UCR Program Additional Verification Guidance for Large Hydel Projects (> 15MW installed capacity)

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1. BACKGROUND

Universal Co2 Emission And Offset Registry Pvt Ltd (Universal Carbon Registry or UCR) is a private limited company located in India and has launched a low cost, simple and robust voluntary carbon standard and accompanying voluntary carbon registry platform (UCR platform or Registry) to enable a sustainable and low carbon world economy. All projects entering UCR are subject to project verification by qualified UCR-Approved Verifiers for the duration of the Project's enrollment in UCR, unless prior verification reports are available for the vintage years assessed. UCR rules require approved greenhouse gas (GHG) Offset Projects to undergo an independent verification to confirm project eligibility based on the Approved Postive List of projects and conformance to the approved UCR Standard.

This Verification Guidance is applicable to auditors and verifiers approved under the UCR and who are audting or verifying large hydropower projects. This guidance tool or document for Large Hydel Projects has been developed based on the need for additional sustainability assessment tools for large hydel or hydropower projects (large scale hydropower under UCR Standard definitions would mean or imply any hydropower or hydel project greater than or exceeding 15MW in installed capacity) at a time of a resurgence of interest in large hydropower as a result of increasing requirements for a low carbon economy, energy security and improved water management. **This tool is not intended or applicable for hydel or hydropower projects whose installed capacity is less than or equal to 15MW.**

UCR Verifiers, when applying this guidance document, shall also ensure compliance with the applicable requirements stipulated in the UCR Program Manual and UCR Standard. **This tool and its scoring system can be incorporated into the main verification report or as a standalone document as per the preference of the auditor and verifier.**

2. Sustainablity of Large Hydropower Projects

The UCR acknowledges that all large hydropower projects are framed by national regulations. First and foremost, a project is expected to comply with the laws and concessions/permits of the government. This guidance tool is a complementary tool, used by project owners, sellers, verifiers and auditors of the UCR on a voluntary basis and in the spirit of continuous improvement, that identifies opportunities for improvement with respect to sustainability criteria relevant to an international context. Compliance with relevant regulatory requirements is expected for all projects, and is an essential component of good practice. National or state requirements may be more stringent than the guidance in this tool and hence in cases of such as compensation or mitigation efforts/measures that a project owner should not legally go above or below are clearly laid out by the regulators. Compliance with regulatory requirements does not equate to a particular scoring level in this guidance tool.

Verification Approach

The emphasis is not on an overall single score or a pass/fail for a project, but rather on provision of a sustainability profile that assists the buyer of carbon credits from the said hydropower project to understand the strengths, weaknesses and pathways towards sustainability improvements of such large hydro projects. In carrying out UCR Additional Verification Guidance for Large Hydropower Project Activities, UCR Verifiers shall:

(a) Be creating a sustainability profile for the project activity. Verifiers will provide an opinion or a grading scale on whether the registered UCR Project Activity has been developed and managed sustainably, provides national, regional, and local benefits;

(b) Evaluate large hydro projects on sustainable development criteria by considering synergies and trade-offs amongst economic, social and environmental values. This balance should be achieved and ensured in a transparent and accountable manner, taking advantage of expanding knowledge, media reports and history of such activites since the project has already been commissioned and is operational at the time of verification or audit.

(c) Ensure that the opinion or findings have scoring statements at levels 1, 2, 3, 4 and 5 (**Level 1** - There are significant gaps relative to basic good practice, **Level 2** - Most relevant elements of basic good practice have been undertaken but there is one significant gap, **Level 3** describes basic good practice on the sustainability topic, **Level 4** - All elements of basic good practice have been undertaken and in one or more cases exceeded, **Level 5** describes proven best practice on a particular sustainability issue that is demonstrable in multiple country contexts. Level 5 statements have been designed with the idea that they are goals that are not easy to reach, but have been proven that they can be attained in multiple country contexts, and not only by the largest projects with the most resources at their disposal) on topics considered to be the most pertinent according to the UCR verifier or as in the *sub para (d)* below.

