

**MULTAN ELECTRIC POWER COMPANY
(MEPCO)**



REQUEST FOR PROPOSAL (RFP)

Tender No. 214/26

**APPOINTMENT OF INTERNATIONAL CONSULTANT/CONSORTIUM FIRM
FOR
EVALUATION AND ASSESSMENT OF TRANSMISSION & DISTRIBUTION (T&D)
TECHNICAL LOSSES OF MEPCO**

**OFFICE OF THE DIRECTOR (PROCUREMENT) DISTRIBUTION
MEPCO H/Q KHANEWAL ROAD MULTAN
TEL: 061-9220279**

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A. LETTER OF INVITATION

LETTER OF INVITATION

To,

M/s _____

Subject: PROVISION OF CONSULTANCY SERVICES FOR CONDUCTING AN INDEPENDENT 3RD PARTY STUDY FOR EVALUATION AND ASSESSMENT OF TRANSMISSION & DISTRIBUTION (T&D) TECHNICAL LOSSES OF MEPCO

Letter of Invitation is being issued to you with details as under:

I. INTRODUCTION

1. General

Multan Electric Power Company (MEPCO), a corporate entity formed pursuant to the restructuring of the Power Wing of the Pakistan Water and Power Development Authority (WAPDA), an agency of the Federal Government of Pakistan, invites sealed bids from eligible bidders (international individual/ consortium firm) for the provision of consultancy services for the following scope of work/services, each to be treated separately:

“Evaluation and Assessment of Transmission & Distribution (T&D) Technical Losses of MEPCO”

1. Transmission Loss Evaluation
2. Distribution Loss Evaluation
 - GIS Mapping of 100% LT Network
 - HT Line Losses
 - Distribution Transformer Losses
 - LT Line Losses
 - Service Main Losses
3. Investment Plan Review and Loss Reduction Strategy

Note: The details of the above services are provided in Annex II (TOR section).

The Consultant shall act as a technical loss expert possessing in-depth knowledge of the distribution system and shall remain available until all queries and contractual obligations are resolved to the complete satisfaction of MEPCO and NEPRA. This Request for Proposals (RFP) is issued for the aforementioned services in accordance with the details provided in the Terms of Reference (TOR).

REQUEST FOR PROPOSALS

1. MEPCO invites the Technical and Financial Proposals for undertaking assignment/ project mentioned in TORs.
2. **RFP consists of the following documents:**
 - i. Letter of Invitation
 - ii. Information to Consultants including Data Sheet (**Annex-1**)
 - iii. Terms of Reference for Consultants (**Annex-2**)
 - iv. Qualification and Experience of Consultant Personnel (**Annex-3**)
 - v. Format for Technical Proposal with Appendices (**Annex-4**)
 - vi. Format for Financial Proposal (**Annex-5**)
 - vii. Standard Contract Agreement for Consulting Services (**Annex-6**)

II. PRE-BID MEETING

A Pre-bid meeting is scheduled to be held on **09.04.26** at **11:00** AM in the Office of Chief Engineer (Technical Services) MEPCO Multan as well as online meeting on zoom.

III. SUBMISSION OF PROPOSALS

The Technical Bids will be opened by the Committee at **11:30AM PST** on dated 30.04.26. The Technical proposal and financial proposal will **remain valid for 150-days from the day of opening**. Consultants shall submit their proposals electronically. The electronic bid shall be submitted on EPADS <https://eprocure.gov.pk>. The proposal shall be prepared on the basis of Terms of References provided in Annex-2. Financial Proposal is also to be submitted along with Technical Proposal on EPADS in the relevant Bid Section (as per the Single Stage Two Envelope Bidding Procedure).

IV. INTENTION TO SUBMIT PROPOSALS

You are requested to acknowledge receipt of this letter at the above-mentioned address and indicate whether or not you intend to submit the Proposals alone or in association with others.

V. REQUEST FOR ADDITIONAL INFORMATION

In the event you desire any explanation to RFP documentation, you may contact the office of the undersigned not later than a week before last submission date of the Proposals. MEPCO reserves the right to accept / reject any or all the proposals without assigning any reason and its decision shall be final and binding. MEPCO shall not be liable for any costs incurred by consultants in preparation or submission of proposals

Yours faithfully,

Director Procurement (Distrb.)
MEPCO H/Q Khanewal Rd. Multan

B. ANNEXURES (1 through 6)

- Annex-1:** Information to Consultants including Data Sheet
- Annex-2:** Terms of Reference for Consultants
- Annex-3:** Qualification and experience of Consultant Personnel
- Annex-4:** Format for Technical Proposal with Appendices
- Annex-5:** Format for Financial Proposal
- Annex-6:** Standard Contract Agreement for Consulting Services

Annex-1:
**Information to Consultants including Data
Sheet**

**CONSULTANCY SERVICES TO CARRY OUT TRANSMISSION AND
DISTRIBUTION (T&D) TECHNICAL LOSS STUDY OF MEPCO**

INFORMATION TO CONSULTANTS

1. SCOPE OF SERVICES

1.1 General Requirements

The Multan Electric Power Company (MEPCO) invites proposal to provide the following scope of services on Quality and Cost Basis (QCBS):

- i. The Firm shall employ internationally recognized engineering standards, validated methodologies, and industry-standard software tools (e.g., PSS/E, Power-Factory, Synergi Electric, or equivalent) preferably PSS/E and Synergi Electric Software.
- ii. All assumptions, data sources, adjustments, and limitations shall be clearly documented.
- iii. The Firm shall coordinate closely with MEPCO and relevant system entities, the Independent System and Market Operator (ISMO), the National Grid Company (NGC), and other concerned organizations, for data validation and reconciliation.
- iv. The study shall be completed and submitted in accordance with timelines prescribed, including presentation and defense before the NEPRA.

1.2 Transmission Loss Evaluation

1.3 Distribution Loss Evaluation

- GIS Mapping of 100% LT Network
- HT Line Loss
- Distribution Transformer Loss
- LT Line Loss
- Service Main Loss

1.4 Investment Plan Review and Loss Reduction Strategy

Note: The details of the above services are provided in Annex II (TOR section).

2. PROCEDURE FOR APPOINTMENT OF CONSULTANT

- The Consultant shall be selected through the Quality and Cost Based Selection (QCBS) method in accordance the provisions of this Request for Proposals (RFP).
- The Consultant must demonstrate adequate technical expertise, relevant international and/or local experience, financial capability, and availability of qualified professional personnel necessary to successfully execute the Services described in the Terms of Reference (TOR).
- The Consultant shall be duly registered with the Pakistan Engineering Council (PEC), where applicable under Pakistani law. In case of a foreign firm, it shall either obtain

PEC registration as required or associate with a PEC-registered local partner in accordance with applicable regulations.

- The foreign firm shall also be registered with the relevant competent authority in its country of origin and shall provide valid documentary evidence of such registration. The foreign firm shall also facilitate and fully cooperate with the Client in verifying the authenticity and validity of such registration with the concerned authority, if so required.
- The Consultant shall possess valid license certificates or authorized user agreements for PSS/E, Synergi Electric, ArcGIS, or equivalent industry-standard software tools required for the assignment and acceptable to MEPCO. Documentary proof of legitimate access and authorized usage shall be provided as part of the Technical Proposal. In case the Consultant holds an expired license, a valid license shall be provided prior to the issuance of the Letter of Intent (LOI).
In case of a Consortium / Joint Venture, all partners shall be jointly and severally liable for the execution of the Contract. A duly executed Joint Venture/Consortium Agreement clearly defining roles and responsibilities of each partner shall be submitted with the Technical Proposal. In case of Consortium/JV, consultant is required to provide original Consortium/JV agreement clearly specifying the **lead firm**, responsibilities and should have wording that all firms in Consortium/JV are equally and fully responsible.
- The Consultant shall propose a detailed methodology for undertaking the assignment, including work plan, timeline, staffing schedule, allocation of responsibilities, and quality assurance procedures, for review and approval by MEPCO.
- The Consultant shall be solely responsible for the proper, timely, and professional performance of the consulting services under the Contract.

3. INSTRUCTIONS TO BIDDERS

- i-** The procurement shall be conducted under the Single Stage – Two Envelope Procedure as per Rule 36(b) of the Public Procurement Rules, 2004.
- ii-** The Consultant must submit:
 - (a) Technical Proposal- through EPADS under the Technical Bid section.
 - (b) Financial Proposal- through EPADS under the Technical Bid section.
- iii-** The Technical Proposals shall be opened publicly at the time, date, and venue specified in the RFP, in the presence of bidders or their authorized representatives who choose to attend.
- iv-** The Financial Proposals of only those bidders who are declared technically qualified shall be opened publicly at a time and venue to be communicated subsequently. The Financial Proposals of technically disqualified bidders shall be returned unopened.
- v-** Proposals shall remain valid for a period of **150 days** from the date of submission. The validity period may be extended with the written consent of the bidders.
- vi-** The Technical Proposals shall be evaluated in accordance with the evaluation criteria provided in the RFP. The Financial Proposals shall be evaluated only for technically qualified bidders in accordance with PPRA Rules.
- vii-** Conditional, incomplete, or non-compliant proposals shall be rejected.

- viii-** All applicable taxes, duties, and levies under the prevailing laws of Pakistan shall be included in the Financial Proposal and borne by the Consultant.
- ix-** In case of a Consortium/ Joint Venture, all partners shall be jointly and severally liable for the execution of the contract. A duly signed Joint Venture Agreement shall be submitted with the Technical Proposal.
- x-** MEPCO reserves the right to reject any or all proposals in accordance with Rule 33 of PPRA Rules, 2004.
- xi-** Bidders may seek clarifications in writing or on EPADS within the specified period. Any addendum/clarifications issued by MEPCO shall form part of the RFP.
- xii-** The contract shall be governed by and interpreted in accordance with the laws of the Islamic Republic of Pakistan and applicable PPRA Rules.
- xiii-** All proposals and correspondence shall be in English. The Consultant's key staff must be proficient in written and spoken English.

4. DOCUMENTS / SAMPLES / CERTIFICATES TO BE SUBMITTED ALONG WITH THE BID.

- i. The Bidder shall furnish a Bid Security in the amount of **Pakistani Rupees Two Million Five Hundred Thousand (PKR 2,500,000) or 2%** of Bid Value whichever is higher in the form of Pay Order/Bank Draft/Bank Guarantee issued by a scheduled bank of Pakistan having a minimum “AA” long-term credit rating (or as applicable if specified in the special condition above) and acceptable to MEPCO. Bid Security shall be submitted originally (in form of hard copy) in an envelope clearly marked with the tender No. & Title before the E-bid submission deadline in the office of Director (Proc) Dist. MEPCO Khanewal Road, Multan. The Bid Security shall remain valid **for Three Hundred days (300) days after** the due date of submission of the bids.
- ii. Certificate that the services offered are in accordance with the tender specifications including all amendments to date.
- iii. List of any deviation or reservation from the bid specifications.
- iv. Copy of letter of current renewal of registration with WAPDA/DISCOs, if applicable
- v. Technical data and literature in English, highlighting the salient features of the quoted items/services.
- vi. Valid license certificates or authorized user agreements for PSS/E, Synergi Electric, ArcGIS, or equivalent industry-standard software tools required for the assignment and acceptable to MEPCO.
- vii. Certificate confirming that the bidder is not blacklisted by any government or semi-government organization.
- viii. Certificate confirming
- ix. that the bidder has no ongoing litigation that may affect the performance of the contract.
- x. Valid Active Taxpayer Certificate issued by the Federal/Provincial Tax Authorities.

5. EVALUATION OF PROPOSALS

The Technical Proposal will be evaluated on the basis of:

- I. Experience and expertise of the Firm / Consortium/Joint Venture;
- II. Quality and suitability of the approach/methodology including association arrangements within consortium members to demonstrate equitable and effective participation, and regional representation.

III. Qualifications, experience and extent of availability of key personnel (both technical and managerial) allocated for this assignment.

