DETAIL IMPROVISATION STUDY REPORT

of

…… Khola Micro Hydro Project,

…… kW, …… HH

…….. Rural Municipality/Municipality, …….. District

Previous VDC.....Ward.....

Submitted to:

Alternative Energy Promotion Centre
Community Electrification Sub-Component
Khumaltar, Kathmandu

Submitted by:

…….
Address ……
Email Address ……......, Telephone No. …….

(Date)

Outline for Improvisation Report Preparation

GENERAL

i. Salient Features (inclusive of GPS Coordinates: intake, forebay and powerhouse)
ii. Executive Summary
iii. Table of Contents
iv. Acronyms and Abbreviations

CONTENTS

1. Introduction
2. Objective
3. Scope of the work and limitations
4. Methodology
   - 4.1 Desk Study
     - 4.1.1 Study of TRC Approved DFS Report
     - 4.1.2 Study of Final Approval
     - 4.1.3 Study of T & C, PoHV Reports
   - 4.2 Field Study for improvisation
     - 4.2.1 Site survey and data collection
     - 4.1.2 Data compilation and analysis
     - 4.1.3 System re-design and report preparation
5. General Overview of the Project
   - 5.1 Background of the project
   - 5.2 Project Information
     - 5.2.1 Client / User's Committees Information
     - 5.2.2 Local Government Information
     - 5.2.3 Previous Salient Features (As per DFS)
   - 5.3 General Project description
     - 5.3.1 Location and accessibility (Route to reach project site, GPS Coordinate (intake, forebay and powerhouse), tentative distance in km and transportation facilities etc.)
     - 5.3.2 Settlement pattern and load centers
     - 5.3.3 Socio economic condition
     - 5.3.4 Hydrology existing water use pattern
     - 5.3.5 Energy use pattern, highlighting the present situation

5.3.6 Existing and possible / potential end-uses

5.4 Overview / condition of the project

5.4.1 Civil Component

5.4.2 Mechanical Component

5.4.3 Electrical Component

5.4.4 Plant size and power requirement (In present condition)

5.4.5 Problem / Issues and corrective measures

5.4.6 Status of NEA Grid line

6. Detail design and cost estimate for improvisation

6.1 Analyse data and information carried out during field survey.

6.2 Project layout and detail design of civil components.

6.3 Detail design of Mechanical and Electrical equipments.

6.4 Details of Bill of Quantities (BOQ)

6.5 Cost estimates,

6.6 Financial analysis

7. Financial sources

8. Conclusion and recommendation

9. Photographs

- Meeting with Users Committee / Community People / Local Government
- Water measurement
- Head measurement
- Civil structures (intake, headrace canal, desilting basin, forebay tank, anchor block, support piers, power house, tailrace)
- Mechanical equipment (Track races, Gate/valves, penstock pipe, Turbine etc.)
- Electrical Equipment (Generator, ELC, Ballast tank, T&D line etc.)
- Load centre, etc.

Note: Follow “Guidelines for Detailed Feasibility Studies of Micro-Hydro Projects, 2014, AEPC for re-design of MHP".