(d) Ensure that **at a minimum** the following *topics** are addressed or scored upon:

1. Environmental and Social Issues Management
2. Project Benefits
3. Project Affected Communities and Livelihoods or Resettlement
4. Biodiversity and Invasive Species

**To accommodate the amount of variety that will be encountered, verifier and auditors can identify a topic as Not Relevant if evidence presented supports such a conclusion.*

Objective Approach

In carrying out this UCR Additional Verification Guidance the UCR verifier or auditor may choose to conduct independent research to identify issues that may have been raised in relation to the project (e.g. media or internet search). The term objective evidence refers to evidence brought to the attention of the verifier or auditor by relevant documentation and research or by interviews.

Topics:

Environmental and social issues management: may include, for example: aquatic and terrestrial biodiversity, threatened species, critical habitats, ecosystem integrity and connectivity issues, water quality, erosion and sedimentation, project-affected communities, ethnic minorities, resettlement, cultural heritage (both physical and non-physical), and public health. Exceptions may be for topics where there was very good documentation of the pre-project condition and commitments were made for changes that would be measured against this pre-project baseline (e.g. resettlees experiencing improved living standards). Environmental and social issues associated with the operating hydropower facility that extend beyond the jurisdictional boundaries in which the facility is located would need to have been identified and included in management plans. Ongoing issues are issues that have been of concern repeatedly for a given area over a longer period of time, and may relate to legacy issues. Legacy issue refers to impacts of previous projects that are unmitigated or not compensated with a similar good or service, or long-standing issues with a present (existing) project, or pre-existing issues in the present location of a new project. Emerging issues may relate to on-site changes (e.g. riverbank erosion exposing cultural heritage artefacts

or impacting on land-use or livelihood activities) or to broader circumstances (e.g. policy changes, changes in relevant legislation or standards, trends in emerging practice, changing community expectations, etc). Where identified or ongoing issues have been resolved through a mediation, legal, approval or licensing process, facility owner/operators would need to have some clear communication on the issue and the resolution so stakeholders understand the issue was recognised, evaluated and resolved. Land rehabilitation is the process of returning project-affected land to some degree of its former state after disturbance or damage associated with project implementation.

Project Benefits: Benefits that can be leveraged from the project; examples include: capacity building, training and local employment; infrastructure such as bridges, access roads, boat ramps; improved services such as for health and education; support for other water usages such as irrigation, navigation, flood/drought control, aquaculture, leisure; increased water availability for industrial and municipal water supply; etc.

Project-Affected Communities and Livelihoods and Resettlement: Resettlement is the process of moving people to a different place to live, because due to the project they are no longer allowed to stay in the area where they used to live. Verifiers must identify the actions by project owner, that have been taken to address resettlement. It would typically include identification of those being resettled; the socioeconomic baseline for the resettlees; the measures to be implemented as part of the resettlement process including those relating to resettlement assistance and livelihood support; monitoring, reporting and review provisions.

Project affected communities are people in the area surrounding the hydropower project who have been affected either positively or negatively by the hydropower facility development and its associated infrastructure. Mitigation measures could be training and capacity building; education; health services; employment; transportation; contributions to provide for cultural traditions or events, etc.

Livelihood refers to the activities required for a means of living. Scoring could be based on measures to address project affected communities, works to protect downstream riparian lands; downstream flow regime agreements to enable sustained livelihoods for downstream communities; access agreements to project lands to enable continued access to sacred sites, community forest, traditional medicinal plants; support for new industries; protection of sacred sites; etc.

Biodiversity and Invasive Species: Measures to address biodiversity and potential impacts arising from pest and invasive species associated with the operating hydropower facility may include, for example: catchment protection, creation of reserves, habitat conservation and improvement, species management plans, translocations, habitat rehabilitation, new habitat creation, managed flow releases, etc. Measures to address passage of aquatic species may include, for example: fish ladders, fish elevators, catch and release programs, fish hatcheries, re-stocking programs, mechanisms for diversion away from turbines for downstream passage, assisted cues (water chemistry, operational conditions), etc. Measures to address invasive species may include, for example: physical barriers to pest species passage, pollution control, physical removal or containment, chemical treatment, reservoir water residence times, managed flow releases, etc.