



CHANJU I HYDRO ELECTRIC PROJECT

Project Title	Chanju I Hydro Electric Project
GS ID of Project	7154
Version of the Validation Report	4.2
Completion date of the Validation Report	06/03/2025
Date of Design Certification	27/02/2023
Version number of the corresponding Design Certification	NA
Project Representative	EKI Energy Services Limited
Project Developer	IA Hydro Energy Private Limited
Project Participants and any communities involved	NA
Activity Requirements applied	Renewable Energy
Scale of the Project Activity	Large Scale

Methodology (ies) applied and version number	ACM0002 Version 22.0 “Grid-connected electricity generation from renewable sources
Product Requirements applied	GHG Emission Reduction & Sequestration
Project Cycle	Retroactive
Other Requirements applied	NA

VKU Project ID	VKU.VAL.18.24_GS_7154
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A. OBJECTIVE

EKI Energy Services Limited (Project Representative) and IA Hydro Energy Private Limited (Project Developer) has contracted VKU Certification Private Limited to conduct validation and certification for renewal of crediting period for the GS4GG project activity (GS_7154) “**Chanju I Hydro Electric Project**”.

The objective of this validation (RCP) is to have an independent third-party assessment of the GS4GG PDD and compliance with the GS requirements /6//7//8//9//10//11//12//13//14//15//16//17//46/ as described in the Gold Standard documentation and supporting documents provided by the project representative /26//27//28//29//30//31//32//33//34//35//36//37//38//39//45//47//48/. The Project Activity (GS_7154) is applying for validation certification of renewable of crediting period under GS4GG programme requirement and it is seen as necessary to provide assurance about:

- Changes in the Project as related to the GS4GG General Eligibility Criteria.
- Incorporation of any relevant updates to the GS4GG Requirements.
- Re-definition of Baseline Scenario and any impact of change on the Eligibility Principles, Criteria and Requirements.
- Any Gold Standard activity, product and methodology-specific Requirements.
- Demonstration of Ongoing Financial Need.
- The impact of new relevant national and/or sectoral policies and circumstances on the baseline.
- The correctness of the application of an approved baseline methodology for the determination of the continued validity of the baseline or its update.
- The estimation of emission reductions for the applicable crediting period.

The Project Activity is a green field activity with the objective to generate clean electricity by using potential energy of water which is a renewable source of energy, the generated green electricity contributes to climate change mitigation efforts. The project activity generates electricity using hydro power and converts it into kinetic energy using turbines, which drives the alternators to generate energy. This project activity is a large -scale hydro power project and requirements of the applied methodology “ACM0002- Grid-connected electricity generation from renewable sources” Version 22.0 /19/. The project will replace anthropogenic emissions of greenhouse gases (GHG’s) estimated to be approximately 139,035 tCO₂per annum during over the crediting period of 26/07/2022 to 25/07/2027 (Inclusive of both dates, thereon displacing 156,271.79 MWh/year amount of electricity from the generation-mix of power

plants connected to the Indian electricity grid, which is mainly dominated by thermal/ fossil fuel-based power plant.

B. SCOPE AND CRITERIA OF THE VALIDATION

The validation scope is defined as the independent and objective review of the Key project information & project design document PDD /1/, monitoring plan and other relevant supporting document which is mentioned section 3.1 of this report. The information in these documents is reviewed against all applicable GS requirements including the baseline and monitoring methodology ACM0002 “Grid-connected electricity generation from renewable sources” Version 22.0/19/.

The documents /1/ /2/ /3/ /4/ /25/ /26/ /27/ /28/ /29/ /30/ /31/ /32/ /33/ /34/ /35/ /36/ /37/ /38/ /39/ /45/ /47/ /48/ has submitted to the VKU Assessment team by project representative were reviewed against the following standards, methodology, tools and guidelines:

- GS4GG Principles and Requirements; Version 1.2, dated: 23/10/2019 /6/
- Gold Standard Validation and verification standard; Version 1.0, dated: 06/03/2023 /10/
- CDM Validation and Verification standard for project activities; Version 3.0 /18/
- Renewable energy activity requirements; Version 1.4, dated: 16/08/2021 /14/
- GHG Emissions Reduction & Sequestration Product Requirements; Version 2.2, dated: 28/08/2023 /15/
- Safeguarding principles & requirements; Version 2.1, dated: 29/06/2023 /8/
- Stakeholder consultation and engagement requirements; Version 2.1, dated: 14/06/2022 /7/
- Design change requirements; Version 1.1, dated: 14/04/2023 /9/
- Site visit and remote audit requirements and procedures; Version 2.0, dated: 30/05/2023 /10/
- Applicability of minimum site visit requirement by VVB; Version 2.0, dated: 16/08/2021 /12/
- Gold Standard Validation & verification body requirements; Version 2.0, dated: 14/01/2021 /13/
- Template Guide: Key Project Information & Project Design Document (PDD) Version 1.5, dated 29/06/2023 /17/
- Gold standard eligible impact quantification methodologies; Version 2.4, dated: 22/06/2023 /16/
- ACM0002 “Grid-connected electricity generation from renewable sources” Version 22.0/19/

- Tool 21: Tool for the demonstration and assessment of additionality Version 07.0.0 /20/
- Tool 7: Tool to calculate the emission factor for an electricity system Version 07.0.0 /21/
- Design Certification Renewal Requirements: CDM Projects Transitioning to GS4GG / 38/
- Tool 11: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period Version 3.0.1 /22/
- CDM – CO₂ Baseline Database (CO₂ Baseline Database for Indian Power Sector); Version 19.0 /23/
- VKU QMS Procedures and SOPs – Internal procedural documents of VKU Certification Pvt. Ltd. /25/

Based on the recommendations in the GS4GG Validation and Verification Standard for Project Activities, Version 1.0/10/ the validation team has employed a rule-based approach, focusing on the identification of significant risks for monitoring plan and the generation of GS-VERs.

The validation is not meant to provide any consulting to the project developer and project representative/coordinating managing entity. However, stated requests for clarifications and corrective actions/forward action request may have provided input for the improvement of the project design. While carrying out the validation, VKU Certification Private Limited determines if the Project Activity complies with the requirements of GS4GG validation and verification standard v1.0/10/, GS4GG principle and requirements v1.2/6/, the applicability conditions of the selected methodology /19/, guidance issued by the Gold Standard and also assess the claims and assumptions made in the final GS4GG Key Project Information & Project Design Document (PDD) /1/ without limitation on the information provided by the project developer.

C. VALIDATION METHODOLOGY AND PROCESS

The method and process are undertaken by a competent validation team (refer Section 2.1) which involved the following steps:

1. The desk review of initial documents and evidence submitted by the project representative in context of the GS4GG criteria along with CDM rules and guidelines issued by CDM EB.
2. SOP 4 of VKU QMS Process; Version 3.0, dated: 24/11/2023
3. Conducting onsite audit, interview/interactions and documentation process with the project representatives, Project developer, site personal and other stakeholders.
4. Reporting audit findings with respect to non-conformities as CLs, CARs and FARs as well as closure of the findings, as appropriate and preparing a draft validation report based on the auditing findings and conclusions.

5. Technical review of the draft validation report along with other documents as appropriate by an independent technical reviewer and approval of the validation report
6. The resolution of outstanding issues and the issuance of the final validation report and opinion.

The report is based on the assessment of the final GS4GG Key Project Information & Project Design Document (PDD) /1/, ER Sheet/2/, onsite audit/ 44/, application of standard auditing techniques as per the GS4GG general requirement for all audit instances including but not limited to document reviews and stakeholder interviews, review of the applied methodology and their underlying formulae and calculations.

This report contains the findings in term of CARs, CLs or FARs and resolutions from the validation and a validation opinion on the implemented Project Activity thus confirming the monitoring plan is sound and reasonable and meets the stated GS4GG requirements, host country criteria and correctly applied the GS approved methodology /19/ and tools /20/ /21/ /22/.

D. VALIDATION CONCLUSION

VKU Certification Pvt. Ltd. has successfully completed the validation process for the GS Project Activity, namely the "**Chanju I Hydro Electric Project “(GS_7154)**, as outlined in the Project Design Document (PDD) /01/ and supporting document /2/ /3/ /4/ /25/ /26/ /27/ /28/ /29/ /30/ /31/ /32/ /33/ /34/ /35/ /36/ /37/ /38/ /39//45/47/48/. The validation confirms that the project adheres to all relevant GS requirements for Project Activities, also compliance with methodologies, tools, guidelines.

The monitoring methodology ACM0002 “Grid-connected electricity generation from renewable sources” Version 22.0/19 / has been appropriately applied to the project activity for the whole crediting period (5 yeas) and is deemed applicable/19/.

The validation (RCP) process was conducted in accordance with ISO 14064-03:2019/24/ and GS standards, along with host country criteria. Our approach is risk-based, drawing on an understanding of the risks associated with estimated GHG emissions data.

VVB has conducted onsite visit as per the Clause 3.1.2 of the "Site Visit and Remote Audit Requirements and Procedures" which stipulates that Onsite audit/44/ can be conducted for this validation (RCP). Despite a comprehensive review of document of project activity, VVB has conducted onsite visit and stakeholder interviews. VKU has found that the Project Developer (PD) has provided sufficient evidence for draw a conclusion at the project's current stage. As a result, VKU Certification Pvt. Ltd. asserts the issuance of a positive opinion based on our thorough validation process.

- Start date of the project activity: 23/07/2011 (Start date of the project activity is the date on which the first purchase order was realized)
- **1st Crediting period:** 26/07/2017 to 25/07/2022 (Including first date and last date).

- **2nd Crediting Period:** From 26/07/2022 to 25/07/2027 (Including first date and last date).

Crediting Period Length: 5 Years

Validated estimated GHG emission reductions and carbon dioxide removals for the project crediting period:

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
26/07/2022 to 25/07/2023	139,035 t CO ₂	0 tCO ₂	139,035 t CO ₂
26/07/2023 to 25/07/2024	139,035 t CO ₂	0 tCO ₂	139,035 tCO ₂
26/07/2024 to 25/07/2025	139,035 t CO ₂	0 tCO ₂	139,035 tCO ₂
26/07/2025 to 25/07/2026	139,035 t CO ₂	0 tCO ₂	139,035 tCO ₂
26/07/2026 to 25/07/2027	139,035 t CO ₂	0 tCO ₂	139,035 tCO ₂
Total	695,175 t CO₂	0 tCO₂	695,175 tCO₂
Annual Average over the crediting period	139,035 t CO ₂	0 tCO ₂	139,035 tCO ₂

Sustainable Development Goals Targeted	Most Relevant SDG Target	SDG Impact
SDG-13: Take urgent action to combat climate change and its impacts (mandatory)	Target 13.2: Integrate climate change measures into national policies, strategies and planning	Impact- Low greenhouse gas Emission Indicator: 13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)

SDG-7: Ensure access to affordable, reliable, sustainable and modern energy for all	Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix	Impact- Electricity produced and supplied to the grid Indicator 7.2.1- Renewable energy share in the total final energy consumption
SDG-8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value Target 8.6: By 2020, substantially reduce the proportion of youth not in employment, education or training	Impact- Employment generated through project Indicator 8.5.1 – Average hourly earnings of female and male employees, by occupation, age and persons with disabilities Impact- Number of trainings Indicator 8.6.1 - Proportion of youth (aged 15-24 years) not in education, employment or training.

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1 EXECUTIVE SUMMARY

EKI Energy Services Limited (Project representative) has appointed VVB, VKU Certification Pvt. Ltd., as the independent validator to conduct validation and certification for renewal of crediting period for the Gold Standard Project Activity titled the " **Chanju I Hydro Electric Project " (GS 7154)** at Chamba district of Himachal Pradesh, India (referred to as the "Project Activity") (for crediting period 26/07/2022 to 25/07/2027 (inclusive of both dates)

This report summarizes the findings of validation of the project, performed on the basis of Gold Standard criteria Gold standard for global goals (GS4GG), as well as criteria are given to provide for ensuring consistent project operations, monitoring, and reporting. The report includes validation outcomes, resolutions, and a validation opinion.

The implementation of project activity ensures energy security, diversification of the grid generation mix a sustainable growth of the electricity generation sector in India. The project being a renewable energy generation activity, it leads to removal of fossil fuel dominated electricity generation. The project activity results in reductions of greenhouse gas (GHG) emissions that are real, measurable, and verifiable and also plays beneficial role in the mitigation of climate change. This project activity is a large-scale hydro power project. The project will replace anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 139,035 tCO₂ per annum during over the crediting period, thereon displacing 156,271.79 MWh/year amount of electricity from the generation-mix of power plants connected to the Indian Electricity grid, which is mainly dominated by thermal/ fossil fuel-based power plant.

The Project Activity employs the ACM0002., version 22:/ 19/ Grid-connected electricity generation from renewable sources. This CDM methodology is also approved under the Gold Standard. The project activity is a 36 MW hydro power project, promoted by IA Hydro Energy Private Limited The project is located in the Northern power region and has been conceived for harnessing the power potential of Chanju Nallah, a tributary of Baira nallah and sub tributary of River Ravi. The project involves installation of three vertical axis Francis turbine generating units of capacity 12 MW each to generate 36 MW of power. Project utilizes a design head of 236.67 m and a design discharge of 16.85 m³/s. The reservoir area created by the diversion barrage is of 0.017 sq km and the power density is 2,117.64 W/m². The project was fully commissioned on 26/07/2017.

The objective of the project activity is to generate power from harnessing the water to meet the ever-increasing demand for power in India. The generated power is exported to the NEWNE grid (Now Indian Grid) via the sub-station at Kurthala (Line Length: 17.783 KM). The project is expected to produce 157,850 MWh of energy per year. The net electricity available for sale to the grid would be 156,271.79

MWh after an auxiliary consumption and transmission losses of 0.5% each. The project activity will displace the fossil fuel fired power generation of the grid and hence contribute to a reduction in the CO₂ Emissions.

