

Common Management Unit

Terms of Reference and Scope of Work

HIRING OF CONSULTANT FOR ENERGIZATION OF 400 KVA TRANSFORMER AND LOAD SANCTION OF 400 KVA & 1000 KVA TRANSFORMERS

1. Objective

The objective is to engage a qualified Electrical Consultant to:

- Assess the existing electrical installation.
- Prepare the required technical documentation/Design Book.
- Facilitate IESCO and statutory approvals.
- Arrange/supervise required electrical and transformer testing.
- Verify compliance of associated electrical works.
- Facilitate final approval and energization of the 400 KVA transformer.

2. Scope of Work and Key Deliverables

Sr.	Work Package / Activity	Description/Task	Deliverable	Level of Effort (LOE)
1	Orientation	Meeting with the CMU Warehouse Team regarding orientation of the tasks		01
2	Electrical Load Assessment and Design Book	Identify and Assess existing electrical load and prepare the Design Book covering the 400 KVA and 1000 KVA transformers.	Assessment Report and Design Book	03
3	IESCO Statutory Requirements and other pre-requisites	Identify and coordinate with IESCO regarding applicable Statutory Requirements and other pre-requisites for processing.	Compliance Report	02
4	IESCO Load Extension / Load Sanction and Energization of 400 kVA Transformer	Prepare, submit and obtain load extension/sanction from IESCO for the 400 kVA and 1000 KVA transformer arrangement. Sanction of 630 KW has already been taken on account of 1000 KVA transformer.	IESCO Approval for Load Sanctioning	02
5	Electrical Infrastructure Works for 400 kVA Transformer	Provide technical specifications and supervise/verify the required works.	Technical Specifications Report	01
6	Testing of 400 kVA Transformer & Oil Dehydration	Arrange/coordinate for testing of the 400 kVA transformer through a qualified vendor, define testing requirements, witness/verify tests and review results.	Transformer Satisfactory Testing Report	01
7	Wiring Test Report & IESCO Verification	Coordinate and prepare the Wiring Test Report and obtain its verification/ acceptance from IESCO/ Electrical Inspector.	Wiring Test Report Vetted by IESCO	01
8	Connection of 400 kVA transformer with 1000 kVA protection panel	Provision of specifications of accessories for termination of two transformers with one protection panel.	Specifications of accessories	01

9	Integrated Electrical Commissioning of Both Transformers	Provide technical oversight/verification of the integrated electrical arrangement and review commissioning results.	Commissioning Report	01
10	Final Documentation & Handover	Review/verify consultant-related approvals, test results and technical documentation.	Complete Documents Dossier	02
Total LOEs				15

3. Consultant Qualification

The Consultant/firm shall:

- Possess relevant academic/professional qualifications in Electrical Engineering registered with the Pakistan Engineering Council.
- Have demonstrated experience in similar consultancy assignments of 5-6 years.
- Have relevant experience in public-sector/Capital Development Authority, Defence Housing Authority (DHA), health-sector/project environments, where applicable.
- Have proven capacity to undertake the assignment within the prescribed timeframe.
- Provide appropriately qualified and experienced personnel for the assignment.
- Demonstrate satisfactory completion of similar assignments through references, previous contracts, completion certificates, or equivalent evidence.
- Experience in electrical power systems, transformers, HT/LT systems, IESCO coordination, load sanction, energization and commissioning.

4. Duration of Consultancy

The assignment shall be completed within 3 months from the date of work order issuance.

5. Important Scope Boundary

The consultancy shall cover professional advice, technical assessment, documentation, testing/verification, coordination, approvals of energization and load sanction of two transformers from IESCO.

6. Final Acceptance

The assignment shall be considered complete upon submission and acceptance of all required reports/certificates, completion of applicable approvals, and facilitation of successful energization of the 400 KVA transformer.

7. Payment Basis

Payment shall be deliverable-based and made against satisfactory completion and acceptance of agreed milestones/deliverables.

8. Location

The consultant will be based at CMU Warehouse, Islamabad under the supervision of HVAC, Electrical Engineer and Manager Warehouse.