The following overall criteria will be applied to evaluate each Technical Proposal on the basis of factors elaborated in **Exhibit-I:**

Sr#	Description	Max. Score	Score Obtained
1	Firm's/Company's Strength (Age of firm will be determined from firm registration date with respective registration authority or with FBR). Evidence must be attached Existence of Company over or equal 10 years = 50 marks Existence of Company over or equal 5 years = 35 marks Existence of Company over or equal 3 years = 25 marks Less than 3 years = 0	50	
2	Financial Capabilities Audited account of the firm for last three years audited by any chartered accounts firm or other authorized agency to be attached – -Annual Turnover equal or above 100 million -50 marks - Annual Turnover above 50 million and less than 100Million – 25 marks -Annual Turnover less than 50Million. - 0 marks	50	
3	Firm's experience in terms of 1. Similar Nature of Project Executed previously in local/international Govt./Semi-Govt organizations. (30 Marks) (Reference documents should be attached with satisfactory completion performance certificate.) (15-Marks for each project) (Max 2 Projects) 2. Same Nature of Projects in DISCOs/K.Electric/NTDC (35 marks for each project) (Max 02 projects). Reference documents should be attached with satisfactory completion performance certificate.	100	
4	Firm's Human Resource (Expertise and Strength of Team Members)		
	4.1.1 Team Lead Education * For 18 years education in relevant field- 30 marks * For 16 years education in relevant field - 20 marks	30	
	4.1.2 Team Lead Experience * Number of years of Experience over or equal 10 years (with min. 5-years relevant experience) - 20 marks * Number of years of Experience less than 10 but greater or equal 05 years (relevant experience) - 10 marks Number of years of Experience less than 05 years - 0 marks	20	
	4.2.1 Qualification of each Technical member (Maximum 5 members, marks will be awarded for Each Member) *For 16 years education in relevant field - 10 marks	50	
	4.2.2 Experience of each Technical member (Maximum 5 members, marks will be awarded for Each Member) * Number of years of Experience over or equal 07 years (with min. 3-years relevant experience)- 10 marks * Number of years of Experience less than 07 but greater or equal to 03 years (relevant experience) - 5 marks Number of years of Experience less than 03 years – 0 marks	50	

Sr. #	Description	Max. Score	Score Obtained
5	<p>Consultant should have prior experience of consultancy services of same/similar nature at international level. (Reference documents must be attached with satisfactory completion/ performance certificate).</p> <p>5-No. Project of same nature details marks – 250 4-No. Project of same nature details marks – 200 3-No. Project of same nature details marks – 150 2-No. Project of same nature details marks – 100 1-No. Project of same nature details marks – 50 (Max. 5-projects)</p> <p>5-No. Project of similar nature details marks – 150 4-No. Project of similar nature details marks – 120 3-No. Project of similar nature details marks – 90 2-No. Project of similar nature details marks – 60 1-No. Project of similar nature details marks – 30 (Max. 5-projects)</p> <p>Note: Projects mentioned at Sr No. 3 will not repeat.</p>	250	
6	Adequacy of proposed work plan and methodology in response to TOR at <i>Annexure-2</i>	100	
Total		700	

Note: -For Technical Qualification Minimum Marks = 490 Marks

MEPCO shall first examine the Consultant’s Technical Proposal in respect of their understanding the requirements of the consultancy services in accordance with TOR. Particular attention shall be given to their approach, methodology of work and level and extent of their proposed personnel inputs and equipment/T&P. MEPCO shall critically look at their organizational arrangements to ensure that the assignment will be carried out in a smooth and orderly manner.

- IV. The qualifications and experience of the proposed personnel shall be of major concern to MEPCO. Accordingly, MEPCO’s decision to accept or reject personnel shall be final and in place of rejected personnel, the consultant shall be required to propose alternative personnel acceptable to MEPCO.
- V. On evaluation of technical proposal, the MEPCO shall notify the results of top-ranking qualifying firms by letter/EPADS and shall inform the date of financial proposal opening.
- VI. From the time the bids are opened to the time the contract is awarded, if any firm/JV/ consortium wishes to contact the Client on any matter related to its proposal, it should do so in writing at the address indicated in the Letter of Invitation. **Any effort by the firm to influence the Client in the proposals evaluation, proposal comparison or**

contract award decisions may result in the rejection of the firm/JV/ consortium consultant's proposal.

- VII. Evaluators of Technical Proposals shall have no access to the Financial Proposals until the technical evaluation, is concluded.
- VIII. The evaluation committee, appointed by the Client as whole, and each of its members individually, shall evaluate the proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria, sub-criteria (not more than three per criteria), and point system specified above. Each responsive proposal will be given a technical score. A proposal shall be rejected at this stage if it does not respond to important aspects of the TORs or it fails to achieve the minimum technical score of 70%.

6. PUBLIC OPENING AND EVALUATION OF FINANCIAL PROPOSALS:

Evaluation of Technical Proposals

The Technical Proposal will be evaluated by a Technical Evaluation Committee using the criteria outlined below. While evaluating competing proposals, MEPCO may consider:

- The written technical information submitted by the bidder,
- Information obtained during presentations, and
- Any other relevant information obtained from other sources.

The criteria are presented by major category to help bidders understand which areas require emphasis in their proposals. Bidders should note that these criteria serve as the standard for evaluating all technical information and highlight the key matters to address in the proposal.

A bidder must obtain at least **70% of the total technical marks** to be considered technically responsive and qualify for the opening of the Financial Proposal.

Evaluation of Financial Proposals

The Financial proposals of the technically qualifying bidders shall be opened in the presence of the representative of the firms, who shall be invited for the occasion and who care to attend. The MEPCO will inform the date, time and address for opening of the financial proposal. The total cost and major components of each proposal shall be publicly announced to the attending representatives of the firms.

The evaluation committee shall determine whether the financial proposals are complete and without computational errors.

6.1 Ranking of Proposal:

The final ranking of proposals will be determined by applying weights of 70% for Technical Score and 30% for Financial Score. The combined total score will then be computed for each bidder as follows:

Formula:

Quoted Price in Financial Bid = A
Technical Score (Obtained) = B
Total Technical Score = C
Minimum Quoted Price = D
Financial Proposal Factor w.r.t 30% Weightage = 0.30
Technical Proposal Factor w.r.t 70% Weightage = 0.70
Equation: $\left[\left(0.3 \times \frac{D}{A} \right) + \left(0.7 \times \frac{B}{C} \right) \right] \times 100$

The bidder with the highest combined weighted score will be ranked first. Subsequent rankings will follow in descending order of the combined score. In other words, the higher the total weighted score, the better the ranking.

6.2 Rights Reserved

MEPCO reserves the right to reject any or all the proposals at any stage without assigning any reason.

6.3 Other conditions

- a. The firm/Consortium/J.V should have 60% of key staff on its permanent full time role nominated to work on the assignment (attach salary slips).
- b. All the key and core staff of the Consultant should be nominated by name in the proposal. During evaluation no marks will be awarded for each TBN (To be nominated) position of key personnel.
- c. A person proposed against any key staff position who is already working on other on-going project at the time of technical evaluation will be rated as zero.

6.4 Conflict of Interest

Consultant shall not be recruited for any assignment that would be in conflict with their prior or current obligations to other clients, or that may place them in a position of not being able to carry out the assignment in the best interest of the Client. Without limitation on the generality of the foregoing, consultant, and any of their associates shall be considered to have a conflict of interest and shall not be recruited under any of the circumstances set forth below:

- a. If a consultant combines the function of consulting with those of contracting and / or supply of equipment; or
- b. If a consultant is associated with or affiliated to a contractor or manufacturer, or
- c. If a Consultant is owned by a Contractor or a manufacturing firm with departments or design offices offering services as Consultant, the Consultant should include relevant information on such relationship along with a statement in the Technical Proposal cover letter to the effect that the Consultant will limit its role to that of a Consultant and disqualify if self and associates from work, in any other capacity or any future project within the next five years, that may emerge from this assignment (including bidding or

- any part of the future project. The contract with the Consultant selected to undertake this assignment will contain an appropriate provision to such effect; or
- d. If there is a conflict among consulting assignments, the consultant (including its personnel and sub-consultant) and any subsidiaries or entities controlled by such consultant shall not be recruited for the relevant assignment. The duties of the consultant depend on the circumstances of each case. While continuity of the consulting services may be appropriate in particular situations if no conflict exist, a consultant cannot be recruited to carry out assignment that, by its nature, will result in conflict with another assignment of such consultant.

DATA SHEET

SR#	DESCRIPTION
1	<p>Name of the Procuring Agency: <u>MEPCO</u></p> <p>Method of selection: QCBS (Quality and cost Based Selection) in accordance with PPRA Rule 2004 and PPRA Procurement of Consultancy Services Regulations 2010.</p> <p>Technical Weight age = 70%</p> <p>Financial Weight age = 30%</p>
2	<p>Name of the assignment is: Evaluation and Assessment of Transmission & Distribution (T&D) Technical Losses of MEPCO.</p> <p>Financial Proposal is also to be submitted along with Technical Proposal on EPADS in the relevant Bid Section (as per the Single Stage Two Envelope Bidding Procedure)</p> <p>Bid security shall be submitted originally (in form of hard copy) in an envelope clearly marked with the tender No. & Title before the E-bid submission deadline in the office of Director (Proc) Dist. MEPCO Khanewal Road, Multan.</p>
3	<p>The Client's representative is: Director Procurement (Distb.) MEPCO</p> <p>Address: O/O Director Procurement MEPCO HQ Khanewal Road Multan</p> <p>Telephone 061-9220279 email: dpdmepco@gmail.com.</p>
4	<p>The Client will provide the following inputs and facilities:</p> <p><u>Only necessary documents for execution of assignments available in MEPCO will be provided to the consultant.</u></p>
5	<p>Proposals must remain valid for 150 days after the submission date. The Bid Security shall remain valid for Three Hundred days (300) days after the due date of submission of the bids.</p>
6	<p>Clarification may be requested not later than 07 days before the submission date on EPADS as well as in written form in the office of Director Procurement MEPCO Head Office Multan.</p>
7	<p>The Language of the Proposal as well as all the related correspondence exchanged by the consultants and the client shall be English.</p>
8	<p>The interested Consultants may associate with other Consultants before submission of technical proposal. Once the technical proposal is submitted, no association / consortium/J.V shall be allowed. <u>In case of Consortium/JV, consultant is required to provide original Consortium/JV agreement clearly specifying the responsibilities, lead firm, profit sharing and should have wording that all firms in Consortium/JV are equally and fully responsible.</u></p>
9	<p>The format of the Technical Proposal to be submitted is: FTP (full technical proposal).</p>
10	<p>Training is a specific component of this assignment: Yes</p>
11	<p>The payment of taxes, fees and other imposition as may be levied under the applicable law in respect of consultants, sub-consultants and their personnel shall not be the responsibility of the Client.</p>
12	<p>Consultant to state local cost in the national currency: Yes.</p>
13.	<p>The Consultant must submit:</p> <p>(a) Technical Proposal- through EPADS under the <i>Technical Bid</i> section.</p> <p>(b) Financial Proposal- through EPADS under the <i>Technical Bid</i> section.</p>
14	<p>A Pre-Bid Meeting will be held on 09.04.26 at 11:00am in the Office of Chief</p>

	Engineer (Technical Services) MEPCO Multan.																		
15	<p>Consultants shall submit their proposals electronically. <i>The electronic bid shall be submitted on EPADS. https://eprocure.gov.pk</i> Proposals must be submitted not later than the following date and time: 30.04.2026, 11:00AM PST. Technical Bids will be opened at 11:30AM PST on same date.</p>																		
16	Defects Liability Period: The period during which consultant's responsibility to rectify any error or amendment in the data provided to MEPCO as desired by MEPCO or NEPRA will be 06-Months after the end of the project.																		
17	Period of Contract: 09-Months from date of Signing of Contract.																		
18	The expected date of starting of consultancy service is based on the finalization of MOU/Contract between Consultant and the Client.																		
19	Liquidated damages shall be 0.5% of the total contract price per week or part thereof, the maximum number of liquidated damages shall be Ten percent (10%) of the contract price.																		
20	<p>Completion Schedule as under:</p> <table border="1"> <thead> <tr> <th><i>Sr.No.</i></th> <th><i>Activity</i></th> <th><i>Duration</i></th> </tr> </thead> <tbody> <tr> <td><i>1</i></td> <td><i>Initial Study Report of Transmission & Distribution (T&D) Network Loss Evaluation for 50% network (as per total scope) using PSS/E for Transmission Losses and SynerGEE Electric software based on GIS Model for Distribution Losses.</i></td> <td><i>04-Months</i></td> </tr> <tr> <td><i>2</i></td> <td><i>Approval of initial study by MEPCO</i></td> <td><i>01-Month</i></td> </tr> <tr> <td><i>3</i></td> <td><i>Submission of final report (after addressing comments from MEPCO)</i></td> <td><i>03-Months</i></td> </tr> <tr> <td><i>4</i></td> <td><i>Approval of loss evaluation study by MEPCO / NEPRA</i></td> <td><i>01-Month</i></td> </tr> <tr> <td></td> <td>Total duration</td> <td>09-Months</td> </tr> </tbody> </table>	<i>Sr.No.</i>	<i>Activity</i>	<i>Duration</i>	<i>1</i>	<i>Initial Study Report of Transmission & Distribution (T&D) Network Loss Evaluation for 50% network (as per total scope) using PSS/E for Transmission Losses and SynerGEE Electric software based on GIS Model for Distribution Losses.</i>	<i>04-Months</i>	<i>2</i>	<i>Approval of initial study by MEPCO</i>	<i>01-Month</i>	<i>3</i>	<i>Submission of final report (after addressing comments from MEPCO)</i>	<i>03-Months</i>	<i>4</i>	<i>Approval of loss evaluation study by MEPCO / NEPRA</i>	<i>01-Month</i>		Total duration	09-Months
	<i>Sr.No.</i>	<i>Activity</i>	<i>Duration</i>																
	<i>1</i>	<i>Initial Study Report of Transmission & Distribution (T&D) Network Loss Evaluation for 50% network (as per total scope) using PSS/E for Transmission Losses and SynerGEE Electric software based on GIS Model for Distribution Losses.</i>	<i>04-Months</i>																
	<i>2</i>	<i>Approval of initial study by MEPCO</i>	<i>01-Month</i>																
	<i>3</i>	<i>Submission of final report (after addressing comments from MEPCO)</i>	<i>03-Months</i>																
	<i>4</i>	<i>Approval of loss evaluation study by MEPCO / NEPRA</i>	<i>01-Month</i>																
	Total duration	09-Months																	
21	The 3rd Party Consultant firm will be required to present its study report before NEPRA for approval.																		
22	A list of debarred firms and individuals is available at the PPRA website: https://ppra.org.pk/																		

Annex-2:

Terms of Reference for Consultant

TERMS OF REFERENCE

Engagement of an Independent Third-Party International Consultant/Consortium Firm For Evaluation and Assessment of Transmission & Distribution (T&D) Technical Losses of MEPCO.

