna Electric Cooperative, Inc. (FLECO), through its Bids and Awards Committee (BAC), invites all interested and eligible bidders to participate in a simplified bidding process (sealed canvass) for the scheduled preventive and corrective maintenance of FLECO substations. In view of this, may we request for quotation for the following scope of works, to wit:

Ref. No.	Particulars
SB 25-006	Preventive and Corrective Maintenance of FLECO Substation (SSPSJN01 – Pagsanjan, SSLMBN02 – Lumban 1, and SSLMBN03 – Lumban 2)
Completion Period	15 Calendar days after issuance of NTP
Source of Fund	RF
Advertisement/Posting of Invitation	March 3, 2025
Submission and Opening of Sealed Proposals	March 10, 2025 / 5:00 pm
Evaluation of Proposals	March 11-12, 2025 / 10:00 am

Instructions for Eligible Bidders/Suppliers:

- Prospective bidders are encouraged to obtain accreditation with FLECO. For a list of requirements, please email fleco.bac@gmail.com.

- Interested bidders may obtain a copy of and seek clarifications regarding the Request for Quotations (RFQs) from the BAC secretariat of FLECO. Contact them at telephone numbers 049.501.4478 / 501.4478 local 109 or email fleco.bac@gmail.com.

- Sealed quotations must be submitted either by courier or hand-delivered by the supplier or their authorized representative on or before the specified date to:

  Bids and Awards Committee Secretariat
  First Laguna Electric Cooperative, Inc. (FLECO)
  Brgy. Lewin, Lumban, Laguna 4014

- Bidders must submit a signed quotation, preferably using the FLECO prescribed RFQ Form, with complete details as per the Terms and Conditions provided.

Payment Schedule	
Delivery Period	
Mode of Delivery	
Warranty	
VAT Registration	
Price Validity	
Technical Specifications	

Certified by:

JAN MICHAEL L. MACALALAG
BAC Chairperson

Approved by:

ENGR. RICHARD B. MONDEZ
General Manager

National Highway, Brgy. Lewin, Lumban, Laguna
Tel Nos. (049) 501-4478/501-5008
https://www.facebook.com/FLECOINC/
fleco_1973@yahoo.com

Terms of Reference
(TOR)

Project Name: **Preventive and Corrective Maintenance of FLECO Substation (SSPSJN01 – Pagsanjan, SSLMBN02 – Lumban 1, and SSLMBN03 – Lumban 2)**

Location: **Pagsanjan and Lumban, Laguna**

I. Project Description

Substation Equipment installed within the substation premises requires preventive maintenance to ensure integrity of the power system, provide reliable service and to increase the lifespan of these equipment. Preventive Maintenance of substation is performed on a different interval depending on the recommendations, equipment status, and standards.

II. Project Duration

The project duration will start from the issuance of notice to proceed (NTP) or issuance of job order (JO) and signing of memorandum of agreement (MOA). The activity will take one day for each substation. Certificate of Completion will be issued upon completion or complying to all activities and submission of necessary documents required. The duration may vary depending on the schedule of the actual maintenance activities.

III. Documentary Requirements

The following documents shall be submitted and complied as part of the project. All documents listed below shall be submitted in both printed and electronic copy.

1. Preventive Maintenance Report Summary
2. Preventive Maintenance Report per substation
3. Preventive and Corrective Maintenance Recommendations
4. Test results with photos or receipt from the testing device
5. Actual photos of actual test equipment used with calibration certificate

The following considerations listed below must be included in the reports

1. All equipment nameplates must be included in the report.
2. As-found and as-left photographs
3. All legends must be included for easy interpretation of results
4. All reference standards must be included
5. Ambient Temperature Records per test must be indicated per test
6. Review and comparison of previous PMS results (copy may be obtain from FLECO)

National Highway, Brgy. Lewin, Lumban, Laguna
Tel Nos. (049) 501-4478/501-5008
https://www.facebook.com/FLECOINC/
fleco_1973@yahoo.com

IV. General Considerations

1. Prices on the proposal shall be on a “per test per equipment” basis
2. Inspection and assessment of the substation equipment shall be conducted prior to the actual activity
3. Separate schedule shall be provided for each substation (8-12 hours per substation) to complete the activity
4. Generator set must be provided by the contractor for their own equipment and for the 230Vac to 125Vdc supply of the substation to avoid battery drainage during functional test of breakers
5. All tests must be shown/discussed/explain/interpret with the supervisor-in-charge in the substation on the day of the activity
6. Gantt Chart must be provided prior to the activity to ensure that the activity will be completed on the time allotted

V. Issuance of Certificate of Completion

Upon completion of the activity and submission of all required documentation, taking into consideration all items listed on item III and IV, certificate of completion will be issued.

VI. Schedule of Activity from NTP/JO

1. Obtain previous preventive maintenance results from FLECO
2. Inspection and assessment of substation
3. Submit Gantt Chart
4. Actual Preventive Maintenance of Substation (Pagsanjan or Lumban 1&2)
5. Actual Preventive Maintenance of Substation (Pagsanjan or Lumban 1&2)
6. Preparation of preventive maintenance reports
7. Submission of preventive maintenance reports
8. FLECO review of preventive maintenance reports
9. Corrections of preventive maintenance reports (if any)
10. Re-subsmission of final and corrected preventive maintenance reports
11. Issuance of certificate of completion

VII. Scope of Works (Actual PMS)

See attached tables.

