

# Terms of Reference (ToR) For

### "Mini / Micro Hydro Site Engineer" in different Provinces

#### 1. Introduction

The Government of Nepal (GoN) and External Development Partners supporting Nepal's rural and renewable energy sector have designed National Rural and Renewable Energy Programme (NRREP) to be implemented by AEPC. AEPC/NRREP aims accelerating renewable energy service deliver to remote rural households to benefit men and women from all social groups contributing to a more equitable economic growth.

#### 2. Background

The Community Electrification Section (CES) is one of the major sections of AEPC which is responsible for coordination and implementation of community electrification activities throughout the country in demand driven and public-private-partnership approach. It helps to electrify communities through the establishment of Mini/Micro Hydropower Projects and AEPC/NRREP provides subsidy and technical assistance to develop up to 1000 kW (1 MW) capacity Mini/Micro Hydropower Projects.

AEPC/CES has now been providing technical support and backstopping to community people for completing ongoing Mini/Micro Hydropower Projects. To provide technical backstopping, maintain quality work and expedite implementation of MHPs, further it felt need of Mini/Micro Hydro Site Engineer at under-construction projects. Therefore AEPC/CES has planned to recruit Mini/Micro Hydro Site Engineers in different Provinces.

Mini/Micro Hydro Site Engineer from competent individuals will be prepared for the following purposes.

- 1) Provide technical support, social mobilization, capacity building of Users Committee and Installer Company.
- 2) Coordination with local governments and relevant stakeholders
- 3) Expedite Mini / Micro Hydropower Project implementation.
- 4) Quality assurance of Mini/Micro Hydro Projects construction.

#### 3. Objectives

#### 3.1 Development Objectives

The development objective of AEPC/NRREP, which is common to its program Components, is:

"To improve the living standard of rural women and men, increase employment of women and men as well as productivity, reduce dependency on traditional energy and attain sustainable development through integrating the alternative energy with the socioeconomic activities of women and men in rural communities."

#### 3.2 Objectives of the Assignment

The main objective of the present assignment is –

• To identify Mini/Micro Hydro Site Engineer for Mini / Micro Hydro Projects and mobilize Site Engineers at individual M/MHPs at different provinces.

#### 4 Scope of Work

Site Engineer is a site based position and needs to have strong technical and managerial background on Mini/Micro Hydro technologies. Site Engineer will work with the CES Team and overall guidance of Program Manager of AEPC/NRREP/CES.

Detail responsibility of Site Engineer will be as per Job Description (JD)  $\mathbf{Annex} - \mathbf{1}$ .

#### 5 Inputs from AEPC/ NRREP/ CESC

- a. AEPC/NRREP budget and relevant documents / materials and information
- b. Appropriate training, information, instruction
- c. Input from relevant AEPC / CES Team

#### 6 Time and budget

#### 6.1 Time frame

• Site Engineer will be contracted in an annual basis or as per need.

#### 6.2 Budget / Remuneration

The budget has been allocated and approved in AEPC Annual Work Plan. Remuneration of Mini/Micro Hydropower Site Engineer will be as per AEPC guidelines and will be mentioned in individual contract agreement.

#### 7 Qualification of Site Engineer

He/She should have a background in Civil / Electrical / Mechanical Engineering and minimum qualification must be as mentioned in **Annex – 1 (Job Description)**.

#### 8 Experience of Site Engineer

He / She should have working experience in Micro/Mini Hydro Power, Environment and Business / Livelihood promotion sector. Detail experience of Site Engineer has been mentioned in  $\mathbf{Annex} - \mathbf{1}$  (Job Description)

#### 9 Documents to be submitted by the interested Individual / expert.

- Application letter including date and signature
- Updated and signed Curriculum Vitae (CV)
- Copy of academic qualification certificates
- Copy of Citizenship
- Copy of Membership Certificate of Nepal Engineering Council
- Experience certificates
- A passport sized photograph
- Other relevant documents
- A filled and signed format as per **Annex II**, (**Personal Information**)

#### 10 Selection Criteria

Criteria for selecting the M/MHPM for preparing the roster will be as per AEPC guidelines. **Annex–III**, (Selection Criteria)

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#### **Job Description (JD)**

**Post Title** : Mini/Micro Hydro Site Engineer

Duty Station: Remote construction sites of Mini/Micro Hydro Projects in different Rural

Municipalities/ Municipalities of different districts.