Emission reductions attributable to the Project Activity adhere to Gold Standard for global goals (GS4GG) requirements for additionality. These project emission reductions are considered additional to what would occur in the absence of the Project Activity. The project activity is the installation of a new grid-connected renewable power plant/unit and this is not a CPA that has been excluded from a registered CDM PoA as a result of erroneous inclusion of CPAs. A summary of estimated sustainable development contributions in the final Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024 /1/ is as follows:

Sustainable Development Goals Targeted	SDG Impact	Estimated Annual Average	Unit or Products
SDG 13: Climate Action	Emission Reductions	139,035	GS-VERs
SDG 8: Decent Work and Economic Growth	Trainings Employee	1 1 ¹	Number of trainings and Employment generated through project
SDG 7: Affordable and Clean Energy	MWh of renewable energy generated	156,271.79	MWh/Annum

Validation serves as a thorough and independent assessment of the Project Activity against Gold Standard and GS requirements, monitoring plans, and compliance with relevant criteria. It ensures that the monitoring plan is sound and reasonable and meets the stated GS4GG requirements. Validation (RCP) is a mandatory step for all Gold Standard Voluntary projects, providing assurance to stakeholders regarding the project's quality and its intended generation of voluntary emission reductions (GS-VERs).

The transition of the project has to be done from GS to GS4GG and same information assessment team confirm from Transition Request Form/40/ which is available on [SUSTAINCERT \(https://platform.sustain-cert.com/public-project/1507\)](https://platform.sustain-cert.com/public-project/1507) website. For this, Project representative has provided declaration for not participation and rejection in other GHG program/41/ Same information has been also checked from the CDM registry along with another registry.

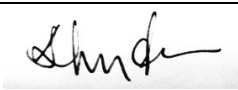
¹ During the CP renewal period, at least one new job and one training session will be provided annually. A total of 75 people are directly employed due to the project activity, and all will continue working during the CP renewal period .

2 VALIDATION TEAM, TECHNICAL REVIEWER AND APPROVER

2.1 Validation team member

S.No.	Role	Type of Resource	Last Name	First Name	Affiliation (e.g., name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk Review	Onsite Inspection	Interview	Validation Finding
1.	Team Leader cum Validator / verifier	ER (External Resource)	Kathuria	Sunil	Outsourced Entity	Y ²	Y	Y	Y
2.	Validator /Verifier-Trainee	IR (Internal Resource)	Tripathi	Apoorva	VKU Certification Private Limited	Y	Y	Y	N

2.2 Technical Reviewer and Approver of the validation report

S.No.	Role	Type of Resource	Last Name	First Name	Affiliation (e.g., name of central or other office of DOE or outsourced entity)	Signature
1.	Technical Reviewer & Technical Expert	ER (External Resource)	Kumar K	Sanjay	Outsourced Entity	
2.	Approver	ER (External Resource)	Kumar K	Sanjay	Outsourced Entity	

² Y: yes, N: No

2.3 Authorized Signatory For VKU

S. No.	Role	Last Name	First Name	Affiliation (e.g., name of central or other office of DOE or outsourced entity)	Signature (Final version only)
1.	Director	Kumar Aharwal	Vikas	VKU Certification Pvt. Ltd.	

3 MEANS OF VALIDATION

3.1 Desk/Document Review

List all documents reviewed or references during the validation are mentioned below:

Sl. No.	Author	Title	Reference	Provider
1	EKI Energy Services Limited	Key Project Information & Project Design Document (PDD)	Version 01, dated 28/06/2024 Version 02, dated 12/07/2024 Version 03, dated 19/07/2024 Version 04, dated 23/07/2024 Version 05, dated 11/10/2024	EKI Energy Services Limited
2	EKI Energy Services Limited	ER Sheet	Version 01, dated 28/06/2024 Version 02, dated 12/07/2024	EKI Energy Services Limited
3	Infinite Environmental Solutions Limited	CDM Project Design Document (PDD)	Version 05, dated 20/11/2018	Available on GS website
4	Gold Standard for the Global Goals	Design and Performance Review	N/A	Available on GS website

		under Gold Standard for the Global Goals		
6	GS4GG	<u>Principles and Requirements</u>	Version 1.2, dated: 23/10/2019	Publicly Available on GS4GG Webpage
7	GS4GG	<u>Stakeholder consultation and engagement requirements</u>	Version 2.1, dated: 14/06/2022	Publicly Available on GS4GG Webpage
8	GS4GG	<u>Safeguarding principles & requirements</u>	Version 2.1, dated: 29/06/2023	Publicly Available on GS4GG Webpage
9	GS4GG	<u>Design change requirements</u>	Version 1.1, dated: 14/04/2023	Publicly Available on GS4GG Webpage
10	GS4GG	<u>Validation and verification standard</u>	Version 1.0, dated: 06/03/2023	Publicly Available on GS4GG Webpage
11	GS4GG	<u>Site visit and remote audit requirements and procedures</u>	Version 2.0, dated: 30/05/2023	Publicly Available on GS4GG Webpage
12	GS4GG	<u>Applicability of minimum site visit requirement by VVB</u>	Version 2.0, dated: 16/08/2021	Publicly Available on GS4GG Webpage
13	GS4GG	<u>Validation & verification body requirements</u>	Version 2.0, dated: 14/01/2021	Publicly Available on GS4GG Webpage
14	GS4GG	<u>Renewable energy activity requirements</u>	Version 1.4, dated: 16/08/2021	Publicly Available on GS4GG Webpage
15	GS4GG	<u>GHG Emissions Reduction & Sequestration Product Requirements</u>	Version 2.2, dated: 28/08/2023	Publicly Available on GS4GG Webpage
16	GS4GG	<u>Gold standard eligible impact quantification methodologies</u>	Version 2.4, dated: 22/06/2023	Publicly Available on GS4GG Webpage
17	GS4GG	<u>Template Guide: Key Project Information</u>	Version 1.5, dated: 29/06/2023	Publicly Available on GS4GG Webpage

		<u>& Project Design Document (PDD)</u>		
18	CDM	<u>CDM Validation and Verification standard for project activities</u>	Version 3.0	Publicly Available on CDM Webpage
19	CDM	<u>ACM0002: Grid-connected electricity generation from renewable sources</u>	Version 22.0	Publicly Available on CDM Webpage
20	CDM	<u>Tool 21: Tool for the demonstration and assessment of additionality</u>	Version 07.0.0	Publicly Available on CDM Webpage
21	CDM	<u>Tool 7: Tool to calculate the emission factor for an electricity system</u>	Version 07.0.0	Publicly Available on CDM Webpage
22	CDM	<u>Tool 11: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period</u>	Version 3.0.1	Publicly Available on CDM Webpage
23	Central Electricity Authority, Ministry of Power	<u>CDM – CO₂ Baseline Database (CO₂ Baseline Database for Indian Power Sector)</u>	Version 19.0	Publicly Available
24	ISO	Standards: <u>ISO 14064-2:2019 & ISO 14064-3:2019</u>	31/05/2019	-
25	VKU Certification Pvt. Ltd.	QMS Procedures and SOPs	N/A	VKU Certification Pvt. Ltd.
26	CHANJU-I HEP 36 MW	Calibration Certificate	Dated 17/05/2019	National Institute for Industrial Research & Technology

27	IA Energy Hydro Pvt. Ltd	Commissioning Certificate for 36 MW	Date: 26/07/2017	EKI Energy Services Limited
28	IA Energy Hydro Pvt. Ltd	Employment Records 1. Employment Generation Details 2. Attendance Register 3. Salary Slips	N/A (AT has cross checked the employment records of the 1 st crediting period to confirm the reasonableness of the assumptions made by the PD during the current 2 nd Crediting period)	EKI Energy Services Limited
29	IA Energy Hydro Pvt. Ltd	Training Record: 1. Training 2. Attendance	N/A (AT has cross checked the training records of the 1 st crediting period to confirm the reasonableness of the assumptions made by the PD during the current 2 nd Crediting period)	EKI Energy Services Limited
30	IA Energy Hydro Pvt. Ltd	O&M	In house	-----
31	IA Energy Hydro Pvt. Ltd	Declaration- ODA (Official Development Association) For this whole crediting period	Dated 12/03/2018	EKI Energy Services Limited
32	Himachal Pradesh State Electricity Board Limited	JMR	AT has cross checked the invoice of the 1 st crediting period to confirm the reasonableness of the assumptions made by the PD during the current 2 nd Crediting period	EKI Energy Services Limited
33	IA Energy Hydro Pvt. Ltd	Invoices	(AT has cross checked the JMR of the 1 st crediting period to confirm the	EKI Energy Services Limited

			reasonableness of the assumptions made by the PD during the current 2 nd Crediting period	
34	Govt. Entity	Power Purchase Agreement (PPA) between IA Energy Hydro Pvt. Ltd and Haryana Power Purchase Centre	Dated: 21/05/2018	EKI Energy Services Limited
35	GS4GG	Cover Letter	Dated 12/03/2018	EKI Energy Services Limited
36	Bfl B Fouress (P) Limited	Technical Details Turbine, Generator	AT has cross checked the details with specifications of Turbine and Generator	EKI Energy Services Limited
37	IA Energy Hydro Pvt. Ltd	Grievance Register	AT has cross checked the grievance Register records to confirm the implementation of ongoing communication with local stakeholder.	EKI Energy Services Limited
38	IA Energy Hydro Pvt. Ltd	GS4GG Transition Request Form	N/A (AT has cross checked the transition Request Form provided by PD.	Available on GS4GG website
39	IA Energy Hydro Pvt. Ltd	Declaration for no double counting	01/07/2024	EKI Energy Services Limited
40	Google Inc.	<u>Google Earth Pro</u>	N/A	Publicly Available
41	-	<u>GPS Map Camera</u>	N/A	Publicly Available
42	VKU Certification	VKU. F24W.Audit and Sampling Plan	VKU.F24W. Audit and Sampling Plan_VKU.VAL.18.24.GS_7154	VKU Certification
43	VKU Certification	VKU.F46W. Attendance Sheet for Audit	VKU.F46W. Attendance Sheet for Audit_VKU.VAL.18.24.GS_7154	VKU Certification

44	VKU Certification	Onsite Inspection-Site Photographs	On 01/07/2024	VKU Certification
45	IA Energy Hydro Pvt. Ltd	Ongoing Finance Need	Calculation sheet to demonstrate Ongoing Finance needs and its supporting evidences containing Previous MRs & Plant generation data	EKI Energy Services Limited
46	GS4GG	CDM Projects Transitioning to GG4GG documents	Dated 02/06/2023	GS Website
47	IA Energy Hydro Pvt. Ltd	Log book sheet	----	EKI Energy Services Limited
48	IA Energy Hydro Pvt. Ltd	Deviation Request Form	Dated 09/11/2023	<u>SustainCERT Platform</u> (sustain-cert.com)
49	H.P. STATE POLLUTION CONTROL BOARD	Consent to Operate Report	Valid From 01/04/2022 to 31/03/2027	EKI Energy Services Limited
50	INDO ARYA CENTRAL TRANSPORT LIMITED	EIA	Dated 14/02/2011	EKI Energy Services Limited
51	CDM	IRR Sheet	-----	CDM registry
52	IA Energy Hydro Pvt. Ltd	Income and Expenses document 2023-2024	Dated: 04/06/2024	EKI Energy Services Limited
53	IA Energy Hydro Pvt. Ltd	EC- Delay in RCP submission	N/A	EKI Energy Services Limited
54	IA Energy Hydro Pvt. Ltd	Transition Review GS CDM TO GS VER	N/A	EKI Energy Services Limited
55	IA Energy Hydro Pvt. Ltd	Annual Report (FY 2023-24)	N/A	EKI Energy Services Limited

56	IA Energy Hydro Pvt. Ltd	Annual Report (FY 2022-23)	N/A	EKI Energy Services Limited
57	IA Energy Hydro Pvt. Ltd	Income and Expenses document (2021-2022)	Dated: 17/05/2022	EKI Energy Services Limited
58	IA Energy Hydro Pvt. Ltd	Income and Expenses document (2020-2021)	Dated: 08/06/2021	EKI Energy Services Limited
59	IA Energy Hydro Pvt. Ltd	Income and Expenses document (2018-2019)	Dated: 28/05/2019	EKI Energy Services Limited

3.2 Onsite Inspection

VKU Certification Pvt. Ltd. has conducted onsite audit on 01/07/2024 for validation (RCP) of this project activity “**Chanju I Hydro Electric Project in Himachal Pradesh, India**” following “**Frequency of physical site visits**” mentioned in **Clause 3.A 3.1.2** of the GS4GG Site visit and remote audit requirements and procedures /10/ and Applicability of minimum site visit requirement by VVB /12/. The risk of onsite/44/ audit assessed by the assessment team is mentioned below:

Sl. No.	Scope of Assessment	Risks Identified	Conclusion
1.	Location of project	Low Risk	Assessment team concludes that there is low risk in location of this project as it was confirmed during the during the onsite audit by interviewing PD representatives and local stakeholders along with Google earth pro/40/, the same is assessed in section 4.1.4 of the final FVR; version 4.1 dated 03/01/2025
2.	Technologies and/or measures	Low Risk	Assessment team concludes that there is low risk in technologies and/or measures applied in this project activity as this project activity is already registered under GS4GG. All the technologies and/or measures applied is confirmed during the onsite audit through physical inspection/44/, the same is assessed

			in section 4.1.5 of the final FVR; version 4.1 dated 03/01/2025
3.	Data and parameters fixed ex ante	Low Risk	Assessment team concludes that there is low risk in fixed ex ante parameters mentioned in Section B.6.2 of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024 as these parameters are based on the applied latest CDM methodology ACM0002 version 22.0 & Tool 07 for calculation of Emission Factor and sourced from <u>CEA database</u> .
4.	Data and parameters to be monitored	Low Risk	Assessment team concludes that there is low risk in Data and parameters to be monitored mentioned in Section B.7.1 of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/ as these parameters are based on the applied latest CDM methodology and other elements of monitoring plan mentioned in section B.7.3 of the project activity
5.	Other elements of monitoring plan	Low Risk	Assessment team concludes that there is low risk in other elements of monitoring plan mentioned in section B.7.3 of the project activity
6.	Assessment that project complies with GS4GG Gender Sensitive requirements	Low Risk	Assessment team concludes that there is low risk in compliance with GS4GG Gender Sensitive Requirements mentioned in section D.2 of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/ as it complies with GS4GG Gender Equality Requirements & Guidelines.
7.	Stakeholder mitigation measures	Low Risk	Assessment team concludes that there is low risk in Stakeholder mitigation measures as it was confirmed by interviewing PD representatives and local stakeholders

			during onsite audit/44/ and the same is assessed in section 4.7 and 4.8 of the final FVR; version 4.1 dated 03/01/2025.
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The details of activities performed during onsite audit, site location, date and involved team members are mentioned below:

