

Terms of Reference (ToR)

Conduct Operation and Maintenance for Operators in Earthquake Damaged Micro Hydro Projects in Jajarkot and West Rukum Districts

1. Introduction

The energy component of the Renewable Energy for Resilient Agri-Food System (RERAS) project is being implemented by the Central Renewable Energy Fund (CREF) within the Alternative Energy Promotion Centre (AEPC), with technical assistance from Renewable Energy for Rural Livelihood (RERL)—a joint initiative of UNDP and the Government of Nepal. CREF and RERL have signed a MoU to provide technical support to CREF in achieving RERAS project goals, including ensuring reliable electricity supply, agricultural mechanization, and the promotion of productive end-uses of agricultural products.

2. Background

RERL supports livelihood opportunities for the poor and marginalized communities through the provision of reliable electricity supply and enterprise development with a focus on increasing plant load factor and improving the quality of electricity and revenue generation. The need for reliable distribution, storage, and processing facilities is creating new energy markets within the agriculture value chains and food system. Recently, RERL has plan to rehabilitate seven micro hydro projects in earth quake damaged MHPs in Jajarkot and West Rukum districts to provide reliable and quality electricity services to the users.

However, most of the micro hydro projects' operators have limited knowledge/skill on operation and maintenance of the micro hydro project. They have faced difficulties if there arise any minor problems in the micro hydro system and the plant shutdown for a long time unless after repaired the plant from technical person from the companies. Thus, RERL intends to upgrade/enhance the skill of operators of micro hydropower projects to be able to smooth operation and minor maintenance on their own.

In this regard, RERL seeks eligible and qualified Consulting Firms for MHPs Operation and Maintenance Training for Operators in selected Micro Hydro projects in Jajarkot and West Rukum districts as per operation and maintenance guidelines of AEPC.

3. Objectives

The main objective of the training is to enhance the capacity of the micro hydropower project's operators for the smooth operation and minor maintenance of the system. However, the specific objective of the training is:

- To ensure the availability of skilled and competent human resources (Operator) for the smooth operation and minor maintenance of MHPs
- To enhance the capacity of operators to troubleshoot and carry out minor repair and maintenance works

4. Scope of Work (Activities)

The scope of the assignment will be, but not limited to, the following-

- Prepare training content in line with the AEPC micro hydro operators' training manual and finalize the training content with the consultation of RERL staff.
- The consultant shall conduct a 10-day event in appropriate site of MHPs in Jajarkot or West Rukum

- The selection of the participants will be finalized by the RERL field staff to conduct practical training.
- 15 operators will participate in the training from selected MHPs
- All the logistics, transportation, equipment and other necessary arrangements for participants (operators) in the training will be managed by the RERL.

5. Deliverables:

- Completion of training event with final completion training report to RERL.

6. Time and Budget

The training program should be completed within 1 (one) month after signing the contract agreement and the reporting should be done within one week of the completion of the training. The date of the training will be jointly finalized with RERL and the Consulting Firms/Organizations. All field levels of training logistics will be provided/managed by RERL.

The transportation of the resource person's cost will be provided by RERL after submission of actual tickets, bills and any other supporting documents.

7. Qualification of the proposed Human Resource of the Consulting Firms /Organizations

The proponent should be Nepalese Organizations / Consulting Firms legally registered with sufficient relevant human resources, facilities, and equipment required to accomplish the task.

The team should be composed of a Training Coordinator, qualified professionals to deliver theoretical and practical classes, and a training assistant. They should have extensive knowledge and experience in the Micro Hydro Power sector.

7.1. Technical Expert- Electromechanical

The trainer should have a bachelor's degree in electrical engineering with 10 years of experience in the micro hydro sector. S/he should have an in-depth knowledge and experience of micro hydro operators' training as well as policies, procedures, guidelines, and standards of quality assurance of the micro-hydro project.

7.2. Training Assistant

The assistant should have at least 5 years' experience in the energy and micro hydro sector with an intermediate degree or equivalent in Mechanical Engineering.

8. Documents to be submitted by the Firm (Eligibility Criteria)

S.N.	List of Documents
1	Copy of Company/Firm Registration Certificate with updated renewal
2	Copy of VAT Registration Certificate
3	Copy of TAX Clearance Certificate of F. Y. 2080/81
4	Latest Signed Resume of resource persons (as per ToR)
5	Financial Proposal with signed cover letter including VAT (as per given format)
6	Experience of Firm and individual that signifies the working knowledge in micro hydro project operators' training

9. Selection/Evaluation Process

The selection will be followed based on the Least Cost Method

10. Acceptance of Proposal

All rights are reserved with AEPC/RERL either to approve or disapprove of any proposal without giving any reasons whatsoever. If needed, the consultant will be asked for modifications and presentations of the proposal before approval.

Annex-1

10 Days MHPs Operator Training in Jajarkot and West Rukum Districts							
S.N.	Activities	Unit	Days	Number	Rate	Amount NPR	Remarks
1	Remuneration for Resource Persons						
1.1	Lead Trainer	Person/Day	12				
1.2	Training Assistant	Person/Day	12				
	Total Consulting fee (Sub Total)						
2	Training Cost -						
2.1	Training Materials	Lump sum					
2.2	Local Transportation (Resource Person)	Person/Day					
	Sub Total						
	Total Program Cost Rs.						