1. Background and Purpose.

- i. Accurate determination of technical losses across all voltage levels is fundamental to transparent energy accounting, efficient power system operation, effective loss-reduction planning, prudent investment decision making, and regulatory compliance under the NEPRA framework. Reliable technical loss estimates constitute the basis for the determination of allowable losses, tariff setting, distribution margins, and performance benchmarking of MEPCO.
- ii. In this context, MEPCO is required to undertake a comprehensive evaluation and assessment of their Transmission and Distribution (T&D) technical losses using data of **Base Year FY2024 25**. The assessment shall be carried out through the engagement of an Independent Third-Party International Consultant/Consortium Firm (the "Firm") to ensure objectivity, credibility, and technical rigor.
- iii. These Terms of Reference (ToRs) establish the minimum scope of work, methodological framework, data and modelling requirements, validation protocols, and reporting obligations for the assignment. The objective is to ensure consistency, accuracy, and regulatory acceptability of the T&D loss assessment studies across MEPCO, in alignment with international best engineering practices and NEPRA's regulatory requirements.

2. Objectives: The key objectives of the assignment are to:

- i. Determine technical losses at 132 kV, 66 kV, 33 kV, 11 kV, and 400/230 V levels using simulation-based load flow studies and validated field data.
- ii. Segregate technical and non-technical losses for accurate accountability.
- iii. Assess the impact of Distributed Energy Resources (DERs)/Solar PV Net Metering on loss estimation and energy accounting.
- iv. Develop validated network models, assumptions and benchmarks including benchmarking against peer and regional utilities as well as relevant international standards and best practices
- v. Recommend least-cost, technically feasible loss reduction measures, with quantified impacts over the investment horizon
- vi. Provide analytical outputs and documentation suitable for regulatory review and approval by NEPRA.

3. Scope of Work

3.1 General Requirements

- i. The Firm shall employ internationally recognized engineering standards, validated methodologies, and industry-standard software tools (eg, PSS®E, Power-Factory, Synergi Electric, or equivalent).
- ii. All assumptions, data sources, adjustments, and limitations shall be clearly documented.
- iii. The Firm shall coordinate closely with MEPCO and relevant system entities, the Independent System and Market Operator (ISMO), the National Grid Company (NGC), and other concerned organizations, for data validation and reconciliation.
- iv. The study shall be completed and submitted in accordance with timelines prescribed, including presentation and defense before the NEPRA.

4. Transmission Loss Evaluation

4.1 Data Provision by MEPCO: MEPCO shall provide, inter alia:

- i. Load and Energy Data:
 - Hourly Load Profile of selected feeders.
 - Month-wise Peak and Off-Peak load data
 - Energy import/export data at all Common Delivery Points (CDPs)
- ii. System Operational Snapshots: Required System snapshots (Peak & Off-Peak for each month) obtained from RCCs covering:
 - Line flows, transformer loadings, bus voltages, loads, etc.
 - Generator dispatch connected at ≤ 132 kV,
 - Capacitor status for peak/off peak conditions and ambient temperatures data
 - Recorded Transmission Losses
 - Any other essential operational data and record
- iii. Network and Asset Information:
 - Network topology, single-line diagram, GIS grid maps,
 - transformer nameplate data, meter accuracy classes,
 - list of CDPs,
 - Any other essential data as required
- iv. Reference Network Model:
 - Reference PSS&E or equivalent base case reflecting the actual network topology of the MEPCO's 132 kV transmission network and up to 11 kV buses of 132/11 KV grid substations for the relevant study year.
 - The base case shall incorporate and reflect all network changes occurring during the study year.

Note: The aforementioned transmission loss evaluation data shall be provided by the O/O DG (MIRAD). Furthermore, the scrutiny, authentication, and vetting of the transmission losses shall be ensured by O/O DG (MIRAD) on behalf of MEPCO.

4.2 Responsibilities of the Firm: The Firm shall

- i. Validate and reconcile all data and resolve inconsistencies.
- ii. Develop matched power-flow cases (Peak & Off-Peak for each month) for the 132 kV, 66 kV and 33 kV transmission network, including transformers up to 11 kV bus-bars.
- iii. Ensure accurate modeling of all system conditions in the load flow study cases including but not limited to:
 - Circuit status, transmission line flows, transformer parameters, taps positions, etc.
 - Voltage profiles, power factor, capacitor configurations,
 - Generator dispatch and load representation.
- iv. Determine monthly and annual transmission losses
 - MW losses from matched cases (Peak and Off peak) for each month,
 - Annual average MW loss (mean and standard deviation) based on the 24 values,
 - Annual Average Energy Loss (GWh) using
 - Regression-based best-fit curve ($R^2 \geq 0.90$), or
 - An equivalent superior methodology.
- v. Compare simulated losses with recorded losses and analyze variances.
- vi. Assess the impact of net-metering injections at grid stations and CDPs.
- vii. Recommend technically and economically viable loss reduction measures,

5. Distribution Loss Evaluation

5.1 Data Provision by MEPCO: MEPCO shall provide

- i. Network Models and GIS Data:
 - GIS-mapped HT network models.
 - Synergi Electric (mdb) files along with latest supported data warehouse, consistent with the study year
- ii. Feeder Load and Performance Data
 - Actual load factors, and power factor of every feeder for study year
 - Feeder-wise loading data, including maximum and minimum current (Amps)
 - Feeder categorization (Urban/Rural) for field validation.
- iii. Distribution Transformer (DT) Data
 - DT database with capacity, type, applicable standards, tagging/identification, and feeder wise allocation.
 - Any other essential data, files, or operational information required by the Firm for accurate modelling, field surveys, validation, and reconciliation of study results.

Note: The aforementioned Distribution loss evaluation data shall be provided by the O/O Chief Strategic Planner. Furthermore, the scrutiny, authentication, and vetting of the Distribution losses shall be ensured by O/O Chief Strategic Planner on behalf of MEPCO.

5.2 Responsibilities of the Firm: The Firm shall conduct load flow analysis for calculation of distribution loss assessment covering HT lines, DTs, LT lines, and service cables by using the Synergi Electric software & GIS mapped models, while considering below but not limited to following:

- i. GIS Mapping of 100% LT Network.
- ii. HT Network Losses
 - Validate and reconcile all GIS based data and resolve inconsistencies
 - Use updated GIS mapped models of all 11 kV feeders showing main branches or T-offs with node-to-node connectivity
 - Models shall include load currents peak hours for summer and winter for the base years as per recorded data at grids.
 - Use total length of the feeders main, branches and inter-lengths between transformer with size and type of conductor and impedance per km.
 - Use actual load factors of the feeders for the base years shall be considered along with actual load factors of the distribution transformers (where metering available).
 - For benchmarking purposes, a few feeders' representative of the company-wide feeder mix shall be selected, preferably those with a complete metering tree available. These feeders will be used to ascertain the actual load factors and associated losses, compared against calculated values.
 - The Firm shall review load loss factor (LLF) empirical formula and same shall be verified and validated with the latest research as well as field data back with any mathematical model. The validated LLF shall be applied on sample feeders along with comments, analysis and results submitted as part of study for review.
 - Technical losses will be assessed and determined using LLF methodology and or any other better alternative option.
- iii. Distribution Transformer Losses
 - For the purpose of DT loss assessment, a separate assessment model shall be adopted to independently determine Iron (No-Load) Losses and Copper (Load) loss
 - The Distribution Company shall establish and maintain a comprehensive and authenticated Distribution Transformer Database, incorporating, inter alia, the following classifications.
 - Transformer capacity ratings and tagging
 - Type/category (Independent, General Duty) and tagging,
 - Feeder-wise allocation and tagging, and
 - Any other technical parameters
 - Furthermore, the database shall distinctly categorize all distribution transformers into the following two groups for analytical and reporting purposes
 - Transformers procured and installed in accordance with valid and approved Standards and Specification, and
 - Transformers manufactured under earlier Standards and Specifications
 - No-Load (Iron) losses based on applicable standard loss values corresponding to the above groups shall be assigned to each transformer. and off-loading factors/adjustment factor (planned and unplanned) shall be applied to reflect the actual off-loading status.
 - Load (Copper) losses first priority shall be accorded to the actual recorded peak load obtained using AMI/APMS/Scanning meters data where available for the respective transformer, otherwise, the nameplate peak load as per applicable specifications shall

- be utilized, subject to reasonable downward adjustment based on justified and prudent engineering estimates.
- Use of measured or sales-based load factors for determining the loading, arbitrary assumptions are not permitted. The actual load factor recorded at the transformer shall be used for loss calculations. Where such data is not available, DT loading shall be evaluated in correlation with the corresponding feeder loading data and installed capacity of D.Ts and corresponding Coincidence Factor (CF), Load allocation must be carried out based on the actual installed capacity and connected load of each DT
 - The annual energy loss shall be computed by incorporation of Coincidence Factor (CF) determined on the basis of justified and documented assumptions, through its integration within validated Loss Factor formula
- iv. LT Network Losses
- Use 100% GIS-based LT network mapping for load-flow analysis by utilizing Synergi Electric software or any equivalent standard analytical tool.
 - Validate and reconcile all GIS based data and resolve inconsistencies
 - The actual transformer-wise Load Factor (LF) shall be applied, through an appropriate Loss Factor, for determining the Annual Energy Loss (AEL) attributable to the LT network associated with the respective distribution transformer. Or,
 - Feeder-wise load factors along with justified and appropriate CFs will be applied for determining the Annual Energy Loss (AEL) attributable to the LT network associated with the respective distribution transformer.
- v. Service Cable Losses:
- For the purpose of evaluating losses in service cables, these cables shall either be incorporated into the LT GIS network or, alternatively, a dedicated analytical model shall be developed to represent the actual electrical parameters of various categories of service cables, based on the specific nature of the connected load.
 - The length of the service cable shall be determined on a prudent and technically justified basis, reflecting the representative average service-lengths. Segregation may be carried out for urban and rural areas, as well as for domestic, commercial, industrial, and agricultural consumers, to ensure accurate representation of the existing network topology.
 - The applicable Load Factor (LF) of the respective distribution transformer shall be used.
 - For loss calculations; where transformer specific LF is not available, the corresponding feeder LF shall be applied For determining the AEL, an appropriate LF shall be applied, with proper technical justification, in deriving the LLF for service-cable loss evaluation
- 5.3 Consolidated Distribution Loss Assessment Losses shall be computed and reported at:**
- i. Company, Circle, Division, Sub-Division, and Feeder levels.
 - ii. Components
 - HT line losses
 - DT losses (category and capacity-wise)
 - LT line and service cable losses
 - Impact of DER/Net Metering on losses

- Total Technical Distribution Losses (HT Line + Distribution Transformer + LT Line+ Service Cable)
- iii. Reconciliation of the calculated losses with CP-22 and CP-22(T) losses for corresponding period to segregate administrative losses.
 - iv. The feeder wise losses shall be reconciled with the CP 22 losses. Any material variance identified during this comparison shall be highlighted and substantiated with appropriate technical justification and supporting evidence.
 - v. For the purpose of validating LT network loss calculations against the CP 22 (1) losses, a complete and verifiable database shall be maintained. A representative sample analysis shall also be furnished to demonstrate the correlation and justification of the simulated LT network results with the recorded performance data.

6. Investment Plan Review and Loss Reduction Strategy

- i. Provide recommendation and identify feeders and areas requiring rehabilitation, compensation, or reconfiguration is required
- ii. Review and validate MEPCO investment plans for technical soundness and the anticipated five-year loss reduction trajectory, and to establish a validated baseline for future system
- iii. and loss-reduction planning Quantify expected loss-reduction trajectory over the next five years on a least-cost basis

7. Deliverables: The Firm shall submit:

- i. Validated transmission and distribution simulation models.
- ii. Detailed technical reports with
 - Methodology
 - Assumptions
 - Results
 - Benchmarking
 - Variance analysis
 - Any other essential aspects
- iii. Loss-reduction recommendations with cost-benefit analysis.
- iv. Regulatory-ready documentation and presentations.
- v. Support for presentation, clarification, and defense before NEPRA and any consequential revisions thereof until approval.

8. Location of the Project:

Fifteen Districts under the jurisdiction of Multan Electric Power Company (MEPCO) viz. Multan, Khanewal, Vehari, Lodhran, Sahiwal, Pakpattan, DG Khan, Rajanpur, Taunsa Sharif, Layyah, Kot Addu, Muzafar Garh, Bahawal Pur, Bahwal Nagar and Rahim Yar Khan.

9. Focused Fields:

To carry out load flow studies of STG Network, 11kV Feeders, LT Network, Distribution Transformers and Service mains.