Date of Audit: 01/07/2024				
No.	Activity Performed on onsite audit	Site Location	Date and Time	Team Member
	Introduction, scope and objective of work, roles and responsibilities of audit team, resources required, and timetable of the onsite audit including time for closing meeting and any concerns from PD.	Chamba, Himachal Pradesh	Date: 01/07/2024, Time: 08:30 AM to 09:00 AM	Sunil Kathuria, Apoorva Tripathi
1.	Discussion over- Project Activity (Technology, Location and Implementation) - Parameter fixed Ex-ante and Baseline emissions, Project emissions and Leakage calculation - Choice and applicability of baseline methodology(ies) - Project boundary and emission sources included in the project boundary - applicability of baseline methodology(ies) - Monitoring plan (feasibility of monitoring plan described in PDD, QA/QC procedures, responsibility of implementation of monitoring plan, data recording & storage procedures) - Emergency Procedure	Chamba, Himachal Pradesh	Date: 01/07/2024, Time: 09:30 AM to 01:00 PM	Sunil Kathuria, Apoorva Tripathi

- Operational lifetime of the project activity, Start date of the project activity, Crediting period - Environmental impacts and need of EIA - Grievance Redressal Mechanism (ongoing communication procedure with relevant local stakeholder) - Interview of relevant Local Stakeholders Compilation of the findings by Auditor/s (CARs/CLs) Discussion of the audit findings to the client and agreement on the issues raised and agreement on timelines.			
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3.3 Interview

Following clause 7.16.6 of GS4GG Validation and Verification Standard; Version 1.0 dated 06/03/2023, VKU assessment team has taken consent from all the interviewees present during onsite audit/44/ conducted on 01/07/2024 to disclose their names and designation/affiliation in the final validation report of this project activity “**Chanju I Hydro Electric Project in Himachal Pradesh , India**” (GS 7154) and none of them have any objection over this hence, there is no perceived or potential conflict of interest. All the interviews conducted during onsite audit for validation of this project activity as recorded in **VKU.F46W. Attendance Sheet for Audit_VKU.VAL.18.24.GS_7154 /43/** is listed below:

No.	Interviewee			Date	Subject	Team Member
	Last Name (Gender)	First Name	Affiliation			
1.	Gwasami (Male)	Jai	IA Energy Hydro Pvt. Ltd		Working of the project Baseline scenario	
2.	Sambyal (Male)	Himanshu				
3.	Guleria (Male)	Sunil Kumar				
4.	Kumar (Male)	Manoj				

5.	Kumar (Male)	Raj		01/07/ 2024	Implementation status of the project	Sunil Kathuria Apoorva Tripathi
6.	Kumar (Male)	Arun			Power Purchase agreement	
7.	Kumar (Male)	Tanuj			Benefits of the project	
					Location of implemented meters	
					Trainings mechanism	
					QA/QC procedure	
					Emergency Procedure	
					Grievance mechanism	
					Roles and responsibility of Job	

No.	Interviewee			Date	Subject	Team Member
	Last Name	First Name	Affiliation			
1.	Negi (Male)	Saurabh	Local Stakeholder (Residents of Villages around	01/07/ 2024	Baseline scenario	Sunil Kathuria
2.	Singh (Male)	Jeet				
3.	Singh (Male)	Hirdayaal				
4.	Singh (Male)	Tripti			Grievance mechanism	

			Project activity)		Benefits of the project	
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3.4 Sampling Approach

Not Applicable, this project is renewable Hydro project so there was no sampling involved. 100% data and records were checked.

3.5 Eligibility of the project under Gold Standard

The General Eligibility Criteria under 3.1.1 of GS4GG Principles & Requirements are as follows:

Table Number 01

Eligibility Criteria	Description	Justification by PD	VKU Assessment
Types of Projects	The project type is a hydro Power Plant which generates power using hydro Energy. The project activity belongs to the type of Renewable energy that generate and deliver power to the Indian grid. The project applies methodology ACM0002 Version 22.0 /19 /, which is an approved methodology under Gold Standard.	The Hydro Power Plant Project is conceived as a grid connected hydro power plant within the category of renewable energy supply. See section A.1 of the PDD/1/.	Assessment team confirms that it is a hydro power project which harness renewable energy and supply electricity to the Indian grid as per the Commissioning Certificate /27/ and The Power purchase agreement between Project Proponent and Haryana Power Purchase Centre /34/
Location of Project:	The project is located on Chanju nallah, a tributary of Baira nallah and sub-tributary of the River Ravi. In Chamba District, Himachal Pradesh India. Power house Location: 32°45'40.0"N 76°12'05.0"E (32.761111, 76.201389)	The geo-coordinates of the project activity can be referred in section A.2	Assessment team confirms that this project activity is located in Chamba District State: Himachal Pradesh on the basis of location mentioned in Commissioning Certificate /27/, The Power purchase

	Further details have been provided in section A.2 of the PDD/1/.		agreement between Project Proponent and Haryana Power Purchase Centre /34/ and also confirm during physical inspection with the help of GPS map camera /41 /.
Project Area, Project Boundary and Scale:	Project Area and Boundary are defined in line with the applicable Methodology ACM0002 Version 22./19/ The project activity is a 36 MW Hydro Energy project and thus qualifies under large scale projects (Non-Micro Scale). This Renewable project estimates issuing emission reductions greater than 10,000 tCO₂e, thus the project falls under non-microscale categories.	Please refer section A.2 of PDD for the Geographical coordinates. The project has an install capacity of 36 MW which is more than 15 MW, therefore applies as a Large-Scale project. See section A.4 of the PDD/1/.	The project area and project boundary include the project power plant and all power plants connected physically to the electricity system that the project power plant is connected to. The spatial extent of the project boundary includes the project power plant/unit and all power plants/units connected physically to the electricity system that the project power plant is connected to. The project activity evacuates the power to the NEWNE grid. Therefore, all the power plants contributing electricity to the Indian grid have been considered in the project boundary. Assessment team confirms that project area and project boundary is in line with the applied Methodology ACM0002; Version 22.0 /19/ Assessment team confirms that it is a large-

			scale project activity as per the GHG Emissions Reduction & Sequestration Product Requirements /15/
Host Country Requirements:	The project activity follows the social wellbeing, Environmental wellbeing, Economic wellbeing and Technological wellbeing.	Projects is in compliance with India's legal, environmental, ecological and social regulations.	Assessment team confirms that this project activity complies with India's legal, environmental, ecological and social regulations as per the interview conducted during onsite audit. The project has a valid consent to operate valid from 01/04/2022 to 31/03/2027/49/
Contact Details:	Project Developer: IA Hydro Energy Private Limited Name of the contact person: Shravan Kumar Goyal Email: commercial.bjr@goelgroup.co.in	GS4GG-Cover Letter	Assessment team confirms that the contact details are correct as per the GS4GG cover letter /36/ and also confirm via interview during onsite visit 44/.
Legal Ownership and Other Rights:	The project activity is developed by the PD.	The commissioning certificates and the Power Purchase Agreement (PPA) is in the name of the project participant.	Assessment team confirms that the legal owner IA Hydro Energy Private Limited of this project activity as per GS4GG Cover Letter /36/, Commissioning Certificate /27/ The Power purchase agreement between Project Proponent and Haryana Power Purchase Centre /34/. Hence, IA Hydro Energy Private

			Limited is the legal owner of this project activity.
Official Development Assistance (ODA) Declaration:	The project had private funding and funding from bank. The PD hereby confirms that there is no public funding from Annex 1 countries and no diversion of Official Development Assistance (ODA) involved in the project activity.	The Project Owner declares that the project has not directly or indirectly received or benefited from official development assistance. An Official Development Assistance (ODA) declaration i.e., GS Annex D) has been submitted to VVB.	Assessment team confirms that this project activity has not received funding from Annex 1 countries as per the interview conducted during onsite audit and ODA declaration /31/ given by PD.

The eligibility criteria as per section 4 Eligible Principles & Requirements of GS4GG are described as follows: Table Number :02

Eligibility Criteria	Justification by PD	VKU Assessment
1. Demonstrate if project is pre identified as eligible by being referenced in Gold Standard Activity Requirements, Impact Quantification Methodologies or Product Requirements	The Project activity is already registered in GS4GG, and it meets all eligibility criteria as mentioned below.	Assessment team confirms that this project activity is already registered in GS4GG and it complies with all GS4GG requirements and guidelines. /6/ /7/ /8/ /9/ /10/ /11/ /12/ /13/ /14/ /15/16//17/.
2. If not pre identified as eligible, provide evidence of Gold Standard approval	Not applicable	Assessment team confirms that this project activity is eligible under GS4GG as it meets all of the GS4GG. Hence it is not applicable
3. Demonstrate how the project meets the General Eligibility criteria of the applicable Activity Requirements	General Eligibility criteria has been justified in the above table.	Assessment team confirms that this project activity meets the General Eligibility criteria of the applicable Renewable Energy Activity Requirements version 1.4 It can be referred from the table number 03 below.

4. Confirm that the project is not registered with any other voluntary or compliance schemes.	The project activity is not registered with any other voluntary or compliance schemes. declaration for no double counting has been provided by the PD.	This project activity is registered under the CDM mechanism and the UN reference no. is 10153³. The project participant had submitted a monitoring report and verification report for period 26/07/2017 to 30/06/2019 but the status of Information and reporting check shows “incomplete” as on 01/07/2021 However, the project proponent has given an undertaking that there would not be double counting of credits for any particular period. Assessment team confirms that this project activity is not registered under any other voluntary or compliance schemes except CDM. The details of the registries checked are as follows: 1) http://cdm.unfccc.int/ 2) https://www.recregistryindia.nic.in/ 3) https://verra.org/verra-standards-and-programs/ 5) https://www.irecstandard.org/ 6) https://cri.nccf.in/ 7) International Carbon Registry 8) GCC Projects Portal PD has also submitted a declaration / 39/ which states that this project activity has neither applied or registered to claim REC benefits under any other GHG Mechanism nor it is rejected by any other GHG program.
5. Demonstrate the activity is NOT located in a host country, region,	The host country for project activity is India which is a non-annex I Country.	Assessment team confirms that this project activity is implemented in Chamba District, Himachal Pradesh in India which is a non-annex I Country and hence, no emission reduction cap is

³ <https://cdm.unfccc.int/Projects/DB/TUEV-SUED1431953233.8/view>

locality or state that has an emission reduction cap enforced OR has the possibility to trade emissions that include the scope of the proposed project	Hence, no emission reduction cap enforced as well as no emission trading system implemented in the host country.	enforced as well as no emission trading system implemented in the host country. The location of this project activity is confirmed on the basis of location mentioned in Commissioning Certificate /27/ and onsite visit/44/, The Power purchase agreement between IA Energy Hydro Pvt. Ltd and Haryana Power Purchase Centre /34/ and the onsite audit.
6. Demonstrate that no potential for double counting of impacts if the Project Area overlaps with that of another Gold Standard or other voluntary or compliance standard programme of a similar nature.	The Project is not registered in any other mechanism. Also, self-declaration/39 / for no double counting has been provided by the PD.	Assessment team confirms that this project activity is not registered under any other voluntary or compliance schemes except CDM. The details of the registries checked are as follows: 1) http://cdm.unfccc.int/ 2) https://www.recregistryindia.nic.in/ 3) https://verra.org/verra-standards-and-programs/ 4) https://evident.app/IREC/device-register/table/ 5) https://cri.nccf.in/ 6) International Carbon Registry 7) GCC Projects Portal This project activity is not registered in any of the above registries, hence, the potential for double counting of impacts is zero. PD has also submitted a declaration /39/ which states that this project activity has neither applied or registered to claim REC benefits under “Renewable Energy Certificate Registry of India” nor it is rejected by any other GHG program and confirms that there would not be any double counting of the SDG Impacts. The validation team concluded that the electricity generated from the given project activity is not claimed by the DISCOM as an RPO commitment as per the PPA/34/, this is also cross

		verified by interviewing the project representative during the onsite audit. Validation team independently cross verify the publicly available weblink https://evident.app/IREC/device-register/table and found that this project activity is not registered under I-REC. Furthermore, validation team also independently cross verify the https://climateactiontracker.org/countries/india/ and https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1847812#:~:text=As%20per%20the%20updated%20NDC,based%20energy%20resources%20by%202030, and found that the given project activity is also not consider under the India NDC target. However, if there should any guidelines be published in the future, the Project Developer (PD) will ensure that GS project activities are not used for double accounting.
7. Demonstrate that the project is in compliance with applicable Host Country's legal, environmental, ecological and social regulation.	The project activity has obtained all the authorities' approvals to comply with legal, environmental, ecological and social regulations before begin the implementation.	Assessment team confirms that this project activity complies with India's legal, environmental, ecological and social regulations as per the interview conducted during onsite audit. The project has been issued a valid consent to operate for period 01/04/2022 to 31/03/2027

The general eligibility criteria under Renewable Energy Activity Requirements version 1.4 are mentioned below: Table Number :03

Eligibility Criteria	Justification by PD	VKU Assessment
Project Type	As discussed above, the project type is eligible.	Assessment team confirms that it is a hydro power project which harness renewable energy and supply electricity to the Indian grid as per the Commissioning

		Certificate /27/ and Power Purchase Agreement (PPA) /34/ between Project Developer and Haryana Power Purchase Centre /34/.
Project Location:	The project is located on Chanju nallah, a tributary of Baira nallah and sub-tributary of the River Ravi, in Chamba district Himachal Pradesh. India Power house Location: 32°45'40.0"N 76°12'05.0"E (32.761111, 76.201389)	Assessment team confirms that this project activity is located in in District: Chamba, State: Himachal Pradesh on the basis of location mentioned in Commissioning Certificate /27/, and Power Purchase Agreement (PPA) between IA Energy Hydro Pvt. Ltd and Haryana Power Purchase Centre /34/ and onsite audit/44 /
Project Scale and boundary	Project Area and Boundary are defined in line with the applicable Methodology ACM0002 Version 22. / 19/ The project activity is a 36 MW Hydro Energy project and thus qualifies under large scale projects (Non-Micro Scale). This Renewable project estimates issuing emission reductions greater than 10,000 tCO₂e, thus the project falls under non-microscale categories.	As per GS4GG GHG Emissions Reduction & Sequestration Product Requirements /15/ - “All Projects exceeding the small-scale thresholds are defined as large scale. Small scale projects are defined following CDM project standard for project activities, as below; a) Type 1: Renewable energy Projects: maximum output capacity of 15 MW(e) or 45MW (th).” As per renewable energy activity requirement /14/ any renewable energy Project with a maximum output capacity of 15 MW (or an appropriate equivalent) is defined as small scale project.