National Highway, Brgy. Lewin, Lumban, Laguna
Tel Nos. (049) 501-4478/501-5008
https://www.facebook.com/FLECOINC/
fleco_1973@yahoo.com

10 MVA Pagsanjan Substation (SSPSJN01)	Test
69kV SF6 Live Tank Power Circuit Breaker 1 Unit	• Insulation Power Factor • Insulation Resistance • Contact Resistance • Timing Test • Functional Test (Local Control, Remote, Relay)) • Visual Inspection • SF6 Gas Analysis • SF6 Gas Refilling if not within proper pressure • Cleaning/Degreasing/Tightening/ Lubrication of Moving Parts • Replacement of Defective/Rusty Bolts and Nuts on bushing terminals • Replacement of Loose Terminal Lugs
69kV Current Transformer for Relaying 1 Set – 3 Units	• Insulation Power Factor • Insulation Resistance • Winding Resistance • CT Ratio • Polarity • Excitation Current • Saturation • Visual Inspection • Cleaning/Degreasing/Tightening/ Lubrication of Moving Parts • Replacement of Defective/Rusty Bolts and Nuts on bushing terminals • Replacement of Loose Terminal Lugs • Analysis on previous PMS result (with copy from FLECO)
10 MVA Power Transformer 1 Unit	• Insulation Power Factor • Insulation Resistance • Winding Resistance • Excitation Current • Transformer Turns Ratio • Polarity • Short Circuit Impedance / Leakage Reactance Test • Bushing Hot Collar • Bushing C1 C2 • Dissolve Gas Analysis • Oil Quality Test • Functional and Continuity Check of Transformer Mechanical Protection and Sensors

National Highway, Brgy. Lewin, Lumban, Laguna
Tel Nos. (049) 501-4478/501-5008
https://www.facebook.com/FLECOINC/
fleco_1973@yahoo.com

	• Replacement of Desiccant (Silica Gel) • Paint Retouch • Visual Inspection • Cleaning/Degreasing/Tightening/ Lubrication of Moving Parts • Replacement of Defective/Rusty Bolts and Nuts on bushing terminals • Replacement of Loose Terminal Lugs Ground Resistance Measurement
13.2kV Vacuum Circuit Breaker 5 Sets of Feeders	• Insulation Power Factor • Insulation Resistance • Contact Resistance • Timing Test • Functional Test (Local, Remote, Relay) • Cleaning of Whole MVSG Cabinet • Visual Inspection • Cleaning/Degreasing/Tightening/ Lubrication of Moving Parts • Replacement of Defective/Rusty Bolts and Nuts on bushing terminals • Replacement of Loose Terminal Lugs

Lumban 1 Substation (SSLMBN02)	Test
69kV SF6 Live Tank Power Circuit Breaker 1 Unit	• Insulation Power Factor • Insulation Resistance • Contact Resistance • Timing Test • Functional Test (Local Control, Remote, Relay) • Visual Inspection • SF6 Gas Analysis • SF6 Gas Refilling if not within proper pressure • Cleaning/Degreasing/Tightening/ Lubrication of Moving Parts • Replacement of Defective/Rusty Bolts and Nuts on bushing terminals • Replacement of Loose Terminal Lugs • Repair of Local Control (Not working on the previous PMS, not yet repaired)
10 MVA Power Transformer 1 unit	• Insulation Power Factor • Insulation Resistance • Winding Resistance • Excitation Current • Transformer Turns Ratio

	• Polarity • Short Circuit Impedance / Leakage Reactance Test • Bushing Hot Collar • Bushing C1 C2 • Dissolved Gas Analysis • Oil Quality Test • Functional and Continuity Check of Transformer Mechanical Protection and Sensors • Replacement of Desiccant (Silica Gel) • Paint Retouch • Visual Inspection • Cleaning/Degreasing/Tightening/ Lubrication of Moving Parts • Replacement of Defective/Rusty Bolts and Nuts on bushing terminals • Replacement of Loose Terminal Lugs Ground Resistance Measurement
ENTES MPR-45S Power Quality Meter (1 Set)	• Wiring and Phase Angle Correction (needs assessment and correction)

Lumban 2 Substation (SSLMBN03)	**Test**
69kV SF6 Dead Tank Power Circuit Breaker (BCT not included)	• Insulation Power Factor • Insulation Resistance • Contact Resistance • Timing Test • Functional Test (Local Control, Remote, Relay) • Visual Inspection • SF6 Gas Analysis • SF6 Gas Refilling if not within proper pressure • Cleaning/Degreasing/Tightening/ Lubrication of Moving Parts • Replacement of Defective/Rusty Bolts and Nuts on bushing terminals • Replacement of Loose Terminal Lugs
5 MVA Power Transformer 1 unit	• Insulation Power Factor • Insulation Resistance • Winding Resistance • Excitation Current • Transformer Turns Ratio • Polarity • Short Circuit Impedance / Leakage Reactance Test

National Highway, Brgy. Lewin, Lumban, Laguna
Tel Nos. (049) 501-4478/501-5008
https://www.facebook.com/FLECOINC/
fleco_1973@yahoo.com

	• Bushing Hot Collar • Bushing C1 C2 • Dissolve Gas Analysis (Trend Comparison based on previous PMS) • Oil Quality Test • Functional and Continuity Check of Transformer Mechanical Protection and Sensors • Replacement of Breather (Main Tank and Tap Changer Tank) (Heavy Duty Glass with Metal Casing) • Replacement of Desiccant (Silica Gel) • Visual Inspection • Cleaning/Degreasing/Tightening/ Lubrication of Moving Parts • Replacement of Defective/Rusty Bolts and Nuts on bushing terminals • Replacement of Loose Terminal Lugs • Ground Resistance Measurement
ENTES MPR-45S Power Quality Meter (1 Set)	• Wiring and Phase Angle Correction (needs assessment and correction)