10. Overview of MEPCO's Distribution System

10.1. Detail of Offices:

Formation	Circles	Divisions	Sub Divisions
Operation	9	41	190
Construction	1	9	18
GSO	2	8	23
GSC	1	4	8
M&T	2	9	-
TOTAL	15	71	239

10.2. TRANSMISSION NETWORK AS ON 30.06.2025.

1. Grid Stations		Multan	Sahiwal	Total
a)	132KV Grid Stations	76	52	128
b)	66KV Grid Stations	4	2	6
c)	132KV Consumer Grid Stations	12	0	12
d)	220KV PARCO Consumer Grid	1	0	1
Total		93	54	147
2. Power Transformers				
a)	132/66KV	4	1	5
b)	132/11.5KV	192	128	320
c)	66/11.5KV	7	3	10
Total		203	132	335
3. PTF MVA Capacity				
a)	132/66KV	147.20	40	187.20
b)	132/11.5KV	5403.30	3762	9165.30
c)	66/11.5KV	90.30	28.5	118.80
Total		5640.80	3830.50	9471.30
4. Length of Transmission lines (KM)				
a)	132KV Transmission line	2586.56	1637.09	4223.65
b)	66KV Transmission line	591.00	44.00	635
Total		3177.56	1681.09	4858.65
5. No. of Transmission lines				
a)	132KV Transmission line	157	85	242
b)	66KV Transmission line	4	1	5
Total		161	86	247
6. No. Of CDP Points		56	38	94

10.3. DISTRIBUTION NETWORK AS ON 30.06.2025

Following is the detail of Distribution Network of MEPCO:

- No. of 11 kV Feeders = **1826 No.**
- Total No of Transformers = (Distb. + Indpndt) = (112,310+133,389= **245699 No.**)
- Total Installed Capacity of Distribution Transformers = **14295.06 MVA**
- Length of 11 kV (HT) Line = **87535.09 km**
- Length of 0.415 kV (LT) Line = **50747.57 km**
- HT/LT Ratio = **1.725**

10.4. Category wise feeders of MEPCO

Sr. No.	Circle Name	Category of Feeders					Total
		Urban	Rural	Mix	Ind	Sensitive Area	
1	Multan	122	81	17	131	1	352
2	DG Khan	33	74	11	26	11	155
3	Vehari	28	104	0	11	1	144
4	Bahawal Pur	65	139	15	38	6	263
5	Sahiwal	45	147	1	45	0	238
6	RY Khan	46	113	1	34	0	194
7	Muzafar Garh	39	104	4	56	0	203
8	Bahawal Nagar	30	82	6	12	1	131
9	Khanewal	26	87	8	25	0	146
Total		434	931	63	378	20	1826

Note: -

In case of any increase in data due to network extension and rehabilitation, the Consultant firm will be bound to carry out the loss evaluation study on same offered total rate.

11. TASK DESCRIPTION AND EXPECTED OUTPUT:

The Consultant shall conduct a comprehensive evaluation/study of the Technical Losses of the Transmission and Distribution System of MEPCO, including but not limited to:

- 132 kV and 66 kV transmission lines & Power transformers
- 11 kV feeders
- Distribution transformers
- Low Tension (LT) lines
- Service mains

The study shall be carried out in accordance with the Terms of Reference (TOR) and regulatory requirements of MEPCO and NEPRA.

11.1. Monthly Progress Reports

The Consultant shall submit detailed monthly progress reports outlining activities performed, data collected, analysis conducted, issues encountered, and planned activities for the following month.

11.2. Deliverables

All deliverables as specified in the TOR shall be submitted within the agreed timelines.

11.3. Draft Study Report

The Consultant shall submit Draft Study Reports covering all components of the project for review and comments by MEPCO.

11.4. Final Study Report

The Final Study Report shall be submitted after incorporation of comments received from MEPCO.

11.5. GIS Mapping

The Consultant shall map and analyze 100% of the LT Network of MEPCO across all categories.

11.6. Data Submission Requirements

The Consultant shall submit all study data and models in compatible digital formats including 11kV mdbs., warehouse, LT Data Entry access file (Field_Data and GPS_Points), GPS way Points in UTM (Text file, GDBs), KMLs, survey sheets (pdf) and Synergi electric mdbs. of LT Network. All submitted data shall be fully functional, editable, and compatible with MEPCO's existing systems.

12. REPORTING REQUIREMENT FOR TRANSMISSION LOSS:

- 12.1 The report will be based on the study of 132KV, 66KV Transmission network.
- 12.2 Monthly progress report & all Deliverable and studies of the project.
- 12.3 Draft study report and final study report be submitted after addressing the comments from MEPCO.

NOTE:

The Consultant shall, at the completion of the project, provide all reporting formats, load flow models, loss calculation sheets, and data submission templates related to the 132 kV and 66 kV transmission network. All such deliverables shall be fully compatible with MEPCO's existing systems and regulatory requirements. The formats and templates shall be finalized in consultation with MEPCO at the time of contract execution.

13. REPORTING REQUIREMENT FOR DISTRIBUTION LOSS:

13.1 First Four-Months Initial Study & Submission

It has been proposed that the consultant will submit an initial study report comprising upon 50% of the network to MEPCO within first Four Months of the study. This report will be based on the study of HT Line, Distribution Transformers, L.T Network and service main of MEPCO.

NOTE:

The Consultant shall, at the completion of the project, provide all GIS data of the MEPCO Distribution Network (HT/LT), including Synergi Electric models (CSV/MDBs), Warehouse, Arc Geo Database (.gdb) files, Data Entry Access databases (MDBs), GPS way points in UTM (.txt, .gdb), KML files, maps (jpeg, pdf) and all other distribution reporting formats. All such deliverables shall be fully compatible with MEPCO's existing systems and

requirements. The data formats shall be finalized at the commencement of the contract in coordination with MEPCO.

14. MODE OF PAYMENT

<i>Activity</i>	<i>% Payment</i>
1: Mobilization Advance against Bank Guarantee	10%
2: Upon Submission of initial study report	10%
3: Acceptance / Go-ahead by MEPCO on initial Study report (after addressing comments from MEPCO)	30%
4: Upon submission of the Final Report and, if required, submission of the revised Final Report after duly addressing MEPCO's comments.	30%
5: Upon approval of loss evaluation study by NEPRA	10%
6: Upon completion of Six-months defect liability period (with effect from issuance of completion certificate by MEPCO)	10%
Total	100%

15. FOCAL PERSON ON BEHALF OF THE CLIENT

The following Steering Committee of MEPCO shall act as focal person for the client:

Chief Engineer / CSD, MEPCO	Convener
DG (MIRAD)/Chief Strategy Officer, MEPCO	Member
Chief Strategic Planner/C.E (T.S), MEPCO	Member
Dy. Manager CA (CP&C), MEPCO	Member

16. PLACE / LOCATION OF PERFORMANCE OF SERVICES:

The services shall be performed at the Consultant's offices, MEPCO offices, and various sites of 132/66 kV MEPCO Grid Stations, as well as different sites of 11 kV feeders, LT lines, and service mains within the jurisdiction of MEPCO.

MEPCO shall not provide any office accommodation, computers or related accessories, official vehicles, or TA/DA to the Consultant's staff.

17. KEY PERSONNELS

Position (for load flow studies)
Principal System Study Engineer (Elect. / Team Leader)
Support System Study Engineer (Elect.)
Junior Engineer (Elect.) / SynerGEE Electric Software expert
Position (For Physical Assessment /study)
Principal Engineer (Elect.)
Support Engineer (Elect.)
Junior Engineer (Elect.)

18. INFORMATION TO BE PROVIDED BY THE CLIENT FOR TRANSMISSION & DISTRIBUTION LOSS ANALYSIS:

MEPCO will assist the Consultant by providing all necessary and relevant information required for carrying out the Transmission & Distribution Loss Analysis as given above.

19. DEFECT LIABILITY PERIOD:

The consultant has to provide assistance to MEPCO regarding any error in the collected data or any kind of observations made by NEPRA or MEPCO on the submitted report found during defect liability period which is the period of **06-Months** after the issuance of completion certificate by MEPCO.

20. CONTRACT FOR ENGINEERING CONSULTANCY SERVICES

The contract for Engineering Consultancy Services will be based on Pakistan Engineering Council's "Standard form of Contract for Engineering Consultancy Services (for Large Projects)" for Lump sum Assignments. However, necessary special condition included in the contract according to MEPCO's financial and legal matters.

21. FINANCING:

The consultancy services shall be financed through MEPCO's own budgetary resources.

22. TRAINING:

The Consultant shall provide hands-on training to **five (05)** MEPCO Engineers on T&D technical loss evaluation through PSS/E, Synergi Electric, ArcGIS, and related methodologies.

Annex-3:
Qualification and Experience of
Consultant Personnel

Annex-3

**QUALIFICATION AND EXPERIENCE OF CONSULTANT
PERSONNEL**

Consultant will assign adequately qualified key personnel to carry out the implementation of the services as mentioned in TOR. In particular, the personnel should possess the qualification and experience as indicated in the following:

1. Principle System Study Engineer / Team Leader:

He should have at least a Bachelor Degree in Electrical Engineering from a recognized and accredited university. In case of a Joint Venture (JV) that includes a local partner, the degree of the local partner's personnel shall be from a university recognized by the Higher Education Commission (HEC) of Pakistan. Master degree holder will be awarded additional marks as mentioned in evaluation criteria. He should have specific experience of working in senior Techno-managerial positions on similar projects. The incumbent should have minimum experience of 10 years with at least 05 years in relevant field. He should be able to lead the team of consultants and assist MEPCO in timely implementation of the project with a quality output.

2. Technical Member: -

- i. Load flow Analysis
- ii. Physical study

He should have at least a Bachelor's Degree in Electrical Engineering from a recognized and accredited university. In case of a Joint Venture (JV) that includes a local partner, the degree of the local partner's personnel shall be from a university recognized by the Higher Education Commission (HEC) of Pakistan. Each Technical Member shall have a minimum of seven (7) years of professional experience, including at least three (3) years in the relevant field.

Annex-4:
Format for Technical Proposal with
Appendices

C. Technical Proposal - Standard Forms

[Comments in brackets [] provide guidance to the Consultants for the preparation of their Technical Proposals; they should not appear on the Technical Proposals to be submitted.]

Refer to Reference Paragraph 3.4 of the Data Sheet for format of Technical Proposal to be submitted, and paragraph 3.4 of Section 2 of the RFP for Standard Forms required and number of pages recommended.

Form TECH-1: Technical Proposal Submission Form

Form TECH-2: Consultant's Organization and Experience

A - Consultant's Organization

B - Consultant's Experience

Form TECH-3: Comments and Suggestions on the Terms of Reference and on Counterpart Staff and Facilities to be Provided by the Client

A - On the Terms of Reference

B - On Counterpart Staff and Facilities

Form TECH-4 Description of Approach, Methodology and Work Plan for Performing the Assignment

Form TECH-5: Team Composition and Task Assignments

Form TECH-6: Curriculum Vitae (CV) for Proposed Professional Staff

Form TECH-7: Staffing Schedule

Form TECH-8: Work Schedule

Form TECH-1: Technical Proposal Submission Form

[Location, Date]

To: M/s Multan Electric Power Company
MEPCO HQ Multan .

Dear Sirs:

We, the undersigned, offer to provide the consulting services for -----
-----in accordance with your Request for Proposal dated [Insert Date] and our
Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a
Financial Proposal sealed under a separate envelope¹.

We are submitting our Proposal in association with: [Insert a list with full name and address of
each associated Consultant]²

We hereby declare that all the information and statements made in this Proposal are true and
accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the Proposal, we undertake to negotiate
on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications
resulting from Contract negotiations.

We undertake, if our Proposal is accepted, to initiate the consulting services related to
the assignment not later than the date indicated in Paragraph Reference 7.2 of the Data Sheet.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature [In full and initials]: _____

Name and Title of Signatory: _____

Name of Firm: _____

Address: _____

1 [In case Paragraph Reference 1.2 of the Data Sheet requires to submit a Technical Proposal only, replace
this sentence with: "We are hereby submitting our Proposal, which includes this Technical Proposal only."]

2 [Delete in case no association is foreseen.]

Form TECH-2: Consultant's Organization and Experience

A - Consultant's Organization

[Provide here a brief (two pages) description of the background and organization of your firm/entity and each associate for this assignment.]

A1: Capital of Firm Audited (Financial Statements for the latest three years).

Subsidiaries and associates.

Annual fees in the last five years in current index.

Financial reference [name/address of bank(s)]

B - Consultant's Experience

[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted either individually as a corporate entity or as one of the major companies within an association, for carrying out consulting services similar to the ones requested under this assignment. [May be used additional pages.]

Assignment name:	Approx. value of the contract (in current US\$ or Euro):
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total No. of staff-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract :
Start date (month/year): Completion date (month/year):	N ^o of professional staff-months provided by associated Consultants:
Name of associated Consultants, if any:	Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader):
Narrative description of Project:	
Description of actual services provided by your staff within the assignment:	

Firm's Name: _____

Form TECH-3: Comments and Suggestions on the Terms of Reference and on Counterpart Staff and Facilities to be provided by the Client

A - On the Terms of Reference

[Present and justify here any modifications or improvement to the Terms of Reference you are proposing to improve performance in carrying out the assignment (such as deleting some activity you consider unnecessary, or adding another, or proposing a different phasing of the activities). Such suggestions should be concise and to the point, and incorporated in your Proposal.]