		Since this project activity has capacity of 36 MW that is more than 15 MW hence, it comes under large scale project activity. The project area and project boundary include the project power plant and all power plants connected physically to the electricity system that the project power plant is connected to. The spatial extent of the project boundary includes the project power plant/unit and all power plants/units connected physically to the electricity system that the project power plant is connected to. The project activity evacuates the power to the NEWNE grid. Therefore, all the power plants contributing electricity to the Indian grid have been considered in the project boundary. Assessment team confirms that project area and project boundary is in line with the applied Methodology ACM0002; Version 22.0./19/
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4 VALIDATION FINDINGS

Sustainable Development Goals Targeted	SDG Impact	Estimated Annual Average	Unit or Products
SDG 7:	MWh of renewable energy generated	156,271.79 MWh per annum.	MWh

Ensure access to affordable, reliable, sustainable and modern energy for all			
SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Number of trainings and hiring through project	1 training/annum and employment to 1 persons / annum ⁴	Number of trainings and Employment generated through project
SDG 13: Climate Action	Emission Reductions	139,035 tCO ₂ per annum	GS-VERs

This report contains the findings in the term of CL, CAR and FAR where:

A corrective action request (CAR) is raised in validation findings if one of the following occurs:

- Non-conformities with the monitoring plan or methodology are found in monitoring and reporting, or if the evidence provided to prove conformity is insufficient;
- Mistakes have been made in applying assumptions, data or calculations of emissions reductions that will impair the estimate of emission reductions;
- Issues identified in a FAR during validation and verification to be verified during verification have not been resolved by the project developer.

A clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable GS requirements have been met.

A forward action request (FAR) is also raised in cases where any required deviation/information is not fulfilled in current validation/verification and thus needs to be taken up in consequent verification for better transparency thus holding the applicability of the methodology eligible to the project activity and there is no impact of the same on additionality, baseline scenario & emission reduction calculation of project.

A total of **15** findings were raised, which includes: **07 Corrective Action Requests (CARs)**; **02 Clarification Requests (CLs)** and **06 Forward Action Request (FAR)**. All the findings were successfully resolved by the PD. The same is discussed in detail in Appendix 3 of this validation report.

⁴ During the CP renewal period, at least one new job and one training session will be provided annually. A total of 75 people are directly employed due to the project activity, and all will continue working during the CP renewal period

4.1 Purpose and General description of Project

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/; ER Sheet; Version 01, dated: 28/06/2024 and Version 02, dated: 12/07/2024/2/, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	CAR #02 and CAR#07 was raised and closed successfully. For more details, please refer Appendix 3
Conclusion	Assessment Team confirms that purpose and general description of project mentioned in Section A.1 of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/ is correct and it complies with the guidelines mentioned in the template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/, previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and fulfils the requirements of Gold Standard for Global Goals.

4.1.1 Identification of project type

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024 and Version 02, dated: 12/07/2024/2/, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	No findings have been raised for the identification of project type.
Conclusion	Assessment Team confirms that it is a renewable energy project as mentioned in Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/ and it is correct as per previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018/3/, Commissioning Certificate

	issued by IA Energy Hydro Pvt. Ltd /27/, Power Purchase Agreement (PPA) between IA Energy Hydro Pvt. Ltd and Haryana Power Purchase Centre /34/. And Technical Details /37/.
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4.1.2 Eligibility of the project under Gold Standard

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024 and Version 02, dated: 12/07/2024/2/, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/, Previous registered validation report version 03 dated 21/4/2022 and onsite audit/44 /.
Findings	CAR #02, CAR#6 and CL#01 were raised and closed successfully. For more details, please refer Appendix 3
Conclusion	Assessment Team confirms that this project is eligible under Gold Standard as mentioned in Section A.1.1: Eligibility of the project under Gold Standard, of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/ and it complies with the guidelines mentioned in the template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/, GS4GG Principles and Requirements; Version 1.2, dated: 23/10/2019 /6/, GS4GG Renewable energy activity requirements; Version 1.4, dated: 16/08/2021 /14/ and Gold standard eligible impact quantification methodologies Version 05, dated 30/12/2019 /16/.

4.1.3 Legal ownership of products generated by the project and legal rights to alter use of resources required to service the project

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ , PPA (Power Purchase
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	Agreement)/ 34/ , JMR (Joint Meter Reading)/32 / ,Invoice/33 / raised by PD and onsite audit /44 /.
Findings	CL#01 were raised and closed successfully. For more details, please refer Appendix 3
Conclusion	Assessment Team confirms that legal ownership of products generated by the project and legal rights to alter use of resources required to service the project mentioned in Section A.1.2 of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/ is correct and IA Energy Hydro Pvt. Ltd is the legal owner of products generated by the project, previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018/3/ Commissioning certificate/27/ PPA /34/ and GS4GG cover letter /36/. It complies with the guidelines mentioned in the template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/.

4.1.4 Location of Project

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, dated 12/07/2024 supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit / 44/.
Findings	CAR#06 was raised and closed successfully. For more details, please refer Appendix 3.
Conclusion	Assessment Team confirms that location of project mentioned in Section A.2 of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/is correct as per Commissioning Certificate issued by IA Energy Hydro Pvt. Ltd /27/, Power Purchase Agreement (PPA) between IA Energy Hydro Pvt. Ltd and Haryana Power Purchase Centre /34/ and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018/3/. It complies with the guidelines mentioned in the template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/

4.1.5 Technologies and /or measures

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, date 12/07/2024, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	CAR#02 and CAR#6 was raised and closed successfully. For more details, please refer Appendix 3.
Conclusion	Assessment Team confirms that technology and/or measures mentioned in Section A.3 of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/ is correct as per Commissioning Certificate of IA Energy Hydro Pvt. Ltd /27/ and Technical Specification of Turbine Generator /37/ and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018/3/. It complies with the guidelines mentioned in the template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/.

4.1.6 Scale of Project

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, dated 12/07/2024, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	No findings have been raised for scale of the project.
Conclusion	Assessment Team confirms that the project has an installed capacity of 36 MW which is more than 15 MW, therefore applies as a Large -Scale project and also mentioned in Section A.4 of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/and it is correct as per Commissioning

	Certificate issued by IA Energy Hydro Pvt. Ltd /27/, Power Purchase Agreement (PPA) between IA Energy Hydro Pvt. Ltd and Haryana Power Purchase Centre Haryana Power Purchase Centre /34/ and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018/3/. It complies with the guidelines mentioned in the template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/ and GS4GG GHG Emissions Reduction & Sequestration Product Requirements; Version 2.2, dated: 28/08/2023 /15/.
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4.1.7 Funding sources of project

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, dated 12/07/2024, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	No findings have been raised for funding sources of project.
Conclusion	Assessment Team confirms that no public funding from Annex 1 countries and no diversion of Official Development Assistance (ODA) /31/ is involved in this project activity as mentioned in Section A.5 of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/. Further project is funded by loan and equity. PD wants to keep the sources of funding as confidential. Hence as per GS4GG PDD completion guidelines, this confidential information is not provided in PDD V 5. It is correct as per declaration given by the project developer and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018/3/. It also complies with the guidelines mentioned in the template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/.

4.2 Application and selection of methodologies and standardized baselines

4.2.1 Reference of approved methodology(ies)

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, dated 12/07/2024, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	No findings have been raised for reference of approved methodology.
Conclusion	Assessment Team confirms that methodology /19/ and tools /20/ /21/ /22/ mentioned in Section B.1 of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/ is the latest one and these are as follows: Methodology: 1. ACM0002: Grid-connected electricity generation from renewable sources - Version 22.0/19/ 2. Tool 21: Tool for the demonstration and assessment of additionality; Version 07.0.0 (EB 70, Annex 08) /20/ 3. Tool 7: Tool to calculate the emission factor for an electricity system; Version 07.0.0 (EB 100, Annex 4) /21/ 4. Tool 11: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period; Version 3.0.1 (EB 66, Annex 47) /22/ It is correct as per the GS4GG Validation and verification standard Version 1.0, dated: 06/03/2023 /10/, Gold standard eligible impact quantification methodologies; Version 2.4, dated: 22/06/2023 /16/, GHG Emissions Reduction & Sequestration Product Requirements, Version 2.2, dated: 28/08/2023 /15/ and also cross verify with CDM website, CEA database. It complies with the guidelines mentioned in the template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/.

4.2.2 Applicability of methodology (ies) and standardized baselines

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, dated 12/07/2024 and Plant Generation data, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	No findings have been raised for Applicability of methodology (ies) and standardized baselines
Conclusion	Assessment Team confirms that the applicability criterion of methodology /19/ and tools /20/ /21/ /22/ as mentioned in Section B.1 the Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/ is correct and this project activity fulfils all the requirements of GS4GG Validation and verification standard; Version 1.0, dated: 06/03/2023 /10/ Gold standard eligible impact quantification methodologies; Version 2.4, dated: 22/06/2023/16/, GHG Emissions Reduction & Sequestration Product Requirements; Version 2.2, dated: 28/08/2023 /15/. It also complies with the guidelines mentioned in the template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/.

4.2.3 Deviation from methodology and/or methodology tool

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, dated 12/07/2024 and Plant Generation data, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	No Deviation from methodology and/or methodology tool has been sought. No finding has been raised
Conclusion	Assessment Team confirms that methodology and tools mentioned in Section B.1 of Key Project Information & Project Design

	Document (PDD); Version 05, dated 11/10/2024/1/ is the latest one and these are as follows: Methodology: ACM0002: Grid-connected electricity generation from renewable sources - Version 22.0/19/ 1. Tool 21: Tool for the demonstration and assessment of additionality; Version 07.0.0 (EB 70, Annex 08) /20/ 2. Tool 7: Tool to calculate the emission factor for an electricity system; Version 07.0.0 (EB 100, Annex 4) /21/ 3. Tool 11: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period; Version 3.0.1 (EB 66, Annex 47) /22/ It is correct as per the GS4GG Validation and verification standard Version 1.0, dated: 06/03/2023 /10/, Gold standard eligible impact quantification methodologies; Version 2.4, dated: 22/06/2023 /16/, GHG Emissions Reduction & Sequestration Product Requirements, Version 2.2, dated: 28/08/2023 /15/. It also complies with the guidelines mentioned in the template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/. No deviation has been found either in methodology /19/ or tools /20/ /21/ /22/ used in the Final Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/.
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4.2.4 Project Boundary, sources and GHGs

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, dated 12/07/2024 and Plant Generation data, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	CAR#8 was raised and closed successfully. For more details, please refer Appendix 3.

Conclusion	Assessment Team confirms that the project boundary and sources of GHGs mentioned in Section B.3 of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/ is correct as per the applied methodology ACM0002: Grid-connected electricity generation from renewable sources - Version 22.0/19/, GS4GG Validation and verification standard; Version 1.0, dated: 06/03/2023 /10/ and also complies with the guidelines mentioned in the template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/.
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4.2.5 Establishment and description of baseline scenario

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, dated 12/07/2024 and Plant Generation data/ 45/, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	CAR#03 was raised and closed successfully. For more details, please refer Appendix 3.
Conclusion	Assessment Team confirms that the baseline scenario established in Section B.4 of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/ is correct as per Tool 11: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period; Version 3.0.1 /22/, para 24 of the applied methodology ACM0002: Grid-connected electricity generation from renewable sources - Version 22.0 /19/ and GS4GG Validation and verification standard; Version 1.0, dated: 06/03/2023 /10/. The baseline emission factor is calculated as per the latest CDM – CO2 Baseline Database; Version 19.0/23/ released by Central Electricity Authority, Ministry of Power, GoI, available at the time of Key Project Information & Project Design Document (PDD); Version 04, dated 23/07/2024/1/ submission for renewal. AT has also independently checked the most recent Energy policy-2021 ⁵ of Government of Himachal Pradesh (State Government), which aims to archive 10000 MW of green energy

⁵ [202310111865046079.pdf \(s3waas.gov.in\)](https://s3waas.gov.in/202310111865046079.pdf)

by 2030. The project is also found to be in line with “India’s Renewable Electricity Roadmap 2030”⁶. The OM, BM & CM of the INDIAN grid used for the project activity is as follows:

Parameter	Value	Nomenclature	Source
EF _{grid,OM,y}	0.9580 tCO ₂ /MWh	Operating margin CO ₂ emission factor for the project electricity system in year y	Calculated as the last 3-year (2020-21, 2021-22 and 2022-23) generation-weighted average, sourced from Baseline CO ₂ Emission Database; Version 19.0 /23/, December 2023 published by Central Electricity Authority (CEA), Government of India
EF _{grid,BM,y}	0.8670 tCO ₂ /MWh	Build margin CO ₂ emission factor for the project electricity system in year y	Baseline CO ₂ Emission Database; Version 19.0 /23/, December 2023 published by Central Electricity Authority (CEA), Government of India
EF _{grid,CM,y}	0.8897 tCO ₂ /MWh	Combined margin CO ₂ emission factor for the	Calculated as the weighted average of the operating margin (0.25) &

⁶ [Report-onIndiaRenewableElectricityRoadmap2030.pdf \(niti.gov.in\)](#)

			project electricity system in year y	build margin (0.75) values, sourced from Baseline CO ₂ Emission Database; Version 19.0 /23/, December 2023 published by Central Electricity Authority (CEA), Government of India
	It also complies with the guidelines mentioned in the template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/. Assessment team has confirmed that the baseline submitted at the time of design certification continues to remain the same with the acceptance of changing baseline emission factor which has been updated with the CEA data base and methodological tool 11 version 3. .0.1 Step 1.1. AT has cross check this with the existing Indian electricity act 2003. In addition, this project also compliance AT has also independently checked the most recent Energy policy-2021⁷ of Government of Himachal Pradesh (State Government), which aims to archive 10000 MW of green energy by 2030. The project is also found to be in line with “India’s Renewable Electricity Roadmap 2030”⁸.			