**Duration** : Annual contract (Possibility of extension)

#### **Responsibilities**:

Site Engineer is a full time site based position and candidates need to have a strong technical and managerial background in Mini/Micro Hydro technologies. Site Engineer will work with the CES Team and overall responsibility provided by Section Head of AEPC/CES. The incumbent will be fully responsible for ensuring proper completion of specified Micro/Mini Hydro Power Plant and other M/MHP related works.

#### More specific responsibilities will be as per recruitment, but could include:

- 1) The overall responsibility for managing the construction and installation of the project to ensure commissioning within the stipulated time frame and within stipulated budget.
- 2) Coordinate at different levels of stakeholders: community, Rural Municipalities/ Municipalities, District Coordination Committee.
- 3) Review technical designs related to Civil and Electro-Mechanical works of M/MHPs.
- 4) Support Community/Users Committee to prepare and collect necessary documents for contracting, sub-contracting or outsourcing of services and to facilitate the process.
- 5) Provide support to contractor/Users Committee in the M/MHP site verification and report to CES.
- 6) Closely monitor, observe, as well as supervise the construction of civil works, transportation of electro mechanical equipments, prepare EDF, installation of electro mechanical equipment and erection of Transmission & Distribution lines etc. as per AEPC's guidelines and DFS/site verification report.
- 7) Constantly monitor and assure the quality and workmanship of all construction works at the site and keep proper record of all quality assurance related documentation.
- 8) Facilitate and provide support to Users Committee to collect the community cash contribution, bank loan, or financial support from other agencies.
- 9) Coach and mentor the Users Committee in order to make him/her capable of fund management and proper account keeping of the MHP and be updated on the financial situation of the project at any time.
- 10) Support Users Committee to keep proper records, work attendance record of construction works, materials expense record, and store keeping.
- 11) Support Users Committee for financial auditing and public auditing.

- 12) Prepare work plan / action plan to complete activities of M/MHP within stipulated time and keep the work schedule updated.
- 13) Provide technical and managerial guidance to the installation company on site while work is in progress.
- 14) Prepare monthly progress report of field works (civil, electro-mechanical and others)
- 15) Report instantly any issues (technical, social etc.) in the M/MHP and facilitate to resolve the matter.
- 16) Any other work assigned by AEPC/CES team and Section Head.

#### **Qualification and Experience**:

A Mini/Micro Hydro Site Engineer should be knowledgeable in survey and design related to Mini/Micro hydropower with a Bachelor's degree in Engineering (Civil/Electrical/Mechanical) with 1 year of experience or Diploma in Engineering in (Civil/Electrical/Mechanical) with 3 years of experience in similar work.

S/he should have thorough knowledge of -

- Technical parameters, guidelines and standards of Micro/Mini Hydropower as well as quality assurance of the sector.
- Practical field based experience in Micro/Mini Hydropower development will be an asset and will be given priority.
- Experience of project management from construction phase of a project will be an asset and will be given priority.
- Report writing and computer skills are mandatory.

## **Personal Information**

Name	
Academic Qualification	
Passed Year	
Years of Experience	
Field of experience	
Availability or commitment for work (Please mention year)	
Minimum expected Salary per month in NPR.	
Contact Address:	
E-mail address,	
Phone No.	
Mobile No.	
Signature	
Date	

#### **Selection Criteria**

- a) As per AEPC Administrative Guidelines.
- b) Mini/Micro Hydro Site Engineer will be finalized as per required on the basis of:
  - Academic qualification,
  - Years of experience,
  - Field of experience,
  - Time availability / duration (Commitment Year) and
  - Performance in interview.
- c) Selected Site Engineers will be informed after finalization from the pool of qualified applicants.
- d) AEPC/NRREP will sign contract with Mini/Micro Hydro Site Engineer as per need.