B - On Counterpart Staff and Facilities

[Comment here on counterpart staff and facilities to be provided by the Client according to Paragraph Reference 1.4 of the Data Sheet including: administrative support, office space, local transportation, equipment, data, etc.]

Form TECH-4: Description of Approach, Methodology and Work Plan for Performing the Assignment

(For small or very simple assignments the Client should omit the following text in Italic)

[Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present your Technical Proposal (50 pages, inclusive of charts and diagrams) divided into the following three chapters:

- a) Technical Approach and Methodology,*
- b) Work Plan, and*
- c) Organization and Staffing,*

a) Technical Approach and Methodology. In this chapter you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.

b) Work Plan. In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule of Form TECH-8.

c) Organization and Staffing. In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.]

Form TECH-5: Team Composition and Task Assignments

Professional Staff				
Name of Staff	Firm	Area of Expertise	Position Assigned	Task Assigned

Form TECH-6: Curriculum Vitae (CV) for Proposed Professional Staff

1. **Proposed Position** [*only one candidate shall be nominated for each position*]: _____

2. **Name of Firm** [*Insert name of firm proposing the staff*]: _____

3. **Name of Staff** [*Insert full name*]: _____

4. **Date of Birth:** _____ **Nationality:** _____

5. **Education** [*Indicate college/university and other specialized education of staff member, giving names of institutions, degrees obtained, and dates of obtainment*]: _____

6. **Membership of Professional Associations:** _____

7. **Other Training** [*Indicate significant training since degrees under 5 - Education were obtained*]: _____

8. **Countries of Work Experience:** [*List countries where staff has worked in the last ten years*]: _____

9. **Languages** [*For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing*]: _____

10. **Employment Record** [*Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment (see format here below): dates of employment, name of employing organization, positions held.*]:

From [Year]: __ To [Year]: _____

Employer: _____

Positions held: _____

<p>11. Detailed Tasks Assigned</p> <p><i>[List all tasks to be performed under this assignment]</i></p>	<p>12. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned</p> <p><i>[Among the assignments in which the staff has been involved, indicate the following information for those assignments that best illustrate staff capability to handle the tasks listed under point 11.]</i></p> <p>Name of assignment or project: _____</p> <p>Year: _____</p> <p>Location: _____</p> <p>Client: _____</p> <p>Main project features: _____</p> <p>Positions held: _____</p> <p>Activities performed: _____</p>
--	--

13. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

_____ Date: _____
[Signature of staff member or authorized representative of the staff] *Day/Month/Year*

Full name of authorized representative: _____

D. Form TECH-7 Staffing Schedule

	Name of Staff	Staff input (in the form of a bar chart) ²													Total staff-month input			
		1	2	3	4	5	6	7	8	9	10	11	12	n	Home	Field ³	Total	
Foreign																		
1		[Home]																
		[Field]																
2																		
3																		
N																		
													Subtotal					
Local																		
1		[Home]																
		[Field]																
2																		
N																		
													Subtotal					
													Total					

- 1 For Professional Staff the input should be indicated individually; for Support Staff it should be indicated by category (e.g.: draftsmen, clerical staff, etc.).
- 2 Months are counted from the start of the assignment. For each staff indicate separately staff input for home and field work.
- 3 Field work means work carried out at a place other than the Consultant's home office.

 Full time input
 Part time input

Annex-5:

Format for Financial Proposal

Financial Proposal Submission Form

[Location, Date]

To:

The Chief Executive Officer
MEPCO,

Atten: Director Procurement
Multan Electric Power Company
MEPCO HQ Multan

Dear Sirs:

We, the undersigned, offer to provide the consulting services for -----
----- in accordance with your Request for Proposal dated
[Insert Date] and our Technical Proposal.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal as indicated in the Instructions to consultant sheets.

Our Financial Proposal is the lump sum amount of Rs. _____/- for the assignment. No commissions or gratuities have been or are to be paid by us to agents relating to this Proposal and Contract execution.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature [In full and initials]: _____

Name and Title of Signatory: _____

Name of Firm: _____

Address: _____

APPENDIX-B: SUMMARY BID PRICES FORMAT:

Description	Qty.	PKR/ km	Taxes %/km	Total PKR/km	Total Amount Without Taxes PKR	Total Amount with Taxes PKR
Transmission & Transformation Loss Evaluation	As per RFP					
11 kV/HT Validate, Reconcile GIS Based Data, resolve inconsistencies and Analysis (Line + Distribution Transformer)						
LT Mapping & Analysis (Line + Service Main)	-----					
Grand Total (PKR)						

- Note:**
1. All applicable taxes will be deducted.
 2. Further details of T&D Losses are provided in Annex-II (ToRs).
 3. The scope of LT GIS mapping/analysis will be finalized and communicated upon receipt of the NEPRA's decision on MEPCO's MYT review petition. Although the RFP currently includes 100% mapping, this scope may be revised in light of said decision and the final rate will be calculated accordingly.

Annex-6:
Standard Contract Agreement for
Consulting Services

The attached Form of Contract Shall be used

CONTRACT FOR ENGINEERING CONSULTANCY SERVICES

between

(NAME OF THE CLIENT)

and

(NAME OF THE CONSULTANTS)

for

_____ **(BRIEF SCOPE OF SERVICES)**
OF _____ **(NAME OF PROJECT)**

Month and Year

I. FORM OF CONTRACT

- [Notes: 1. Use this Form of Contract when the Consultants perform Services as Sole Consultants.
2. In case the Consultants perform Services as a Member of the joint venture, use the Form included at the end.
3. All notes should be deleted in the final text.]

This CONTRACT (hereinafter called the "Contract") is made on the ____ day of ____ (month) of ____ (year), between, on the one hand,

(hereinafter called the "Client" which expression shall include the successors, legal representatives and permitted assigns) and, on the other hand,

(hereinafter called the "Consultants" which expression shall include the successors, legal representatives and permitted assigns).

WHEREAS

- (a) the Client has requested the Consultants to provide certain consulting services as defined in the General Conditions of Contract attached to this Contract (hereinafter called the "Services"); and
- (b) the Consultants, having represented to the Client that they have the required professional skills, and personnel and technical resources, have agreed to provide the Services on the terms and conditions set forth in this Contract;

NOW THEREFORE the Parties hereby agree as follows:

1. The following documents attached hereto shall be deemed to form an integral part of this Contract:
- (a) the General Conditions of Contract;
- (b) the Special Conditions of Contract;
- (c) the following Appendices:

[Note: If any of these Appendices are not used, the words "Not Used" should be inserted below/next to the title of the Appendix and on the sheet attached hereto carrying the title of that Appendix.]

Appendix A: Description of Services
Appendix B: Reporting Requirements
Appendix C: Key Personnel and Sub-consultants

Appendix D: Breakdown of Contract Price in Local Currency

Appendix E: Services & Facilities to be provided by the Client and Counterpart Personnel to be Made Available to the Consultants by the Client.

Appendix G: Integrity Pact (for Services above Rs. 10 million)

2. The mutual rights and obligations of the Client and the Consultants shall be as set forth in the Contract, in particular:
- (a) the Consultants shall carry out the Services in accordance with the provisions of the Contract; and
 - (b) the Client shall make payments to the Consultants in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names in two identical counterparts, each of which shall be deemed as the original, as of the day, month and year first above written.

For and on behalf of

Witness

(CLIENT)

Signatures _____

Signatures _____

Name _____

Name _____

Title _____

Title _____

(Seal)

For and on behalf of

(CONSULTANTS)

Witness

Signatures _____

Signatures _____

Name _____

Name _____

Title _____

Title _____

(Seal)

II. GENERAL CONDITIONS OF CONTRACT

1. GENERAL PROVISIONS

1.1 Definitions

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- (a) "Applicable Law" means the laws and any other instruments having the force of law in the Islamic Republic of Pakistan, as those may be issued and in force from time to time;
- (b) "Contract" means the Contract signed by the Parties, to which these General Conditions of Contract (GC) are attached, together with all the documents listed in Clause 1 of such signed Contract;
- (c) "Contract Price" means the price to be paid for the performance of the Services, in accordance with Clause 6;
- (d) "Effective Date" means the date on which this Contract comes into force and effect pursuant to Sub-Clause 2.1;
- (e) "GC" means these General Conditions of Contract;
- (f) "Government" means the Government of the Islamic Republic of Pakistan;
- (g) "Foreign Currency" means currency other than the currency of Islamic Republic of Pakistan;
- (h) "Local Currency" means the currency of the Islamic Republic of Pakistan;
- (i) "Member" in case the Consultants consist of a joint venture of more than one entity, means any of the entities, and "Members" means all of these entities;
- (j) "Party" means the Client or the Consultants, as the case may be, and "Parties" means both of them;
- (k) "Personnel" means persons hired by the Consultants or by any Sub Consultant as employees and assigned to the performance of the Services or any part thereof;
- (l) "SC" means the Special Conditions of Contract by which the GC are amended or supplemented;
- (m) "Services" means the work to be performed by the Consultants pursuant to this Contract, as described in Appendix A;

- (n) "Sub Consultant" means any entity to which the Consultants subcontract any part of the Services in accordance with the provisions of Sub-Clause 3.6;
- (o) "Third Party" means any person or entity other than the Client, the Consultants or a Sub Consultant; and
- (p) "Project" means the work specified in SC for which engineering consultancy services are desired.

1.2 Law Governing the Contract

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law.

1.3 Language

This Contract has been executed in the English language which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract. All the reports and communications shall be in the English language.

1.4 Notices

Any notice, request, or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered in person to an Authorized Representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, or facsimile to such Party at the address of the Authorized Representative specified under Sub-Clause SC 1.6. A Party may change its address for notice hereunder by giving the other Party notice of such change.

1.5 Location

The Services shall be performed at such locations as are specified in Appendix A and, where the location of a particular task is not so specified, at such locations as mutually agreed by the Parties.

1.6 Authorized Representatives

Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Client or the Consultants shall be taken or executed by the Authorized Representatives specified in the SC.

1.7 Taxes

Unless specified in the SC, the Consultants, Sub Consultants, and their Personnel shall pay such taxes, fees, and other impositions as may be levied under the Applicable Law.

1.8 Leader of Joint Venture

In case the Consultants consist of a joint venture of more than one entity, the Consultants shall be jointly and severally bound to the Client for fulfillment of the terms of the Contract and designate the Member named in SC, to act as leader of the Joint Venture, for the purpose of receiving instructions from the Client.

1.9 Relation between the Parties

Nothing contained herein shall be construed as establishing a relation of master and servant or of principal and agent as between the Client and the Consultants. The Consultants, subject to this Contract, have complete charge of Personnel and Sub Consultants, if any, performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.

1.10 Headings

The headings shall not limit, alter or affect the meaning of this Contract.

2. COMMENCEMENT, COMPLETION, MODIFICATION, AND TERMINATION OF CONTRACT

2.1 Effectiveness of Contract

This Contract shall come into force and effect on the date (the "Effective Date") of the Client's notice to the Consultants instructing the Consultants to begin carrying out the Services. This notice shall confirm that the effectiveness conditions, if any, listed in the SC have been met.

2.2 Termination of Contract for Failure to Become Effective

If this Contract has not become effective within such time period after the date of the Contract signed by the Parties as shall be specified in the SC, either Party may, by not less than twenty eight (28) days written notice to the other Party, declare this Contract to be null and void, and in the event of such a declaration by either Party, neither Party shall have any claim against the other Party except for the work (if any) already done or costs already incurred by a Party at the request of the other Party.

2.3 Commencement of Services

The Consultants shall begin carrying out the Services at the end of such time period after the Effective Date as shall be specified in the SC.

2.4 Expiration of Contract

Unless terminated earlier pursuant to Sub-Clause 2.9, this Contract shall expire when, pursuant to the provisions hereof, the Services have been completed and the payments of remunerations including the direct costs if any, have been made. The Services shall be completed within a period as is specified in the SC, or such extended time as may be allowed under Sub-Clause 2.6.

The term "Completion of Services" is as specified in the SC.

2.5 Modification

Modification of the terms and conditions of this Contract, including any modification of the scope of the Services or of the Contract Price, may only be made in writing, which shall be mutually agreed and signed by both the Parties.

2.6 Extension of Time for Completion

If the scope or duration of the Services is increased:

- (a) The Consultants shall inform the Client of the circumstances and probable effects;
- (b) The increase shall be regarded as Additional Services; and
- (c) The Client shall extend the time for Completion of the Services accordingly.

2.7 Force Majeure

2.7.1 Definition

- (a) For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party and which makes a Party's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances, and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial actions (except where such strikes, lockouts or other industrial actions are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by government agencies.
- (b) Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a Party or such Party's Sub consultants or agents or employees, nor (ii) any event which a diligent Party could reasonably have been expected to both (A) take into account at the time of the conclusion of this Contract and (B) avoid or overcome in the carrying out of its obligations hereunder.

- (c) Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.

2.7.2 No Breach of Contract

The failure of a Party to fulfill any of its obligations under the Contract shall not be considered to be a breach of, or default under this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event; (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract; and (b) has informed the other Party in writing not later than fifteen (15) days following the occurrence of such an event.