4.2.6 Demonstration of additionality

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, dated 12/07/2024 and Plant Generation data/ / OFN (Ongoing Financial Need) sheet , supporting documents (Section 3.1) and previously registered CDM Project Design
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⁷ [202310111865046079.pdf \(s3waas.gov.in\)](#)

⁸ [Report-onIndiaRenewableElectricityRoadmap2030.pdf \(niti.gov.in\)](#)

⁹ As per Invoice

	26/07/2017	31/03/2018	249	30,637,880.00	3.10	14.24%	-58.29 ¹⁰ %
	01/04/2018	31/03/2019	365	137,442,000.00	3.63	43.58%	-12.92%
	01/04/2019	31/03/2020	366	169,759,000.00	3.74	53.68%	7.26%
	01/04/2020	31/03/2021	365	159,343,000.00	4.50	50.53%	0.95%
	01/04/2021	31/03/2022	365	146,522,000.00	4.50	46.46%	-7.17%
	01/04/2022	31/03/2023	365	140,022,000.00	4.50	44.40%	-11.29%
	01/04/2023	31/03/2024	366	154,936,710.00	4.50	49.00%	-2.11%
	Total for 5 Year		1710	643,703,880.00	3.89	43.57%	-12.95%
	Total for 7 Year		2441	938,662,590.00	4.07	44.51%	-11.07%

According to the registered PDD and IRR sheet (<https://cdm.unfccc.int/Projects/DB/TUEV-SUED1431953233.8/view>), the Equity IRR without CDM for the project was calculated at 9.14%, which is below the benchmark of 12.25%. The projected Plant Load Factor (PLF) during registration was 50.05%, but the actual PLF achieved during the 5-year crediting period was 43.57%, and 44.51% for the 7-year crediting period, both significantly lower than expected. This resulted in significant revenue shortfalls: 13.08% less revenue during the 5-year period (actual revenue: 2,259.29 million INR against the expected 2,599.19 million INR) and 6.28% less revenue during the 7-year period (actual revenue: 3,410.43 million INR against the expected 3,638.87 million INR). Since electricity generation is the sole revenue source, the reduced PLF undermines the project's financial sustainability, affecting its ability to contribute to Sustainable Development Goals (SDGs) like renewable energy promotion, job creation, and climate change initiatives. To sustain the project, ongoing financial support, operational improvements, and diversification of revenue streams are essential.

The company has experienced a significant loss of INR 436.76 million in FY 2017-18 and faced negative income in subsequent years. A turnaround was achieved in FY 2020-21, but financial stability remains elusive. Income

¹⁰ Using 34.14% as the expected PLF for the 249-day period would provide a more balanced value, giving a Variation in PLF (%) of -58.28%.

reached a high of INR 329.11¹¹ million in FY 2022-23, only to plummet to INR 60.31 million in FY 2023-24, highlighting persistent volatility.

Income and expenses as per the OFN Sheet: -

Project Cost invested at the time of validation (INR Million)

STATEMENT OF PROFIT & LOSS FOR THE YEAR ENDED

Particulars (INR Lakhs)	31-03- 2024	31-03- 2023	31-03- 2022	31-03- 2021	31-03- 2020	31-03- 2019	31-03- 2018
Total Income	6,034.44	15,870.63	19,220.96	8,859.63	8,007.39	9,919.21	2,256.84
Total Expenses	5,181.98	11,799.89	18,528.62	7,592.83	8,403.79	10,088.89	8,566.25
Profit Before Tax	852.46	4,373.13	692.34	1,266.80	122.01	-169.68	-6,309.41
Total Tax Expenses	251.06	1,081.57	288.54	333.81	392.30	-75.36	-1,940.27
Profit (loss) for Year	601.40	3,291.56	403.80	932.99	-270.29	-94.32	-4,369.13
Total comprehensive income for year (INR Lakhs)	603.13	3,291.06	403.66	924.73	-272.90	-92.42	-4,367.63
Total comprehensive income for year (INR Million)	60.31	329.11	40.37	92.47	-27.29	-9.24	-436.76
Total % of Income (Net profit of Gross Revenue)	9.99 %	20.74 %	2.10 %	10.44 %	-3.41 %	-0.93 %	-193.53 %

¹¹ It was observed from the Audited financial statement 2022- 2023 that- during the year Haryana Electricity Regulatory Commission passed order for determination of tariff for sale of power to Haryana Power Purchase Centre from Chanju 1 HEP @ 4.50/KWh (Petition No. 19 of 2019 dated 06-04-2023). Accordingly, the company has recognised sale revenue of earlier years amounting to 4195.54 Lakhs/-

	Category	INR
	Secured Loan (Term Loan)	15,303.41
	Bank overdraft carved out of Term Loan	1,796.30
	Borrowings (INR Lakhs)	17,099.71
	Borrowings (INR Million)	1,709.97
	With borrowings accounting for 56.23% of the project cost, securing additional carbon revenue is critical to improving operational efficiency, stabilizing income streams, and ensuring sustainable growth. The project developer must address the repayment of borrowings, including a term loan from the State Bank of India with an outstanding amount of ₹1,530.34 million. Additionally, a bank overdraft carved out of the term loan, amounting to ₹179.63 million, is repayable in 176 monthly instalments starting from February 2024, with no immediate lump-sum payment required. Carbon Revenue Financial support is essential to mitigate past losses, meet repayment obligations, and secure the company's future growth and stability. Cross Checking VVB has conducted a thorough assessment of the submitted documents, which include the verified OFN calculation sheet, supporting evidence, plant generation data from 2017 to 2024/45/, the IRR sheet for the CDM project (ID/51/10153), the income and expenses documentation (/52//57//58//59/), the Audited Annual Report for FY 2023-24/55/, FY 2022-23/56/. Additionally, the VVB reviewed the GS registry website and verified that no GS VERs have been claimed by the PD. As part of the ongoing verification process, the VVB also examined the Deviation Request Form submitted by the PD (ID/48/), which is accessible on the GS website. Based on this assessment, the VVB concludes that the project activity continues to rely on carbon revenue for its financial sustainability.	

4.2.7 Prior Consideration

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, dated 12/07/2024 and, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	No findings have been raised for prior consideration.

Conclusion	The project is undergoing renewal of crediting period. Hence prior consideration not required.
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4.3 Estimation of emission reductions (SDG 13) or net anthropogenic removals and other Sustainable Development Goals

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024,Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024 /1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, dated 12/07/2024 and, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.		
Findings	No findings have been raised for estimation of emission reductions (SDG 13) or net anthropogenic removals and other Sustainable Development Goals		
Conclusion	PD has considered 3 SDGs under this project activity. The Sustainable Development Goals targeted, their most relevant SDG targets and SDG impacts are mentioned below:		
	Sustainable Development Goals Targeted	Most Relevant SDG Target	SDG Impact
	SDG 13: Take urgent action to combat climate change and its impacts	Target 13.2: Integrate climate change measures into national policies, strategies and planning.	Emissions Reductions in tCO2
	SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	Target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value. Target 8.6: By 2020, substantially reduce the proportion of youth not	1.Training 2. Employees

		in employment, education or training.	
	SDG -7: Ensure access to affordable, reliable, sustainable and modern energy for all	7.2: By 2030, increase substantially the share of renewable energy in the global energy mix	MWh of renewable energy generated.
Summary of ex ante estimates of each SDG Impacts are as follows:			
SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all			
YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
26/07/2022 to 25/07/2023	0	156,271.79 MWh/yr	156,271.79 MWh/yr
26/07/2023 to 25/07/2024	0	156,271.79 MWh/yr	156,271.79 MWh/yr
26/07/2024 to 25/07/2025	0	156,271.79 MWh/yr	156,271.79 MWh/yr
26/07/2025 to 25/07/2026	0	156,271.79 MWh/yr	156,271.79 MWh/yr
26/07/2026 to 25/07/2027	0	156,271.79 MWh/yr	156,271.79 MWh/yr
Total	0	781,358.95 MWh/yr	781,358.95 MWh/yr
Note -The first year start date is from 2 years back from GS registration date and vintage specific dates will be fixed after GS registration date.			

Since project activity is renewable electricity generation, the quantity of Affordable and Clean Energy is mentioned under project estimate. In baseline, no any renewable energy generation, hence mentioned as zero.

SDG 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
26/07/2022 to 25/07/2023	0 Training, 0 Jobs	1 Training, 1 Jobs	1 Training, 1 Jobs ¹²
26/07/2023 to 25/07/2024	0 Training, 0 Jobs	1 Training, 1 Jobs	1 Training, 1 Jobs
26/07/2024 to 25/07/2025	0 Training, 0 Jobs	1 Training, 1 Jobs	1 Training, 1 Jobs
26/07/2025 to 25/07/2026	0 Training, 0 Jobs	1 Training, 1 Jobs	1 Training, 1 Jobs
26/07/2026 to 25/07/2027	0 Training, 0 Jobs	1 Training, 1 Jobs	1 Training, 1 Jobs
Total	0 Training, 0 Jobs	05 Training, 05 Jobs	05 Training, 05 Jobs

The project leads to employment opportunities which would not have been possible in the baseline scenario. The project provides employment at least 05 persons in the second crediting period. Also, project activity improves the quality of employment by giving training to employee. Thus minimum 1 training/ year will be conducted by the project activity.

SDG 13: Take urgent action to combat climate change and its impacts

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
26/07/2022 to 25/07/2023	139,035 tCO2	0 tCO2	139,035 tCO2

¹² During the CP renewal period, at least one new job and one training session will be provided annually. A total of 75 people are directly employed due to the project activity, and all will continue working during the CP renewal period

	26/07/2023 to 25/07/2024	139,035 tCO2	0 tCO2	139,035 tCO2
	26/07/2024 to 25/07/2025	139,035 tCO2	0 tCO2	139,035 tCO2
	26/07/2025 to 25/07/2026	139,035 tCO2	0 tCO2	139,035 tCO2
	26/07/2026 to 25/07/2027	139,035 tCO2	0 tCO2	139,035 tCO2
	Total	695,175 tCO2	0 tCO2	695,175 tCO2
	Assessment Team confirms that the estimation of emission reductions (SDG 13) or net anthropogenic removals and other Sustainable Development Goals (SDG 7 and SDG 8) mentioned in Section B.6 of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/ is correct as per the applied methodology ACM0002: Grid-connected electricity generation from renewable sources - Version 22.0/19/ and it complies with the GS4GG Validation and verification standard Version 1.0, dated: 06/03/2023 /10/ and guidelines mentioned in the template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/. Assessment Team conclude that parameters and values mentioned under SDGs 7, 8 and 13 of SDG Impact Tool submitted by PD are consistent and correct with the Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/ which are validated above.			

4.4 Monitoring Plan

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, dated 12/07/2024 and, supporting documents (Section 3.1) and previously registered
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	CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.														
Findings	CAR#3 and CAR#2 was raised and closed successfully. For more details, please refer Appendix 3.														
Conclusion	As part of monitoring plan, these are the following data/parameters which will be monitored under 3 SDGs (SDG 7, SDG 8 & SDG 13): SDG 7: Affordable and Clean Energy (Indicators 7.2.1) <table border="1"> <tr> <td>Data / Parameter</td><td>EG_{facility,y} or EG_{PJ,y}</td></tr> <tr> <td>Unit</td><td>156,271.79 MWh/Year</td></tr> <tr> <td>Description</td><td>Net Quantity of Electricity supplied to grid</td></tr> <tr> <td>Source of data</td><td>Calculated from difference of Gross electricity generation and Auxiliary consumption by the project activity</td></tr> <tr> <td>Measurement methods and procedures</td><td> Data Type: Measured Monitoring equipment: A set of two dedicated (Main and Check meter including) Energy meter. Meters are connected to State Load Dispatch Centre through Modem from transmission of data. Net electricity generated will be calculated from the readings of Gross electricity generation and Auxiliary consumption by the project activity Cross Checking: Quantity of net electricity supplied to the grid will be cross checked from the Invoices/33/ Monthly Bill raised by the Project Participant to the IA Hydro Energy Private Limited and Daily log book sheet / /. </td></tr> <tr> <td>Monitoring frequency</td><td> Measurement: Continuous. Recording: Monthly Monitoring Method: recording in JMR (Joint Meter Reading) Accuracy Class 0.2s The JMR includes monthly recording of electricity export & import. </td></tr> <tr> <td>QA/QC procedures</td><td>Net electricity supplied to the grid by the project activity has been cross checked with</td></tr> </table>	Data / Parameter	EG _{facility,y} or EG _{PJ,y}	Unit	156,271.79 MWh/Year	Description	Net Quantity of Electricity supplied to grid	Source of data	Calculated from difference of Gross electricity generation and Auxiliary consumption by the project activity	Measurement methods and procedures	Data Type: Measured Monitoring equipment: A set of two dedicated (Main and Check meter including) Energy meter. Meters are connected to State Load Dispatch Centre through Modem from transmission of data. Net electricity generated will be calculated from the readings of Gross electricity generation and Auxiliary consumption by the project activity Cross Checking: Quantity of net electricity supplied to the grid will be cross checked from the Invoices/33/ Monthly Bill raised by the Project Participant to the IA Hydro Energy Private Limited and Daily log book sheet / /.	Monitoring frequency	Measurement: Continuous. Recording: Monthly Monitoring Method: recording in JMR (Joint Meter Reading) Accuracy Class 0.2s The JMR includes monthly recording of electricity export & import.	QA/QC procedures	Net electricity supplied to the grid by the project activity has been cross checked with
Data / Parameter	EG _{facility,y} or EG _{PJ,y}														
Unit	156,271.79 MWh/Year														
Description	Net Quantity of Electricity supplied to grid														
Source of data	Calculated from difference of Gross electricity generation and Auxiliary consumption by the project activity														
Measurement methods and procedures	Data Type: Measured Monitoring equipment: A set of two dedicated (Main and Check meter including) Energy meter. Meters are connected to State Load Dispatch Centre through Modem from transmission of data. Net electricity generated will be calculated from the readings of Gross electricity generation and Auxiliary consumption by the project activity Cross Checking: Quantity of net electricity supplied to the grid will be cross checked from the Invoices/33/ Monthly Bill raised by the Project Participant to the IA Hydro Energy Private Limited and Daily log book sheet / /.														
Monitoring frequency	Measurement: Continuous. Recording: Monthly Monitoring Method: recording in JMR (Joint Meter Reading) Accuracy Class 0.2s The JMR includes monthly recording of electricity export & import.														
QA/QC procedures	Net electricity supplied to the grid by the project activity has been cross checked with														

		invoices submitted for the sale of power by the project proponent/34/. Calibration of all the meters will be undertaken at least once in a year calibration or whenever abnormal difference/inconsistency is observed between main meter and check meter and faulty meters will be duly replaced immediately.
	Data / Parameter	EG _{Gross}
	Unit	157,850 MWh
	Description	Gross electricity generation by the project activity
	Source of data	Energy meter readings from plant records
	Measurement methods and procedures	Data Type: Measured Monitoring equipment: Not Applicable as it is a calculated parameter The data will be measured/metered continuously and a logbook will be maintained on site to record hourly readings from the energy meter. The readings will be taken by the shift Engineer. This hourly data will be signed off at the end of every 8-hour shift by the engineer in charge of the shift and again at the end of each day by the power plant manager. Cross Checking: Quantity of net electricity supplied to the grid will be cross checked from the Invoices/33/ Monthly Bill raised by the Project Participant to the IA Hydro Energy Private Limited and Daily log book sheet /47 /.
	Monitoring frequency	Measurement: Continuous Recording: Monthly Monitoring Method: recording in JMR (Joint Meter Reading) The JMR includes monthly recording of electricity export & import.

