Initial Environmental Examination Report

PROPOSED UPPER KADURUGALDOLA MINI HYDROPOWER PROJECT

2MW

PROJECT PROPONENT

S.N. Sabaragamuwa Hydro (Pvt.) Ltd. 17 B Council Avenue Rathnapura

PROJECT APPROVING AGENCY

CENTRAL ENVIRONMENTAL AUTHORITY

April-2015

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ABBREVIATIONS

CDM	Clean Development Mechanism
CEA	Central Environmental Authority
DSD	Divisional Secretariat Division
DWC	Department of Wildlife Conservation
GHG	Green House Gases
GN	Grama Niladhari
GO	Government Organization
GPS	Global Positioning System
IEEA	Initial Environmental Examination Report
IUCN	International Union for Conservation of Nature and Natural Resources
LOI	Letter of Intent
MONR	Ministry of Environment and Natural Resources
MOU	Memorandum of Understanding
NBRO	National Building Research Organization
NGO	Non- Governmental Organization
NRMC	Natural Resource Management Centre
SEA	Sustainable Energy Authority
TOR	Terms of Reference

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EXECUTIVE SUMMARY

The Initial Environmental Examination (IEE) IEE report for the proposed Upper Kadurugaldola Mini Hydro Power Project was conducted to ensure that the proposed project will preserve Biodiversity, be environmentally sustainable, economically viable and socially acceptable. The possible environmental impacts and suitable mitigatory measures at the planning stage and commissioned stage of the project are also addressed.

This report covers the environmental studies carried out at the project site of the proposed Upper Kadurugaldola Mini Hydropower. Padi dola, which is a source for the Upper Kadurugaldola Mini Hydropower project, is a tributary of the Bambarabotuwa oya which flows to the Kalu gnaga. This project involves the constructing a weir across the Padi dola at Bambaragala at 590m high the energy of 5.9 GWh annually by using two sets of 1000 kW turbines at the power house. The geographic co-ordinates of the weir site are at 06.42.995'N 80.32.698'E The diverted water from the Padi dola flows through the 280 m long penstock leads to the power house. Finally the water will be released back into the Padi dola at 306m msl level. The power house will be located at the geographical coordinates of 6° 42.829'N 80° 32.340'E The generated electrical power will be linked to the National Grid at 33,000 V at an interconnection point about 200m away from the proposed power house.

The project activities will encompass the felling of a number of trees and minimal land clearances and civil construction works. The building the weir and short headrace channel, and permanent constructions such as fore bay, penstock, powerhouse, and tail race channel as well as temporary construction work such as shelters and stores will be the main construction works.

Specialized resource personnel from a range of disciplines were consulted to identify the possible impacts and to propose suitable mitigatory measures in order to make the Proposed Upper Kadurugaldola Mini Hydro Power Project feasible from hydrological, conserving

biodiversity, ecological and sociological aspects and to ensure that the proposed project is both economically viable and environmentally sustainable.

The study revealed that the impacts caused by the project in the areas of sociology, ecology, hydrology and geology will not be irreparable or significant and with the application of recommended mitigatory measures, easily remedied.

The proposed project aims to tap an indigenous renewable resource, connecting the energy produced to the National Grid. Thereby the proposed project will meet the growing demands for electricity, contributing to the development of the country in an environmentally sound manner.