2.7.3 Extension of Time

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

2.7.4 Payments

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultants shall be entitled to continue to be paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purpose of the Services and in reactivating the Services after the end of such period.

2.8 Suspension of Payments by the Client

The Client may, by written notice of suspension to the Consultants, suspend all payments to the Consultants hereunder if the Consultants fail to perform any of their obligations under this Contract, including the carrying out of the Services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall request the Consultants to remedy such failure within a period not exceeding thirty (30) days after receipt by the Consultants of such notice of suspension.

2.9 Termination

2.9.1 By the Client

The Client may terminate this Contract, by not less than thirty (30) days written notice of termination to the Consultants, to be given after the occurrence of any of the events specified in paragraphs (a) through (e) of this Sub-Clause 2.9.1 and sixty (60) days in the case of the event referred to in paragraph(f):

- (a) if the Consultants do not remedy a failure in the performance of their obligations under the Contract, within thirty (30) days after being notified or within any further period as the Client may have subsequently approved in writing;
- (b) if the Consultants become (or, if the Consultants consist of more than one entity, if any of their Members becomes) insolvent or bankrupt or enter into

any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;

- (c) if the Consultants fail to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause 8 hereof;
- (d) if the Consultants submit to the Client a statement which has a material effect on the rights, obligations or interests of the Client and which the Consultants know to be false;
- (e) if, as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days;
- (f) if the Client, in its sole discretion, decides to terminate this Contract.

2.9.2 By the Consultants

The Consultants may terminate this Contract, by not less than thirty (30) days written notice to the Client, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (d) of this Sub-Clause 2.9.2:

- (a) if the Client fails to pay any monies due to the Consultants pursuant to this Contract and not subject to dispute pursuant to Clause 8 within forty-five (45) days after receiving written notice from the Consultants that such payment is overdue;
- (b) if the Client is in material breach of its obligations pursuant to this Contract and has not remedied the same within forty-five (45) days (or such longer period as the Consultants may have subsequently approved in writing) following the receipt by the Client of the Consultants' notice specifying such breach;
- (c) if, as a result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days;
- (d) if the Client fails to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause 8 hereof.

2.9.3 Cessation of Services

Upon receipt of notice of termination under Sub-Clause 2.9.1, or giving of notice of termination under Sub-Clause 2.9.2, the Consultants shall take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Consultants, and equipment and materials furnished by the Client, the Consultants shall proceed as provided, respectively, by Sub-Clauses 3.8 or 3.9.

2.9.4 Payment upon Termination

Upon termination of this Contract pursuant to Sub-Clauses 2.9.1 or 2.9.2, the Client shall make the following payments to the Consultants:

- (a) Remuneration and reimbursable direct costs expenditure pursuant to Clause 6 for Services satisfactorily performed prior to the effective date of termination. Effective date of termination for purposes of this Sub-Clause means the date when the prescribed notice period would expire;
- (b) except in the case of termination pursuant to paragraphs (a) through (d) of Sub-Clause 2.9.1, reimbursement of any reasonable cost incidental to the prompt and orderly termination of the Contract, including the cost of the return travel of the Personnel, according to Consultants Traveling Allowance Rules.

2.9.5 Disputes about Events of Termination

If either Party disputes whether an event specified in paragraphs (a) through (e) of Sub-Clause 2.9.1 or in paragraphs (a) through (d) of Sub-Clause 2.9.2 hereof has occurred, such Party may, within forty-five (45) days after receipt of notice of termination from the other Party, refer the matter to arbitration pursuant to Clause 8 hereof, and this Contract shall not be terminated on account of such event except in accordance with the terms of any resulting arbitral award.

3. OBLIGATIONS OF THE CONSULTANTS

3.1 General

3.1.1 Standard of Performance

The Consultants shall perform the Services and carry out their obligations with all due diligence, efficiency, and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe methods. The Consultants shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Client, and shall at all times support and safeguard the Client's legitimate interests in any dealings with Sub consultants or third parties.

3.1.2 Law Governing Services

The Consultants shall perform the Services in accordance with the Applicable Law and shall take all practicable steps to ensure that any Sub consultants, as well as the Personnel of the Consultants and any Sub consultants, comply with the Applicable Law.

3.2 Consultants Not to Benefit from Commissions, Discounts, etc.

The remuneration of the Consultants pursuant to Clause 6 shall constitute the Consultants' sole remuneration in connection with this Contract or the Services, and the Consultants shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Consultants shall use their best efforts to ensure that the Personnel, any Sub consultants, and agents of either of them similarly shall not receive any such additional remuneration.

3.3 Confidentiality

The Consultants, their Sub consultants, and the Personnel of either of them shall not, either during the term or after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, the Services, this Contract, or the Client's business or operations without the prior written consent of the Client. This clause is further explained in SC.

3.4 Liability of the Consultants

The Consultants are liable for the consequence of errors and omissions on their part or on the part of their employees in so far as the design of the Project is concerned to the extent and with the limitations as mentioned herein below.

If the Client suffers any losses or damages as a result of proven faults, errors or omissions in the design of a project, the Consultants shall make good such losses or damages, subject to the conditions that the maximum liability as aforesaid shall not exceed twice the total remuneration of the Consultants for design phase in accordance with the terms of the Contract.

The liability of the Consultants expires after one (1) year from the stipulated date of completion of construction or after three (3) years from the date of final completion of the design whichever is earlier.

The Consultants may, to protect themselves, insure themselves against their liabilities but this is not obligatory. The extent of the insurance shall be up to the limit specified in second para above. The Consultants shall procure the necessary cover before commencing the Services and the cost of procuring such cover shall be borne by the Consultants up to a limit of one percent of the total remuneration of the Consultants for the design phase for every year of keeping such cover effective.

The Consultants shall, at the request of the Client, indemnify the Client against any or all risks arising out of the furnishing of professional services by the Consultants to the Client, not covered by the provisions contained in the first para above and exceeding the limits set forth in second para above provided the actual cost of procuring such indemnity as well as costs exceeding the limits set forth in fourth para above shall be borne by the Client.

3.5 Other Insurances to be taken out by the Consultants

In addition to the insurance stated in Sub-Clause 3.4 above, the Consultants shall take out and maintain the various insurances as are specified in the SC, at the cost and expense of the Client.

3.6 Consultants' Actions Requiring Client's Prior Approval

The Consultants shall obtain the Client's prior approval in writing before taking any of the following actions:

- (a) Appointing such Personnel as are listed in Appendix-C merely by title but not by name;
- (b) entering into a subcontract for the performance of any part of the Services, it being understood (i) that the selection of Sub consultants and the terms and conditions of the subcontract shall have been approved in writing by the Client prior to the execution of the subcontract, and (ii) that the Consultants shall remain fully liable for the performance of the Services by the Sub consultants and its Personnel pursuant to this Contract;
- (c) Any other action that may be specified in the SC.

3.7 Reporting Obligations

The Consultants shall submit to the Client the reports and documents specified in Appendix B in the form, in the numbers, and within the periods set forth in the said Appendix.

3.8 Documents Prepared by the Consultants to be the Property of the Client

All plans, drawings, specifications, reports, and other documents and software prepared by the Consultants in accordance with Sub-Clause 3.7 shall become and remain the property of the Client, and the Consultants shall, not later than upon termination or expiration of this Contract, deliver (if not already delivered) all such documents and software to the Client, together with a detailed inventory thereof. The Consultants may retain a copy of such documents and software.

Restriction(s) about the future use of these documents is specified in the SC.

3.9 Equipment and Materials Furnished by the Client

Equipment and materials made available to the Consultants by the Client, or purchased by the Consultants with funds provided by the Client, shall be the property of the Client and shall be marked accordingly. Upon termination or expiration of this Contract, the Consultants shall make available to the Client an inventory of such

equipment and materials and shall dispose of such equipment and materials in accordance with the Client's instructions or afford salvage value of the same. While in possession of such equipment and materials, the Consultants, unless otherwise instructed by the Client in writing, shall insure them at the expense of the Client in an amount equal to their full replacement value.

3.10 Accounting, Inspection and Auditing

The Consultants (i) shall keep accurate and systematic accounts and records in respect of the Services hereunder, in accordance with internationally accepted accounting principles and in such form and detail as will clearly identify all relevant time charges, and cost, and the basis thereof, and (ii) shall permit the Client or its designated representatives periodically, and up to one year from the expiration or termination of this Contract, to inspect the same and make copies thereof as well as to have them audited by auditors appointed by the Client.

4. CONSULTANTS' PERSONNEL AND SUB CONSULTANTS

4.1 General

The Consultants shall employ and provide such qualified and experienced Personnel and Sub consultants as are required to carry out the Services.

4.2 Description of Personnel

- (a) The title, activities of job description and estimated period of engagement in the carrying out of the Services of each of the Consultants' Personnel are described in Appendix C.
- (b) Adjustment with respect to the estimated periods of engagement of various salary grades of the Personnel set forth in Appendix C may be made by the Consultants in accordance with the actual requirements of the Contract to ensure efficient performance of the Services, provided that the aggregate of such adjustments shall not cause payments under this Contract to exceed the ceilings set forth in Sub-Clause 6.1(a) of this Contract.

4.3 Approval of Personnel

The Key Personnel and Sub consultants listed by title as well as by name in Appendix C are deemed to be approved by the Client. In respect of other Key Personnel which the Consultants propose to use in carrying out of the Services, the Consultants shall submit to the Client for review and approval a copy of their biographical data. If the Client does not object in writing (stating the reasons for the objection) within fourteen (14) calendar days from the date of receipt of such biographical data, such Key Personnel shall be deemed to have been approved by the Client.

4.4 Working Hours, Leave, Overtime, etc.

Working Hours for Key Personnel are set forth in Appendix-C hereto.

Except for the staff covered under reimbursable direct costs expenditure, the Consultants' remuneration given in Appendix D and Appendix E shall be deemed to cover paid casual leave, sick leave and earned leave. The Client will reimburse overtime payments to eligible Personnel provided by the Consultants, in respect of support staff and work charged staff. Any taking of leave by Personnel shall be subject to the prior approval by the Consultants who shall ensure that absence for leave purposes will not delay the progress and adequate supervision of the Services. Such leave taking of the Authorized Representative of the Consultants at site, if any, shall be preceded by the Client informed in writing.

4.5 Removal and/or Replacement of Personnel

- (a) Except as the Client may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Consultants, it becomes necessary to replace any of the Key Personnel, the Consultants shall provide as a replacement a person of equivalent or better qualifications.
- (b) If the Client;(i) finds that any of the Personnel has committed serious misconduct or has been charged with having committed a criminal action; or (ii) has reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultants shall, at the Client's written request specifying the grounds therefor, provide as a replacement a person with qualifications and experience acceptable to the Client.
- (c) Any of the Personnel provided as a replacement under Sub-Clauses (a) and (b) above, the rate of remuneration applicable to such person as well as any reimbursable expenditures (including expenditures due to the number of eligible dependents) the Consultants may wish to claim as a result of such replacement, shall be subject to the prior written approval by the Client. Except as the Client may otherwise agree, (i) the Consultants shall bear all additional travel and other costs arising out of or incidental to any removal and/or replacement, and (ii) the remuneration to be paid for any of the Personnel provided as a replacement shall not exceed the remuneration which would have been payable to the Personnel replaced.

4.6 Resident Engineer

If required by the SC, the Consultants shall ensure that at all times during the Consultants' performance of the Services, a Resident Engineer acceptable to the Client, shall take charge of the performance of such Services

5. OBLIGATIONS OF THE CLIENT

5.1 Assistance, Coordination and Approvals

5.1.1 Assistance

The Client shall use its best efforts to ensure that the Client shall:

- (a) provide at no cost to the Consultants, Sub consultants and Personnel such documents prepared by the Client or other consulting engineers appointed by the Client as shall be necessary to enable the Consultants, Sub consultants or Personnel to perform the Services. The documents and the time within which such documents shall be made available, are as specified in the SC;
- (b) assist to obtain the existing data relevant to the carrying out of the Services, with various Government and other organizations. Such items shall be returned by the Consultants upon completion of the Services under this Contract;
- (c) issue to officials, agents and representatives of the concerned organizations, all such instructions as may be necessary or appropriate for prompt and effective implementation of the Services;
- (d) provide to the Consultants, Sub consultants, and Personnel any such other assistance and exemptions as may be specified in the SC;
- (e) assist to obtain permits which may be required for right-of-way, entry upon the lands and properties for the purposes of this Contract.

5.1.2 Co-ordination

The Client shall:

- (a) coordinate and get or expedite any necessary approval and clearances relating to the work from any Government or Semi-Government Agency, Department or Authority, and other concerned organization named in the SC.
- (b) coordinate with any other consultants employed by him.

5.1.3 Approvals

The Client shall accord approval of the documents within such time as specified in the SC, whenever these are applied for by the Consultants.

5.2 Access to Land

The Client warrants that the Consultants shall have, free of charge, unimpeded access to all land of which access is required for the performance of the Services.