	QA/QC procedures	Net electricity supplied to the grid by the project activity has been cross checked with invoices submitted for the sale of power by the project proponent/34/ and logbook sheet / 47/. Calibration of all the meters will be undertaken at least once in a year calibration or whenever abnormal difference/ inconsistency is observed between main meter and check meter and faulty meters will be duly replaced immediately.
	Data / Parameter	EG _{y Aux}
	Unit	789.25 MWh
	Description	Auxiliary consumption by the project activity
	Source of data	Energy meter readings from Plant records
	Measurement methods and procedures	Data Type: Measured Monitoring equipment: Not Applicable it is a calculated parameter The data will be measured/metered continuously and a logbook will be maintained on site to record on daily basis from the auxiliary meter. The readings will be taken by the shift Engineer. This daily data will be signed off by the engineer in charge of the shift and by the power plant manager Cross Checking: Quantity of net electricity supplied to the grid will be cross checked from the Invoices/33/ Monthly Bill raised by the Project Participant to the IA Hydro Energy Private Limited and Daily log book sheet / 47/.
	Monitoring frequency	Measurement: Continuous Recording: Monthly Monitoring Method: recording in JMR (Joint Meter Reading) The JMR includes monthly recording of electricity export & import.

QA/QC procedures	Net electricity supplied to the grid by the project activity has been cross checked with invoices submitted for the sale of power by the project proponent/34/. Calibration of all the meters will be undertaken at least once in a year calibration or whenever abnormal difference/ inconsistency is observed between main meter and check meter and faulty meters will be duly replaced immediately.
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SDG 8: Decent Work and Economic Growth

Data / Parameter	Quantitative employment Quality of employment
Unit	Number (employees) Number (Trainings)
Description	• Number of project employees. • Number of Trainings provided to employees & O&M staff
Source of data	• Employee Records • Training Records (HSE & HR)
Measurement methods and procedures	Employee Records Training Records
Monitoring frequency	Monthly monitoring and annual compilation
QA/QC procedures	The number of persons employed is mentioned in the plant register, which can be crossed checked with daily attendance register. The trainings held can be crosschecked with the training documents/29 / maintained at site. The information required for this parameter is checked by VVB during site visit through interview with people and daily attendance register.

SDG 13: Climate Action

	Data Parameter /	Emissions Reduction
	Unit	tCO ₂ e
	Description	CO ₂ emission reduction due to implementation of project activity
	Source of data	Calculated as per Tool 7: Tool to calculate the emission factor for an electricity system. The data for emission factor are obtained from “CO ₂ Baseline Database for Indian Power Sector” version 19.0, published by the Central Electricity Authority, Ministry of Power, Government of India. As per Estimated ER sheet. During the period, the results shall be obtained from the Actual ER sheet
	Measurement methods and procedures	Calculated from CEA database version 19.0 and Energy Generation
	Monitoring frequency	The energy meters are calibrated once in a year by an independent testing laboratory. The calibration of the meters will be done once in a year as per CEA guidelines. The accuracy class of meters, feeder arrangements, metering and determination of net electricity supplied to grid and calibration interval are under purview of state electricity board and PD do not have any control on it.
	QA/QC procedures	A check meter is also installed near the main meter to cross check the electricity exported to the grid. The check meter reading is used in case of failure of main meter.
Assessment Team confirms that the monitoring plan mentioned in Section B.7 of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/ is correct as there is no change from the previous monitoring plan /3/ mentioned in the previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018/3/ and it also complies with the GS4GG Validation and verification standard		

	Version 1.0, dated: 06/03/2023 /10/ and guidelines mentioned in the template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/. The assessment team reviewed all meter calibration details during the site visit and conducted interviews. It was found that Two sets of meters (Main & Check meter) were changed in the year 2020 & their calibrations records couldn't be evidenced, on site interviews revealed that these new meters are connected through modem to State electricity Board for communication and it is responsibility of the board to do its calibration. As a result, the VVB issued a Clarification Request (CL #01 and converted this CL into a Forward Action Request (FAR). Refer to Appendix 3 for findings (CL #1 and FAR #6).
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4.5 Project Start date, crediting period type and duration

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, dated 12/07/2024 and, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	CAR#02 was raised and closed successfully. For more details, please refer Appendix 3.
Conclusion	Assessment Team confirms that start date of this project activity is 23/07/2011 and it is correct as per the supporting document i.e., Work order for civil work for Hydro power plant and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018/3/and GS4GG Transition Annex; Version 1.0/38/. 26/07/2017¹³ (this is commissioning date of full 36 MW capacity and is within two years back from expected GS registration)

¹³ The project is registered with UNFCCC with reference no CDM 10153. The crediting period for the project activity under UNFCCC is 7 years and renewable twice. The 1st crediting period is from 26/07/2017 to 25/07/2024 followed by 2nd from

	The 2 nd crediting period for this project activity as mentioned in section C.2 of Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024 is from 26/07/2022 to 25/07/2027 (Inclusive of both dates). It is renewable and length of this crediting period is 5 years. It is correct as per the GS4GG Validation and verification standard Version 1.0, dated: 06/03/2023 /10/ and CDM Projects Transitioning to GG4GG 02/06/2023 /38 /
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4.6 Environmental Impacts

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, dated 12/07/2024 and, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	No findings were raised.
Conclusion	Assessment Team confirms that this project activity does not harm environment as mentioned in Appendix-1: Safeguarding Principles Assessment of Final Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/. It is correct as per the Environment and Social Impact Assessment and the ESIA report is prepared by an independent third party (INDO ARYA CENTRAL TRANSPORT LIMITED) to meet the environmental clearance criteria of MOEFCC. /50/

4.7 Local Stakeholder Consultation

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated:
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26/07/2024 to 25/07/31 and 3rd from 26/07/2031 to 25/07/2038. The 1st crediting period under GS4GG will start from 2 years retroactive from the date of initial submission with GS till 25/07/2024

	28/06/2024/2/ and final version 02, dated 12/07/2024 and, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	CAR#05 was raised and closed successfully. For more details, please refer Appendix 3.
Conclusion	As per clause 5.1.47 of GS4GG Principles & Requirements; Version 1.2, the scope of Design certification renewal is limited to: a) Changes in the Project as related to the General Eligibility Criteria. b) Incorporation of any relevant updates to the Gold Standard Requirements. c) Re-definition of Baseline Scenario and any impact of change on the Eligibility Principles, Criteria and Requirements. d) Any Gold Standard activity, product and methodology-specific Requirements. e) Demonstration of Ongoing Financial Need, where relevant This project activity is already registered in GS4GG and PD had conducted the Stakeholder consultation physical meeting retroactively at the time of validation. no complementary stakeholder meeting has been conducted during this RCP (Renewal of crediting period) there have been no changes in the project design capacity, monitoring approach, or emission reduction calculations & Relevant Stakeholders for this project. For continuous input or to record ongoing communication with local stakeholders a grievance register /38/ is available at the project site office of Chanju I Hydro Electric Project in Himachal Pradesh, India at Village VIII Bhaghaigarh, Tehsil Churah, District Chamba in Himachal Pradesh state of India. It is permanently available to local stakeholders. It is correct as per the actual site scenario and complies with GS4GG Principles and Requirements; Version 1.2, dated: 23/10/2019 /6/, Validation and verification standard; Version 1.0, dated: 06/03/2023 /10/, guidelines of template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/.

4.8 Global Stakeholder Consultation

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, dated 12/07/2024 and, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	No findings were raised.
Conclusion	The project activity was earlier registered in CDM and transition has been done from CDM to GS4GG. Only GS4GG for CER labelling and seek to move to GSVER stream to issue Gold Standard VERs. PD had conducted the Stakeholder consultation physical meeting in line with the GS4GG requirements and guidelines. The local stakeholder consultation meeting was applicable as the project is retroactive registration project. The table 2.8 of the GS toolkit was used to identify the stakeholders. The identified stakeholders were the ones local people impacted by the project and then were local NGOs, International NGOs, GS representatives and local govt etc. Also, PD had conducted a physical Stakeholder consultation meeting on 17/01/2009 at Village VIII Bhaghaigarh, Tehsil Churah, District Chamba in Himachal Pradesh. All the stakeholders were invited through public notice which were displayed/placed to the nearby areas. Further, stakeholders were invited individually to attend the stakeholders meeting. Assessment team confirms that the stakeholder consultation mentioned in section E of Final Key Project Information & Project Design Document (PDD); Version 05, dated 11/10/2024/1/ is correct as per the previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018/3/ and fulfils the GS4GG principles and requirements /6/ and also complies with the guidelines of template guide of Key Project Information & Project Design Document (PDD); Version 1.5, dated 29/06/2023 /17/.

4.9 Safeguarding Principle and Gender Sensitive Assessment

Means of Validation	Desk Review of Key Project Information & Project Design Document (PDD); Version 01, dated: 28/06/2024, Version 02, dated 12/07/2024, Version 03, dated 19/07/2024/1/ Final Key Project Information & Project Design Document (PDD) Version 05, dated 11/10/2024/1/, ER Sheet; Version 01, dated: 28/06/2024/2/ and final version 02, dated 12/07/2024 and Plant Generation data, supporting documents (Section 3.1) and previously registered CDM Project Design Document (PDD); Version 05, dated 20/11/2018 /3/ and onsite audit/44/.
Findings	CAR#08 was raised and closed successfully. For more details, please refer Appendix 3
Conclusion	No safeguarding principles were added to the monitoring plan in the registered PDD. Therefore, the relative success and failures, or improvements to proposed mitigation measures is not applicable.

5 INTERNAL QUALITY CONTROL

The final validation report has undergone a technical review and quality review before being submitted to the project participant(s)/coordinating managing entity and GS4GG registry. Technical reviewer is qualified in accordance with VKU Certification Private Limited., qualification scheme for GS4GG validation and verification performed the technical review.

6 VALIDATION OPINION

VKU Certification Pvt. Ltd. is contracted by IA Energy Hydro Pvt. Ltd (Project Developer) and EKI Energy Services Limited (Project Representative) for validation (RCP) of the project activity “**Chanju I Hydro Electric Project in Himachal Pradesh, India**” (GS 7154) for 2nd crediting period from 26/07/2022 to 25/07/2027 (Inclusive of both dates).

The validation was performed following requirements and guidelines defined by Gold Standard for the Global Goals and UNFCCC criteria, Clean Development Mechanism (CDM), latest version of Validation and Verification Standard and related Standards/Guidance and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The project will result in reductions of greenhouse gas (GHG) emissions that are real, measurable and give long-term benefits to the mitigation of climate change, as stated in the final Key Project Information and Project Design document (PDD)/1/. In the opinion of the validation team, the project meets all relevant GS4GG, UNFCCC, CDM criteria and all relevant host country.

The review of the final Key Project Information and Project Design document (PDD)/1/ and the subsequent follow-up interviews have provided validation team with sufficient evidence to determine the validity of the original baseline. The key project information & project design document (PDD)/1/ and ER Sheet/2/ correctly applies the valid version of the methodology ACM0002: Grid-connected electricity generation from renewable sources - Version 22.0/19/ and meets all relevant criteria therein. The monitoring arrangements described in the monitoring plan are feasible within the project, and it is validation team's opinion that the project developer is able to implement the monitoring plan and it is deemed likely that the forecasted emission reductions of 139,035 tCO₂e per year from the project during the second crediting period will be achieved, given that the underlying assumptions do not change.

During the course of validation total of 13 findings were raised, which includes: 07 CARs, 02 CLs and 06 FAR were identified in the Key Project Information and Project Design document (PDD) /1/, ER Sheet/2/. All the CAR and CL have been successfully resolved by project developer. But there is 6 FAR raised during current renewal of crediting period which needs to be addressed in next verification available in Appendix-3 of this report.

In summary, it is validation team's opinion that the project activity **“Chanju I Hydro Electric Project in Himachal Pradesh, India” (GS 7154)** meets all relevant GS4GG and UNFCCC requirements for the renewal of the crediting period. Hence, VKU Certification Pvt. Ltd. recommends the renewal of the second crediting period from 26/07/2022 to 25/07/2027 (Inclusive of both dates).

7 MATERIALITY AND LEVEL OF ASSUMPTION APPLIED

7.1 Materiality

As per the ISO 14063-3:2019 /24/, VKU validation team has applied materiality thresholds for the purpose to reach at the conclusion on the GHG statement about the estimated SDG Impacts due to the project activity **“Chanju I Hydro Electric Project in Himachal Pradesh, India” (GS 7154)**. Hence, to assess the baseline scenario and estimation, validation team has applied the qualitative materiality over the assumptions and information presented in the final Key Project Information and Project Design document (PDD) Version 05, dated 11/10/2024/1/.

7.2 Level of Assumption

All the revisions in the validation report before being submitted to the project representative were subject to an independent internal technical review to confirm that all validation activities had been completed

according to the pertinent VKU's internal procedure and with a **“Reasonable Level of Assumption”** as per the ISO Standard 14064-2 and ISO 14064-3 /24/.

APPENDIX 1: Abbreviations

Abbreviations	Full texts
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CL	Clarification Request
CO₂	Carbon Dioxide
CO_{2e}	Carbon Dioxide equivalent
CME	Co-ordinating/ Managing Entity
EB	Executive Body
EF	Emission Factor
FAR	Forward Action Request
FVR	Final Validation Report
GS	Gold Standard
GS4GG	Gold Standard for Global Goals
GHG	Greenhouse Gas
PD	Project Developer
QC/QA	Quality Control/Quality Assurance
SDG	Sustainable Development Goal
TA	Technical Area
TR	Technical Review
UNFCCC	United Nations Framework Convention on Climate Change
VER	Verified Emission Reductions
VVB	Validation and Verification Body
VVS	Validation and Verification Standard
AT	Assessment team
N/A	Not Applicable
RCP	Renewal of crediting Period
PDD	Project Design Document
COD	Date of commissioning
ER	Emission Reduction
CEA	Central Electricity Authority
PPA	Power Purchase Agreement
ODA	Official Development Assistance
MOU	Memorandum of Understanding
NOC	No Objection Certificate

APPENDIX 2: COMPETENCY STATEMENT

Team Leader-



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Sunil Kathuria
Nationality	Indian
Countries of Experience	Malaysia, Uganda, Kenya, South Africa, Nigeria Bangladesh, China, Vietnam, Thailand, Philippines, United Kingdom, Germany, USA
Education Qualification	B.E. (Electrical Power)
Year of Experience	40 Years
Area of Expertise	Climate Change & Environment Energy Generation / Distribution GHG Footprints Manufacturing Sector
Eligible Sectoral Scope	TA 1.1 – Thermal energy generation TA 1.2 – Renewables TA 2.1 - Energy distribution TA 3.1 - Energy Demand TA 4.1 – Cement and lime production (Manufacturing Industries) TA 13.1 Solid Waste & Wastewater

Roles

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	YES
Verifier	YES
Team Leader	YES
Technical Reviewer	YES
Local Expert (Country Wise)	YES
TA Expert (1.1, 1.2, 2.1, 3.1, 4.1, 13.1)	YES
Financial Expert	NO

Reviewed by	Apoorva Gupta (Quality Manager)	Date	16/10/2023
Approved by	Barun Kumar (Technical Manager)	Date	16/10/2023

Validator/Verifier – Trainee-



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Apoorva Tripathi
Nationality	Indian
Countries of Experience	India
Education Qualification	B.Sc. (BCZ) M.Sc. (Environmental Science)
Year of Experience	8 Months as Project Trainee
Area of Expertise	Climate Change & Environment
Eligible Sectoral Scope	NA

Roles

Project Trainee	NO
Validator/Verifier Trainee	YES
Validator	NO
Verifier	NO
Team Leader	NO
Technical Reviewer	NO
Local Expert (Country Wise)	NO
TA Expert (X.X)	NO
Financial Expert	NO

Reviewed by	Vandana Gupta (Quality Manager)	Date	04/04/2023
Approved by	Vivek Kumar Ahirwar (Technical Manager)	Date	04/04/2023

Technical Reviewer



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Sanjay Kumar K
Nationality	Indian
Countries of Experience	Vietnam, Thailand, India
Education Qualification	BE (Civil Engineering) ME (Environmental Engineering)
Year of Experience	12+ Years
Area of Expertise	Climate Change & Environment / Industry
Eligible Sectoral Scope	TA 1.2 - Energy generation from renewable energy sources TA 3.1. Energy demand TA 6.1. Construction TA 13.1. Solid waste and wastewater

Roles

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	YES
Verifier	YES
Team Leader	YES
Technical Reviewer	YES
Local Expert (Country Wise)	YES
TA Expert (1.2, 3.1, 6.1 & 13.1)	YES
Financial Expert	NO

Reviewed by	Apoorva Gupta (Quality Manager)	Date	16/10/2023
Approved by	Barun Kumar (Technical Manager)	Date	16/10/2023

APPENDIX 3: RESOLUTION OF FINDINGS

Finding No. 01	Date: 06-July-2024
Finding Type- CAR ☐ CL ☒ FAR ☐	
Stage of funding raised:	
Desk Review	☐
Onsite assessment	☒
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
1. Validation and Verification Standard V1.0	
Non-Conformity	
1. Document: The document incorporated in the List of Documents needs to be provided. • PPA • No double counting • Generation data • The declaration between PP and Chief Engineer (Energy), Directorate of Energy, Govt. of HP • Training records • SDG impact tool 2. In section B.7.3: During the onsite visit, AT reviewed the calibration certificate and found that the last meter calibration was performed on 17/05/2019, with a validity extending until 17/05/2020. No subsequent calibrations have been carried out by PD. Could you clarify this?	
Evidence	
• PPA • No double counting • Generation data • The declaration between PP and Chief Engineer (Energy), Directorate of Energy, Govt. of HP • Training records • SDG impact tool • Calibration of the meters	
1st Response from PD	Date: 12/07/2024
1. Document: Following document has been provided. • PPA • No double counting • Generation data • The declaration between PP and Chief Engineer (Energy), Directorate of Energy, Govt. of HP • Training records • SDG impact tool 2. Calibration of the meters was carried out by state utility i.e. Chhattisgarh State Power Distribution Company Ltd. (CSPDCL) and PD don't have control over it.	
Documents provided by PD for review	
PDD V2	

1st Review by Assessment Team	Date: 14/07/2024
1. Following Documents are not submitted • Generation Data • Training Records 2. The response provided does not align with the registered PDD Version 02 dated 18/01/2019, therefore this issue remains unresolved. (Open) Hence CL#01 is open	
2nd Response from PD	Date: 18/07/2024
Following Documents are being submitted • Generation Data • Training Records Calibration of the meters was carried out by state utility i.e. Chhattisgarh State Power Distribution Company Ltd. (CSPDCL) and PD don't have control over it and as per requirement of CSPDCL inspect them.	
Documents provided by PD for review	
PDD V3	
2nd Review by Assessment Team	Date: 19/07/2024
The response provided by PP does not align with the PDD version 03 dated 19/07/2024 therefore this issue remains unresolved.so VVB convert this CL into FAR (Forward Action requestion). (See findings number 06) CL#01 Closed	

Finding No. 02	Date: 06-July-2024
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised:	
Desk Review	☒
Onsite assessment	☐
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
1. Template guide- Project Design Document Version1.4 A.1/A.3 2. Renewable Energy activity requirements v1.4 3. GS principles & requirements version 1.2 Section A.1.1 4. Validation and Verification Standard V1.0 Section 4.1.2/b	
Non-Conformity	
1. GS-PDD: The font colour and formatting of the report should be within the guidelines stated in the template guide. 2. Section A.1: • Dates in this section are found to be inconsistent with section C.2.1 of GS PDD version 05 dated 14/02/2023 and also GS registry. Also correct this information in section C.2.1 • This value of Emission reductions is inconsistent with ER sheet. Please check and correct Entire documents 3. Section A.1.1:	

• Latest version of GS templates and documents must be used in PDD, e.g. GS4GG-Renewable-Energy-Activity-Requirements-v1.4 is the most current version; however GS-PD continues to use version 03. • Give details of GS evaluation of eligibility of the project. • Reference to GS document and clause must be clearly stated for eligibility criteria stated in this section. 4. Section A.3: The value of net water head is found to be inconsistent with the technical specification. 5. Section D1 has not been filled as per Template Guidelines. It should have summary of the Assessment available in Appendix 1 to clearly show which aspects form part of the Project monitoring plan	
Evidence	
1. Key Project Information & Project Design Document (PDD) Version 01, Dated 28-june-2024 2. Renewable Energy activity requirements v1.4 3. Technical Specification details	
1st Response from PD	Date: 12/07/2024
GS-PDD: The font colour and formatting of the revised PDD now being in-lined with the guidelines stated in the template guide. Section A.1: • Dates mentioned in revised PDD is now being corrected and is in-lined with section C.2.1 of GS PDD version 05. • This value of Emission reductions is being corrected in in-lined in Entire documents. Section A.1.1: • Latest version of GS templates and guidelines are being used in revise PDD. • Details of GS evaluation of eligibility of the project is now being mentioned in revised PDD. • Reference to GS document and clause is being mentioned and now it is clearly stated for eligibility criteria stated in this section. Section A.3: The value of net water head is being corrected as per technical specification. Section D.1: has now being filled as per Template Guidelines. There are no any mitigation measures required and no any Safeguarding principles are added to the monitoring plan. Hence this section is not applicable.	
Documents provided by PD for review	
PDD V2 ER sheet V2 SDG Impact tool	
1st Review by Assessment Team	Date: 14/07/2024
GS-PDD: Font colour has not updated in revised PDD. (Open) Section A.1: • Section C.2.1 has now been corrected, and supporting documents have also been provided. Closed • The value of emission reduction is now corrected in entire documents. Closed Section A.1.1: • GS4GG-Renewable-Energy-Activity-Requirements-v1.4 is now corrected. Closed • Reference and clause of GS document is not included in revised GS-PDD. (Open) Section A.3: • The value is now corrected in revised GS- PDD. Closed Section D1: • GSS-PDD has been per the template guideline. Closed	
2nd Response from PD	Date: 18/07/2024

GS-PDD: Font colour is being updated in revised PDD as per GS PDD Guideline. Section A.1.1: Details Reference to GS document and clause is being mentioned and now it is clearly stated for eligibility criteria stated in this section.	
Documents provided by PD for review	
PDD V3	
2nd Review by Assessment Team	Date: 19/07/2024
- Assessment team checked and confirm that PD has update the font colour in revised PDD version 3.0 dated 19/07/2024.Closed - PD has included references and clause in revised PDD version 3.0 dated 19/07/2024.Closed	
CAR#02 Closed	

Finding No. 03	Date: 06-July-2024
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised:	
Desk Review	☒
Onsite assessment	☐
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
1. CEA Database version 19 2. OFN Sheet 3. Validation and Verification Standard V1.0 Section 4.1.2/b 4. Template guide- Project Design Document Version 1.4 Section B.7.1	
Non-Conformity	
1. Section B.4: The date of Baseline CO2 Emission Database is not matching with the published documents. 2. Section B.4, step 1.1 claims shall be backed by the relevant National policies/laws. While doing so, PD shall present data in order to demonstrate how the original baseline is still valid. PD shall provide information of the present policies of the Government of India and project compliance with the same e.g. RE target of the country under NDC 3. Section B.5: - Demonstration of ongoing financial needs has not been carried out as per GS Principles & requirements version 1.2 clause 4.1.51 & 4.1.52 - Revenue figures are grossly understated in GS-PD & OFN sheet as verified through sample of plant operational records. Please submit the complete data for the entire crediting period of Energy generation, revenue earned and expenditures showing Profit and loss in the OFN sheet	

along with the different tariffs prevalent during the current Crediting period. Evidence in regard to statements made in this section needs to be submitted. 4. Section B 6 : Most relevant SDG target for this project activity is not defined. Value of annual emission reductions used in GS-PD is found to be inconsistent with ER sheet. 5. Section B.7.1: The SLD of the monitoring system along with the location of energy meters and sub-station/grid connection points is missing.	
Evidence	
1. Key Project Information & Project Design Document (PDD) Version 01, Dated 28-june-2024 Section B.4/B.7.1. 2. Generation data	
1st Response from PD	Date: 12/07/2024
Section B.4: The date and month of Baseline CO2 Emission Database is being revised and now it is matching with the published documents. Section B.4, Data regarding original baseline is still valid is being described in revised PDD and Information of the present policies of the Government of India and project compliance being added. Section B.5: - Demonstration of ongoing financial needs is now being revised as per GS Principles & requirements version 1.2 clause 4.1.51 & 4.1.52 - Complete data for the entire crediting period of Energy generation, revenue earned and expenditures showing Profit and loss in the OFN sheet along with the different tariffs prevalent during the current first Crediting period and other Evidence in regard to statements made in this section are being submitted to verify the OFN sheet. Section B 6: Most relevant SDG target is being revised and Value of annual emission reductions used in GS-PD is now corrected and in-lined with ER sheet. Section B.7.1: The SLD of the monitoring system along with the location of energy meters and sub-station/grid connection points is being added in Revised PDD.	
Documents provided by PD for review	
PDD V2 ER sheet V2 SDG Impact tool	
1st Review by Assessment Team	Date: 14/07/2024
Section B.4: Section has been updated with date and month of CO2 baseline data base in revised PDD. Closed	

Information regarding the baseline has been corrected in the revised GS-PDD, and current Government of India policies and project compliance has also been included. Closed	
Section B.5:	
No Corrective action has been taken in the revised GS-PDD, so it remains open.	
Section B 6:	
No Corrective action has been taken in the revised GS-PDD. No SDG targets have been included in this section, so it remains open.	
Section B.7.1:	
PD has included the SLD of the monitoring system, along with the locations of energy meters and sub-station/grid connection points, in the revised PDD. Closed	
2nd Review by Assessment Team	Date: 19/07/2024
- Assessment team verified and confirms that PD has demonstrate of ongoing financial need in revised PDD version 3.0 dated 19/07/2024 as per the GS Principles & requirements version 1.2 clause 4.1.51 & 4.1.52. Closed - PD has updated relevant SDG target in revised PDD version 3.0 dated 19/07/2024.Closed	
CAR#03 Closed	

Finding No. 04	Date: 06-July-2024
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised:	
Desk Review	☒
Onsite assessment	☐
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
1. CEA Database version 19 2. Generation data and PPA	
Non-Conformity	

1. ER Sheet: The calculated value of operating margin is inconsistent with the PDD and Emission data for years 2019-20, 2020-2021 CEA Database version 19. 2. Inconsistencies observed in “years” across entire sheet same needs to be corrected. 3. OFN Sheet: • Generation values are grossly understated as verified from sample of monthly records of generation during site visit. Please submit month wise generation data for entire CP since 2017 to 2024 in this sheet to verify figures. • No expenses have been shown in these statements. Please include the same and present credible year wise accounting statement showing profit and loss for each year starting from 2017-2024, • There are three PPAs signed since start date of crediting period having different rates How a single rate is taken to determine gross revenue earned	
Evidence	
1. ER sheet Values of Emission data for years 2019-20 and 2020-2021 (Operating margin) 2. OFN Sheet	
1st Response from PD	Date: 12/07/2024
1. ER Sheet: The calculated value of operating margin and Emission data for years 2019-20, 2020-2021 CEA Database version 19 are correct in the revised PDD. 2. Crediting period years and date are corrected as per GS Project Cycle (5+5+5) 15 Years and same approach is being followed in revised PDD. 3. OFN Sheet: submitted	
Documents provided by PD for review	
PDD V2 ER sheet V2 OFN Sheet	
1st Review by Assessment Team	Date: 14/07/2024
ER Sheet: • The values are in line with the CEA data base. Closed • Crediting periods years is now corrected. Closed OFN Sheet: • OFN sheet has not been submitted along with the revised document. Open	
2nd Response from PD	Date: 18/07/2024
• Section B.5: Revised ongoing financial sheet is being submitted.	
Documents provided by PD for review	
PDD V3 OFN Sheet	

2nd Review by Assessment Team	Date: 19/07/2024
OFN Sheet: PD has submitted OFN sheet. Closed	