5.3 Change in the Applicable Law

If, after the date of this Contract, there is any change in the Applicable Law which increases or decreases the cost of the Services rendered by the Consultants, then the remunerations and direct costs otherwise payable to the Consultants under this Contract shall be increased or decreased accordingly, and corresponding adjustment shall be made to the amounts referred to in Sub-Clause 6.1 (a). Rate in the Appendix-E shall be revised in case of revision in salary made in an organization due to statutory Notification. Such revised rate(s) shall be applicable from the respective date(s) of implementation of such Notification by the concerned organizations for which necessary proof shall be provided to the Client.

5.4 Services and Facilities

The Client shall make available to the Consultants, Sub consultants and the Personnel, for the purpose of the Services and free of any charge, the services, facilities and property described in Appendix F at the times and in the manner specified in said Appendix F, provided that if such services, facilities and property shall not be made available to the Consultants as and when so specified, the Parties shall agree on; (i) any time extension that it may be appropriate to grant to the Consultants for the performance of the Services; (ii) the manner in which the Consultants shall procure any such services, facilities and property from other sources; and (iii) the additional payments, if any, to be made to the Consultants as a result thereof pursuant to Sub-Clause 6.1(b) hereinafter.

5.5 Payments

In consideration of the Services performed by the Consultants under this Contract, the Client shall make to the Consultants such payments and in such manner as is provided by Clause 6 of this Contract.

5.6 Counterpart Personnel

- (a) If so provided in Appendix-F hereto, the Client shall make available to the Consultants, as and when provided in such Appendix-F, and free of charge, such counterpart personnel to be selected by the Client, with the Consultants' advice, as shall be specified in such Appendix-F. Counterpart personnel shall work under the exclusive direction of the Consultants. If any member of the counterpart personnel fails to perform adequately any work assigned to such member by the Consultants which is consistent with the position occupied by such member, the Consultants may request the replacement of such member, and the Client shall not unreasonably refuse to act upon such request.

- (b) If counterpart personnel are not provided by the Client to the Consultants as and when specified in Appendix-F, the Client and the Consultants shall agree on; (i) how the affected part of the Services shall be carried out; and (ii) the additional payments, if any, to be made by the Client to the Consultants as a result thereof pursuant to Sub-Clause 6.1(c) hereof.

6. PAYMENTS TO THE CONSULTANTS

6.1 Cost Estimates, Ceiling Amount

- (a) An estimate of the cost of Services payable in local currencies is set forth in Appendices D respectively. Except as may be otherwise agreed under Sub-Clause 2.5 and subject to Sub-Clause 6.1 (b), payments under this Contract shall not exceed the ceilings in local currency in Appendix D, excluding adjustments made under Sub-Clause 6.2(a) of the SC. The Consultants shall notify the Client as soon as cumulative charges incurred for the Services have reached 80% of either of these ceilings.
- (b) Notwithstanding Sub-Clause 6.1(a) hereof, if pursuant to any of the Sub-Clauses 5.3, 5.4 or 6.6 hereof, the Parties shall agree that additional payments in local and/or foreign currency, as the case may be, shall be made to the Consultants in order to cover any necessary additional expenditures relating to remuneration not envisaged in the cost estimates referred to in Sub-Clause 6.1(a) above, and the ceiling or ceilings, as the case may be, set forth in Sub-Clause 6.1(a) above shall be increased by the amount or amounts, as the case may be, of any such additional payments.
- (c) Notwithstanding Sub-Clause 6.1(b) hereof, if pursuant to any of the Sub-Clauses 5.3, 5.4 or 5.6 hereof, the Parties shall agree that additional payments in local and/or foreign currency, as the case may be, shall be made to the Consultants in order to cover any necessary additional expenditures relating to reimbursable direct cost not envisaged in the cost estimates referred to in Sub-Clause 6.1(a) above, the ceiling or ceilings, as the case may be, set forth in Sub-Clause 6.1(b) above shall be increased by the amount or amounts, as the case may be, of any such additional payments.

6.2 Remuneration and Reimbursable Direct Costs (Non-salary Costs)

- (a) Subject to the ceilings specified in Sub-Clause 6.1(a) hereof, the Client shall pay to the Consultants; (i) remuneration as set forth in Sub-Clause 6.2(b); and (ii) reimbursable direct costs expenditure as set forth in Sub-Clause 6.2(c). Remuneration shall be subject to price adjustment as specified in the SC.
- (b) Remuneration for the Personnel shall be determined on the basis of time actually spent by such Personnel in the performance of the Services after the date determined in accordance with Sub-Clause SC 2.3 (including time for necessary travel via the most direct route) at the rates referred to, and subject to such additional provisions as are set forth in the SC.

- (c) Reimbursable direct costs (non-salary costs) actually and reasonably incurred by the Consultants in the performance of the Services. The reimbursable direct costs expenditure shall be for the items specified in the SC.

6.3 Currency of Payment

- (a) Local currency payment in Appendix D shall be made in Pakistani Rupees.
- (b) The SC shall specify which items of remuneration and reimbursable expenditures shall be paid, respectively, in local currency.

6.4 Mode of Billing and Payment

Billing and payments in respect of the Services shall be made as follows:

- (a) To cover payments due under Sub-Clauses 6.1 and 6.2 of this Contract, the Client shall establish a revolving fund in foreign currency and local currency accounts, each account to be separately and distinctly maintained by the Consultants, and shall deposit into the said accounts, amounts in the currencies specified above as follows:
 - (i) Not later than thirty (30) days following the signing of Contract by both the Parties amounts estimated to be the requirements in the respective currencies for the three (3) months of the Services immediately following the signing of Contract calculated on the basis of the applicable estimates set forth in Appendices D.
 - (ii) Not later than the 15th day of each succeeding month, the amount equal to the preceding monthly estimate in accordance with Appendices D and E shall be recouped by the Client in the revolving fund against foreign currency and local currency amounts.

Any bank interest accruing in a revolving fund shall be credited by the Consultants to the Client.

- (b) As soon as practicable and preferably within thirty (30) days after the end of each calendar month during the period of the Services, the Consultants shall submit to the Client, in duplicate, itemized statements, accompanied by copies of receipted invoices, vouchers and other appropriate supporting materials, of the amounts payable pursuant to Sub-Clauses 6.3 and 6.4 for such month. Separate monthly statements shall be submitted in respect of amounts payable in foreign currency and in local currency. Monthly statement shall distinguish that portion of the total eligible costs which pertains to remuneration from that portion which pertains to reimbursable direct costs expenditure.

In case of a joint venture, separate monthly statements shall be submitted in respect of amounts payable to each Member of the joint venture of the Consultants.

- (c) The Client shall cause the payment of the Consultants' monthly statements within twenty-eight (28) days for amounts in local currency and within fifty six (56) days for amounts in foreign currency after the receipt by the Client of such statements with supporting documents. Only such portion of a monthly statement that is not satisfactorily supported may be withheld from payment. Should any discrepancy be found to exist between actual payment and costs authorized to be incurred by the Consultants, the Client, after seeking clarification from the Consultants, may add or subtract the difference from any subsequent payments.
- (d) The final payment under this Clause shall be made only after the final report and a final statement, identified as such, shall have been submitted by the Consultants and approved as satisfactory by the Client. The Services shall be deemed completed and finally accepted by the Client and the final report and final statement shall be deemed approved by the Client as satisfactory ninety (90) calendar days after receipt of the final report and final statement by the Client unless the Client, within such ninety (90) days period, gives written notice to the Consultants specifying in detail deficiencies in the Services, the final report or final statement. The Consultants shall thereupon promptly make any necessary corrections, and upon completion of such corrections, the foregoing process shall be repeated. Any amount which the Client has paid or caused to be paid in accordance with this Clause in excess of the amounts actually payable in accordance with the provisions of this Contract shall be reimbursed by the Consultants to the Client within thirty (30) days after receipt by the Consultants of notice thereof. Any such claim by the Client for reimbursement must be made within fifty-six (56) days after receipt by the Client of a final report and a final statement approved by the Client in accordance with the above. The Client shall cause the final payment to the Consultants within fifty-six (56) days of receipt of final invoice from the Consultants, after completion of Services finally accepted along with the final report and statement of the Consultants by the Client.
- (e) All payments under this Contract shall be made to the bank account of the Consultants to be notified later.

6.5 Delayed Payments

If the Client has delayed payments beyond the period stated in paragraph (c) of Sub-Clause 6.4, no interest charges shall be paid to the Consultants.

6.6 Additional Services

Additional Services means:

- (a) Services as approved by the Client outside the Scope of Services described in Appendix A;
- (b) Services to be performed during the period extended pursuant to Sub-Clause 2.6, beyond the original schedule time for completion of the Services; and
- (c) Any re-doing of any part of the Services as a result of Client's instructions.

If, in the opinion of the Client, it is necessary to perform Additional Services during the currency of the Contract for the purpose of the Project, the Consultants, with the prior written authorization of the Client, shall carry out such Additional Services on the basis of the billing rates set out in the Contract. In case for any reasons these rates and prices are determined by both the Parties to be not applicable for said Additional Services, then suitable billing rates and the additional time, shall be agreed upon between the Client and the Consultants.

6.7 Consultants' Entitlement to Suspend Services

If the Client fails to make the payment of any of the Consultants' invoice within twenty-eight (28) days after the expiry of the time stated in paragraph (c) of Sub-Clause 6.4, within which payment is to be made, the Consultants may after giving not less than twenty-eight (28) days' prior notice to the Client, suspend the Services or reduce the rate of carrying out the Services, unless and until the Consultants have received the payment.

This action will not prejudice the Consultants' entitlement to financing charges under Sub-Clause 6.5.

7. FAIRNESS AND GOOD FAITH

7.1 Good Faith

The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization to the objectives of this Contract.

7.2 Operation of the Contract

The Parties recognize that it is impractical in this Contract to provide for every contingency which may arise during the life of the Contract, and the Parties hereby agree that it is their intention that this Contract shall operate fairly as between them, and without detriment to the interest of either of them, and that, if during the term of this Contract either Party believes that this Contract is operating unfairly, the Parties will use their best efforts to agree on such action as may be necessary to remove the

cause or causes of such unfairness, but no failure to agree on any action pursuant to this Sub-Clause shall give rise to a dispute subject to arbitration in accordance with Clause 8 hereof.

8. SETTLEMENT OF DISPUTES

8.1 Amicable Settlement

The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

8.2 Dispute Settlement

Any dispute between the Parties as to matters arising pursuant to this Contract which cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be submitted by either Party for settlement in accordance with the provisions of the Arbitration Act, 1940 (Act No. X of 1940) and Rules made thereunder and any statutory modifications thereto.

Services under the Contract shall, if reasonably possible, continue during the arbitration proceedings and no payment due to or by the Client shall be withheld on account of such proceedings.

9. INTEGRITY PACT

9.1 If the Consultant or any of his Sub consultants, agents or servants is found to have violated or involved in violation of the Integrity Pact signed by the as Appendix-G to this Form of Contract, then the Client shall be entitled to:

- (a) recover from the Consultant an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by the Consultant or any of his Sub consultant, agents or servants;
- (b) terminate the Contract; and
- (c) recover from the Consultant any loss or damage to the Client as a result of such termination or of any other corrupt business practices of the Consultant or any of his Sub consultant, agents or servants.

On termination of the Contract under Sub-Para (b) of this Sub-Clause, the Consultant shall proceed in accordance with Sub-Clause 2.9.3. Payment upon such termination shall be made under Sub-Clause 2.9.4 (a) after having deducted the amounts due to the Client under Sub-Para (a) and (c) of this Sub-Clause.

III. SPECIAL CONDITIONS OF CONTRACT

Clause No. of GC Amendments of, and Supplements to, Clauses in the General Conditions of Contract

1.1 Definitions

(h) “Local Currency” means the Pak Rupees (PKR)

(m) The text is modified as under:

“Services” means the work to be performed by the Consultants including but not limited to the indicative overall Terms Of References (ToRs) as described in Annex 2;

(n) The paragraph is deleted in its entirety.
The word “Sub consultants” wherever appearing in this Contract will stand deleted.

1.6 Authorised Representatives

The Authorised Representatives are the following:

For the Client:

Telephone : _____
Fax : _____
E.Mail : _____

or any other official nominated by the Client

For the Consultants:

Telephone : _____
Fax : _____
E.Mail : _____

or any other official nominated by the Consultants

2.1 Effectiveness of Contract

The date on which this Contract shall come into force and effect is the date when the Contract is signed by the Parties.

2.3 Commencement of Services

The Consultant shall commence the services with immediate effect after the signing of contract by the Parties.

2.4 Expiration of Contract

The estimated period for completion of overall Services will be 09-Months from the Effective Date of the Contract.

2.7.3 Extension of time

Add at the end “in case of Force Majeure, extension of time will be decided and approved by the client”.

2.7.4 Payments

Payment will be made as per schedule of %age work completed.

2.9.2 By the Consultants

2.9.2(a) The text “forty five (45)” in second line after the word “within” is replaced with the text “ninety (90)”.

2.9.2(b) The text “forty five (45)” in second line after the word “within” is replaced with the text “ninety (90)”.

2.9.3 Cessation of Services

Upon receipt of notice of termination under sub clause 2.9.1 GC, or giving of notice of termination under sub-clause 2.9.2 of GC, the Consultants shall take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this to a minimum. The consultant is bound to establish its office at his own expense and furnishing of his establishment at his own cost. MEPCO has no objection to take back all the items purchased for establishing of office for specific project regarding which the Scope of Services was issued. Moreover, consultant is bound to hand over all the work done both in soft and hard form

and if any software purchased, the same will also be returned to client (MEPCO).

2.9.5 Disputes about Events of Termination

The text “forty-five (45)” in third line after the word “within” is replaced with the text “ninety (90)”.

- *The blacklisting of firms and contractors will be carried out as per Blacklisting Policy of MEPCO available at MEPCO website.*
- *The parties agree that this agreement and any subsequent agreement (s) shall be governed by, applied to, interpreted and construed in accordance with the laws of the Islamic Republic of Pakistan.*
- *In relation to any legal action or proceedings rising out of or in connection with this agreement, the parties irrevocably submit to the exclusive jurisdiction of the competent courts of Law at Multan, Pakistan.*

3.3 Confidentiality

GIS Data being a sensitive in nature, the Consultants, their Sub consultants, and the Personnel of either of them shall not, either during the term or after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, the Services, this Contract, or the Client's business or operations without the prior written consent of the Client. For any foreign Consultant, execution of a **Non-Disclosure Agreement (NDA)** shall be mandatory prior to accessing any GIS Data under this Contract. Such NDA shall be in a form satisfactory to the Client and enforceable under applicable law.

3.5 Other Insurances to be taken out by the Consultants

The risks and the coverage shall be the responsibility of the Consultants entirely and not on the part of Client.

3.6 Consultants' Actions Requiring Client's Prior Approval

The Consultants shall obtain the Client's prior approval in writing before taking any of actions for which he is required to obtain such approval under the provisions of the contract(s) of the Project.

3.8 Documents Prepared by the Consultants to be the Property of the Client

The last line of first paragraph “the Consultants---- and software” is deleted.

3.9 Equipment and Materials Furnished by the Client

The consultant shall hire the building at his own and equip if fully with all necessary equipment at his own cost and this will not be the property of Client after completion of contract / work awarded.

4.1 General

The word “Sub consultant” wherever appearing in this Contract will stand deleted.

4.3 Approval of Personnel

Remove the word “and Sub Consultant” from first line

Remove the word “deemed” from second line, add words after examining their CV or Resume, which Consultant has to provide before start of work”.

4.4 Working Hours, Leave, Overtime, etc.

The client is not responsible for this, as all the staff belongs to Consultant and time management is the responsibility of Consultant, Client will not consider any item as leave or overtime etc. separately than the Scope of Services for service contract value.

4.5 Removal and/or Replacement of Personnel

- (a) Add at the end with the approval of client
- (c) Deleted.

5.1.1 Assistance

- (a) The Client shall provide basic information about the project within fifteen (15) days or as mutually agreed between the parties from the commencement date of the Scope of Services.
- (d) Other assistance and exemptions to be provided by the Client are to be mutually decided by the Parties as per requirements of Scope of Services.

5.1.3 Approvals

The Client shall accord approval of the documents immediately but not later than fourteen (14) days from the date of their submission by the Consultants or any other mutually agreed time period.

5.2 Access to Land

Add words at the end “that the Consultant will inform well in time before visit and the reason of visit”

5.4 Services & Facilities

Deleted

5.6 Counterpart Personnel

- (a) Deleted
- (b) Deleted

6.1 Cost Estimates, Ceiling Amount

No payment will be made to the Consultants in Foreign Currency; as such the words Foreign Currency wherever appearing in this Contract will not be applicable.

The Paragraph (a) is replaced with the following:

- (a) An estimate of the cost of the Services time-based or lump sum input (as mutually agreed between the Parties based on the Scope of the Services), payable in local currency will be set forth. The Scope of Services, period of completion of the Services and estimated cost will be negotiated, prior to issuance of contract agreement.

6.3 Currency of Payment

The Sub-Clause is replaced with the following:

- (a) All payment shall be made in Pak Rupees.

6.4 Mode of Billing and Payment

(a) This paragraph is replaced with the following;

In consideration of the services performed by the consultant under this contract, the client shall make to the consultant such payments and in such a manner as stated herein.

<i>Activity</i>	<i>% Payment</i>
<i>1: Mobilization Advance against Bank Guarantee</i>	<i>10%</i>
<i>2: Upon Submission of initial study report</i>	<i>10%</i>
<i>3: Acceptance / Go-a-head by MEPCO on initial Study report (after addressing comments from MEPCO)</i>	<i>30%</i>
<i>4: Upon submission of the Final Report and, if required, submission of the revised Final Report after duly addressing MEPCO's comments.</i>	<i>30%</i>
<i>5: Upon approval of loss evaluation study by NEPRA</i>	<i>10%</i>
<i>6: Upon completion of Six-months defect liability period (with effect from issuance of completion certificate by MEPCO)</i>	<i>10%</i>
<i>Total</i>	<i>100%</i>

Payments will be made by Chief Financial Officer MEPCO on production of following documents.

- i. Submission of Invoices of official letter head in triplicate.
- ii. The payments against 6.4 (a) above will be made on the submission of duly certified/verified reports from Steering Committee/focal Persons nominated by MEPCO.

6.5 Delayed Payments

Deleted

8.2 Dispute Settlement

The following text is added at the end of Sub-Clause:

Venue of arbitration shall be Lahore and the courts located in Lahore shall have jurisdiction in the matter.

10.1 Performance Guarantee

The Consultants shall provide a performance guarantee equal to 10% of the offered amount from a bank acceptable to Client within 15-days from issuance of NOA (Notification of Award). The consultants shall procure the necessary cover before the commencing of the service and the cost of procuring such cover shall be borne by the consultants.

Note: The Contract will be signed after submission of Performance Guarantee.

APPENDIX A

SCOPE OF SERVICES

The Multan Electric Power Company (MEPCO) invites proposal to provide the following scope of services on Quality and Cost Basis (QCBS):

“Evaluation and Assessment of Transmission & Distribution (T&D) Technical Losses of MEPCO”

1.1 General Requirements

The Multan Electric Power Company (MEPCO) invites proposal to provide the following scope of services on Quality and Cost Basis (QCBS):

- i. The Firm shall employ internationally recognized engineering standards, validated methodologies, and industry-standard software tools (e.g., PSS/E, Power-Factory, Synergi Electric, or equivalent) preferably PSS/E and Synergi Electric Software.
- ii. All assumptions, data sources, adjustments, and limitations shall be clearly documented.
- iii. The Firm shall coordinate closely with MEPCO and relevant system entities, the Independent System and Market Operator (ISMO), the National Grid Company (NGC), and other concerned organizations, for data validation and reconciliation.
- iv. The study shall be completed and submitted in accordance with timelines prescribed, including presentation and defense before the NEPRA.

1.2 Transmission Loss Evaluation

1.3 Distribution Loss Evaluation

- GIS Mapping of 100% LT Network
- HT Line Loss
- Distribution Transformer Loss
- LT Line Loss
- Service Main Loss

1.4 Investment Plan Review and Loss Reduction Strategy

Note: The details of the above services are provided in Annex II (TOR section).

APPENDIX B

Reporting Requirements

The Consultants shall submit the required reports/deliverables of the Project as stipulated hereunder;

Monthly/ Quarterly Reports:

The Consultant firm will provide written reports on their progress to Chief Engineer/CSD Director/Convener MEPCO on Monthly basis and quarterly basis.

Completion Reports:

The Completion reports are to be provided to the Chief Engineer/CSD Director/Convener MEPCO. The Consultant firm may be required to present the report to BOD MEPCO, if required.

APPENDIX C

Key Personnel

The Consultants' key personnel details will be provided by the Consultants.

Appendix D

Breakdown of Contract Price in Local Currency

APPENDIX E

Services & Facilities to be provided by the Client and counterpart Personnel to be Made Available to the Consultants by the Client.

1. Services & Facilities to be Provided by the Client

(Not Used)

2. Counterpart Personnel to be Made Available to the Consultants by the Client

(Not used)

IV. TENDER FORMS

FORM OF TENDER/Bid SECURITY
(Bank Guarantee)

Guarantee No. _____
Executed on _____
Expiry Date _____

Letter by the Guarantor to the Purchaser

Name of Guarantor (Bank) with Address: _____

Name of Principal (Tenderer) with address: _____

Penal Sum of Security (express in words and figures): _____

Tender Reference No. _____ Date of Tender _____

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Tender and at the request of the said Principal, whether Guarantor above-named are held and firmly bounded to the _____ (herein after called the "Purchaser") in the sum stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the accompanying Tender numbered dated as above for _____ (Particulars of Tender) to the said Purchaser, and

WHEREAS, the Purchaser has required as a condition for considering said Tender that the Principal furnish a Tender Security in the above said sum to the Purchaser, conditioned asunder:

- (1) That the Tender Security shall remain valid for a period of _____ days after tender opening date.
- (2) that in the event of,
 - a) the Tenderer withdraws his Tender during the period of validity of Tender, or
 - b) The Tenderer does not accept the correction of his Tender Price.
 - c) failure of the successful tender to
 - i. Furnish the required Performance Security.
 - ii. Sign the proposed Contract Agreement/ Acceptance of P.O.

Then the entire sum be paid immediately to the said Purchaser as Liquidated Damages and not as penalty for the successful tenderer's failure to perform.

PROVIDED THAT the Guarantor shall forth with pay to the Purchaser the said sum stated above upon first written demand of the Purchaser without cavil or argument and without requiring the Purchaser to prove or to show grounds or reasons for such demand notice of which shall be sent by the Purchaser by registered post duly addressed to the Guarantor at its address given above.

PROVIDED ALSO THAT the Purchaser shall be the sole and final judge for deciding whether the Principal has duly performed his obligation to sign the Contract Agreement and to furnish the requisite Performance Security within the time stated above, or has defaulted in fulfilling said requirements and the Guarantor shall pay without objection the sum stated above upon first written demand from the Purchaser forthwith and without any reference to the Principal or any other person.

IN WITNESS WHEREOF, the above bounden Guarantor has executed the instrument under its seal on the date indicated above, the name and seal of the Guarantor being here to affixed and the represents duly signed by its undersigned representative pursuant to authority of its governing body

(Guarantor (Bank)

Witness:

1. _____

(Corporate Secretary (Seal)

2. _____

(Name, Title & Address) (Seal)

1. Signature _____

2. Name _____

3. Title _____

(Corporate Guarantor (Seal)

**APPENDIX (E): PERFORMANCE SECURITY
FORM OF PERFORMANCE
SECURITY**

(Bank Guarantee) Guarantee No. _____
Executed on _____
Expiry Date _____

Letter by the Guarantor to the Purchaser
Name of Guarantor (Bank) with Address: _____
Name of Principal (Tenderer) with address: _____
Penal Sum of Security (express in words and figures): _____
L.O.I/Contract No. _____ Dated _____
Letter of Acceptance No. _____ Dated _____

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Tender Documents and above said Letter of Acceptance (hereinafter called the Documents) and at the request of the said Principal, we the Guarantor above-named are held and firmly bound un to the _____ (herein after called the "Purchaser") in the sum of the amount stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has accepted the Purchaser's above said Letter of Acceptance for _____ (name of Contract) for the _____ (Name of Project).

NOW WHEREAS, if the Principal (Contractor) shall well and truly perform and fulfill all the undertakings, covenants, terms and conditions of the said Documents during the original terms of the Said Documents and any extensions there of that may be granted by the Purchaser, with or without notice to the Guarantor, which notice is hereby, waived and shall also well and truly perform and fulfill all the undertakings, covenants terms and conditions of the Contract and of any and all modifications of said Documents that may hereafter be made, notice of which modifications to the Guarantor being hereby waived, then, this obligation to be null and void otherwise to remain in full force and effect till _____ (Date) failing Our total liability under this Guarantee is limited to the sum stated above and it is a condition of any liability attaching to us under this Guarantee that the claim for payment in writing shall be received by as within the validity period of this Guarantee, which we shall be discharged of our liability, if any, under this Guarantee.

We _____ (the Guarantor), waiving all objections and defenses under the Contract, do hereby irrevocably and independently guarantee to pay to the Purchaser without delay upon the Purchaser's first written demand without cavil or arguments and without requiring the Purchaser to prove or to show grounds or reasons for such demand any sum or sums up to the amount stated above, against the Purchaser's written declaration that the Principal has refused or failed to perform the obligations under the Contract which payment will be effected by the Guarantor to Purchaser's designated Bank & Account Number i.e. _____

PROVIDED ALSO THAT the Purchaser shall be the sole and final judge for deciding whether the Principal (Contractor) has duly performed his obligation under the Contract or has defaulted in fulfilling said obligations and the Guarantor shall pay without objection any sum or sums up to the amount stated above upon first written demand from the Purchaser forthwith and without any reference to the Principal or any other person.

IN WITNESS WHEREOF, the above bounden Guarantor has executed this Performance Guarantee under its seal on the date indicated above, the name and corporate seal of the Guarantor being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body

(Guarantor (Bank) _____
Witness: 1. Signature _____
1. _____ 2. Name _____
_____ 3. Title _____
(Corporate Secretary (Seal)
2. _____
_____ (Name, Title & Address) (Seal) (Corporate Guarantor (Seal)