Finding No. 05	Date: 08-July-2024
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised: Desk Review ☒ Onsite assessment ☐ Technical Review ☐ Project Review Report by Registry ☐	
Requirement 1. Template guide- Project Design Document Version1.4 Section E 2. Stakeholder Consultation and Engagement Requirements.	
Non-Conformity 1. Section E.1: a. PD shall discuss if and why there is not a need to conduct a complementary stakeholder consultation for the renewal of the crediting period. b. PD shall discuss how the stakeholder feedback Round conducted through physical meetings on 14 th January 2009, and feedback round of 27/10/2010 meets stakeholder consultation engagement Requirements. 2. In Section E.2: a. Mitigation mechanisms for complaints and grievances received from local and Global stakeholders are not stated in this section as per the guidelines provided in the Template.	
Evidence 1. Key Project Information & Project Design Document (PDD) Version 01, Dated 28-june-2024 section E.1/E.2/Appendix 5/.	
1st Response from PD	Date:12/07/2024
1. Section E.1: a. As per para 4.1.28 of “Principles of requirements” V1.2 - The Stakeholder Consultation shall be conducted prior to the start date of the Project and it is not mention in the guidance that there is a need to conduct a complementary stakeholder consultation for the renewal of crediting period. However PD has placed a grievance mechanism for ongoing communication with stakeholder.	

b. At the time of CDM registration, PD has published a notice in local newspaper on 14/01/2009 and the stakeholder meeting was conducted on 17/01/2009, 27/10/2010, 18/05/2013 respectively. Further, SFR have been planned for 60 days after listing project with GS. The email was sent on 02/02/2019 to relevant stakeholders for SFR as per the Stakeholder consultation and engagement requirements 2. In Section E.2 a. Grievance Register has been maintained at office of PD and O&M site office at Project location to mitigate the complaints and grievances received from local stakeholders and for global stakeholder's email address is mentioned in section E.2	
Documents provided by PD for review	
PDD	
1st Review by Assessment Team	Date: 14/07/2024
3. Section E.1 and E.2 The above response provide by PD in revised PDD has inline as per the para 4.1.28 of "Principles of requirements" V1.2. Closed	

Finding No. 06	Date: 19-July-2024
Finding Type- CAR ☐ CL ☐ FAR ☒	
Stage of funding raised: Desk Review ☒ Onsite assessment ☒ Technical Review ☐ Project Review Report by Registry ☐	
Requirement	
Calibration Certificate	
Non-Conformity	
Calibration status should be checked in the next verification. (Refer CL#01)	
Evidence	
Meter calibration certificate	

Finding No. 07	Date: 22/07/2024
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised:	
Desk Review	☐
On-site assessment	☐
Technical Review	☒
Project Review Report by Registry	☐
Requirement	
- Renewable Energy Requirements v1.4 /A.1.1 - PDD template requirements under A.1.1 Version 1.4/A.4/A.1.2/ - Technical Specification /A.3	
Non-Conformity	
Section A.1 - The distance from the power plant and the length of transmission line used? OPEN Section A.1.1 - Since the project was submitted for preliminary review before 24/01/2020 as per the REA requirements, clause 2.1.3 is not applicable. OPEN - The applicability criteria are incorrectly mentioned under clause 2.1.3 of the Renewable Energy Requirements v1.4. OPEN. - Location of the project activity is incomplete as per the criteria under section 3.2.1 of the REA requirements. OPEN. - How is this in line with para (vii) of the PDD template requirements under A.1.1 of the eligibility criteria. OPEN. - As per clause 1.1.3 of Annex A, this discretion lies with GS to accept the findings of ESIA or not. OPEN - What is the minimum ecological flow that is appropriate for the location of the project activity. OPEN - Please at least summarise the measures as part of substantiation to the claim that the project has not resulted in seriously affecting the groundwater. OPEN Section A.1.2 The eligibility criteria fulfilment under (ii) under section A.1.2 of the GS4GG PDD template is not demonstrated. OPEN. Section A.2 No hydropower plant is visible upon checking the coordinates with the google earth pro. OPEN	
	

Section A.3 Is this the rpm of the turbine? Not consistent with registered documents. OPEN Section A.4 The information provided against scale of the project is not in line with the section A.4 of the PDD template. OPEN	
Evidence	
• Renewable Energy Requirements v1.4. under clause 2.1.3 • PDD template requirements under A.1.1 Version 1.4 • GS4GG PDD version 2.0 dated 18/01/2019 • Goggle Earth	
1st Response from PD	Date: 23/07/2024
Section A.1 - The adjutants to the power plant and the length of transmission line used is being mentioned in revised PDD (17.783 KM). Section A.1.1 • Typo error is being corrected and mentioned in revised PDD. • Typo error regarding applicability criteria is being corrected and mentioned in revised PDD. • Correct Location of the project activity being mentioned in revised PDD. • Typo error is being corrected and mentioned in revised PDD. • Typo error is being corrected and mentioned in revised PDD. • Typo error is being corrected and mentioned in revised PDD. • Please at least summarise the measures as part of substantiation to the claim that the project has not resulted in seriously affecting the groundwater. OPEN The measures taken to substantiate the claim that the project has not seriously affected the groundwater include: 1) 1. Conducting a detailed impact assessment study on groundwater levels. 2) 2. Evaluating potential impacts and creating a mitigation plan, as documented in the EIA report. 3) 3. Implementing quality assurance and control procedures. 4) 4. Establishing continuous monitoring protocols to ensure groundwater levels remain unaffected throughout the crediting period. The quality assurance and control procedures are put in place for appropriate continuous monitoring over the crediting period. Section A.1.2 The eligibility criteria fulfilment under (ii) under section A.1.2 of the GS4GG PDD template is now being demonstrated in revised PDD. Section A.2 Correct details are being mentioned in revised PDD.	



Section A.3 Yes, this the rpm of the turbine referred from technical specifications.

Section A.4 The information regarding scale of project is correct.

Documents provided by PD for review

Revised PDD

1st Review by Assessment Team

Date: 24/07/2024

1. PD has mentioned the distance between power plant and the length of transmission line in revised PDD version 4.0 dated 23/07/2024. Closed
2. Typo error has been updated in revised PDD version 4.0 dated 23/07/2024. Closed
3. PD has updated location in revised PDD version 4.0 dated 23/07/2024. Closed
4. PD has updated this section in revised PDD version 4.0 dated 23/07/2024 and also submitted EIA report. Closed
5. PD has mentioned the minimum ecological flow in revised PDD. Closed
6. PD has summarised the measures as part of substantiation to the claim that the project has not resulted in seriously affecting the groundwater in revised PDD. Closed
7. Details are correct as per PDD filling guideline. **IA Hydro Energy Private Limited** is the project proponent (PD) of project activity and have the legal right to control and operate the project activities. Closed
8. PD has updated technical specification in revised PDD version 4.0 dated 23/07/2024. Closed
9. The information regarding scale of project is correct. Closed

CAR#07 Hence closed

Finding No. 08	Date: 22/07/2024
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised:	
Desk Review	☐
Onsite assessment ☐	
Technical Review	☒
Project Review Report by Registry	☐
Requirement	
- GS principles & requirements version 1.2 Section - Template guide- Project Design Document Version 1.4 A.1 - Technical Specification	
Non-Conformity	

Section B.5.2 However the operations of the plant did not stop. Moreover, this is not as per section 4.1.52 of the PAR. Requirements. OPEN Section B.6.3 Units are not provided in the table below. Also, the table is tampered. OPEN Section B.7.3 As per the diagram power transformers are using SF6 breaker while in technical specification it was mentioned as air vacuum breakers. OPEN Section D.2 How does discuss CSR activities mitigate the issues mentioned in 3 above. OPEN Section E.2 • PD office would require prior permission to meet PD representatives. How is this enabling to register or record grievances by the public. How far is the nearest village and how can they commute to the site office. OPEN • What is the helpline number and what are the procedures involved towards recording the grievance and resolving it. OPEN	
Evidence	
• GS principles & requirements version 1.2 under clause 4.1.52 • Key Project Information & Project Design Document (PDD) Version 03, Dated 12-July-2024	
1st Response from PD	Date: 23/07/2024
Section B.5.2 Correction has been done in revised PDD. Section B.6.3 Units are now being provided in the table. Section B.7.3 Typo error is being corrected in revised PDD and being in-lined with SLD. Section D.2 Discussing CSR activities with both genders helps mitigate gender-related issues by identifying and addressing barriers to participation, ensuring fairness in benefits, and accommodating diverse needs. This inclusive approach allows the project to create more effective solutions and opportunities, making it easier for both men and women to engage and benefit equally from the project's activities. Section E.2 • The project activity site office is located in a publicly accessible area, allowing local stakeholders to easily provide feedback. This location supports continuous and regular monitoring of stakeholder comments. • The helpline number for grievances is +91 9755060515. To record a grievance, stakeholders can call this number, visit the site office, or submit written complaints via email or postal mail. Grievances are acknowledged, investigated, and resolved, with follow-up to ensure satisfaction. All grievances and resolutions are documented in the Grievance Register.	
Documents provided by PD for review	
Revised PDD	
1st Review by Assessment Team	Date: 24/07/2024
1. PD has updated this section as per principles & requirements version 1.2 Section 4.1.52 in revised PDD version 4.0 dated 23/07/2024. Closed 2. Units are updated in revised PDD version 4.0 dated 23/07/2024. Closed 3. Typo error is being corrected in revised PDD version 4.0 dated 23/07/2024 and being in-lined with SLD. Closed 4. PD has updated this section D.2 in revised PDD version 4.0 dated 23/07/2024 and add CSR activities mitigate. Closed	

5. PD has updated this section E.2 in revised PDD version 4.0 dated 23/07/2024 for local stakeholders.
CAR#08 Hence Closed

Finding No. 09	Date: 10/10/2024
Finding Type- CAR ☐ CL ☐ FAR ☒	
Stage of funding raised:	
Desk Review	☐
Onsite assessment	☐
Technical Review	☐
Project Review Report by Registry	☒
Requirement	
Site visit and remote audit requirements and procedures V 2.0 §3.2.2	
Non-Conformity	
A physical site visit is mandatory during first verification.	
Evidence	
N/A	

Finding No. 10	Date: 10/10/2024
Finding Type- CAR ☐ CL ☐ FAR ☒	
Stage of funding raised:	
Desk Review	☐
Onsite assessment	☐
Technical Review	☐
Project Review Report by Registry	☒

Requirement
GS4GG principles & requirements version 1.2
Non-Conformity
Verifying VVB shall take note of the monitoring period claims during the 1 st verification.
Evidence
N/A

Finding No. 11	Date: 10/10/2024
Finding Type- CAR ☐ CL ☐ FAR ☒	
Stage of funding raised:	
Desk Review	☐
Onsite assessment	☐
Technical Review	☐
Project Review Report by Registry	☒
Requirement	
GS4GG principles & requirements version 1.2	
Non-Conformity	
VVB and PP shall consider the following rule: 5.1.29: 1st verification shall be completed within two years after the certification is achieved.	
Evidence	
N/A	

Finding No. 12	Date: 09/10/2024
Finding Type- CAR ☐ CL ☐ FAR ☒	

Stage of funding raised:	
Desk Review	☐
Onsite assessment	☐
Technical Review	☐
Project Review Report by Registry	☒
Requirement	
GS4GG principles & requirements version 1.2 section d	
Non-Conformity	
An annual report shall be submitted for each monitoring year by end of next calendar year for which verification is not completed. If a verification is in progress but not completed, then an Annual Report is still required by the end of calendar year	
Evidence	
N/A	

Finding No. 13	Date: 14/10/2024
Finding Type- CAR ☐ CL ☐ FAR ☒	
Stage of finding raised:	
Desk Review	☐
Onsite assessment	☐
Technical Review	☐
Project Review Report by Registry	☒
Requirement	
1. GS4GG Principles & Requirements Version 1.2 clause 4.1.52 (c)	
Non-Conformity	
1. As per GS4GG Principles & Requirements Version 1.2 clause 4.1.52 (c) “Where no revenue is realised from Gold Standard certification during a given period, this would be considered a FAR for the next Issuance.”	

Evidence
NA

Finding No. 14	Date: 05/11/2024
Finding Type- CAR ☐ CL ☒ FAR ☐	
Stage of finding raised:	
Desk Review	☐
On-site/remote/hybrid assessment	☐
Technical Review	☒
Project Review Report by Registry	☐
Requirement	
GS principles & requirements version 1.2 Section	
Non-Conformity	
• PLF is calculated for full year. This is calculated for 249 days alone. OPEN • Is the comparison fair considering that PLF for full year is compared against 249 days? OPEN • Not traceable in PDD. Clarify. • What does this cost mean-operational or revenue expenditures? Also elaborate the heads under these expenses. OPEN	
Evidence	
• GS principles & requirements version 1.2 under clause 4.1.52 • OFN Sheet	
1 st Response from PD	Date:
1. The crediting period began on 26/07/2017, and the financial year ends on 31/03/2018; therefore, we have accounted for a total of 249 days. 2. Using 34.14% as the expected PLF for the 249-day period would provide a more balanced value, giving a Variation in PLF (%) of -58.28%. 3. Please refer the IRR from Weblink: https://cdm.unfccc.int/Projects/DB/TUEV-SUED1431953233.8/view 4. This is operational expenditure, which includes costs directly associated with the acquisition, construction, or production accordingly.	
Documents provided by PD for review	

Updated OFN Sheet	
1 st Review by Assessment Team	Date: 04/12/2024
1. During assessment it was observed that PD has now clarified the difference in days for calculation of PLF. Closed. 2. During assessment it was observed that PD has clarified the comparison between the PLF for full year and 249 days. Closed. 3. PD has now provided IRR Sheet to verify the same. Closed. 4. During assessment it was observed that PD has now mentioned details about the expenditures. Closed.	

Finding No. 15	Date: 05/11/2024
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised:	
Desk Review	☐
On-site/remote/hybrid assessment	☐
Technical Review	☒
Project Review Report by Registry	☐
Requirement	
GS principles & requirements version 1.2 Section	
Non-Conformity	
- As per profit and loss statement the company has made a profit of 603 crores till the financial year ending of March 31, 2024 without even selling the carbon credits. OPEN - How is this in line with the 4% escalation per year of the project costs assumed in the additionality description in PDD? OPEN - The CSR is mandatory for companies which make 5 crores profit. So how is OFN applicable for the present project activity. OPEN	
Evidence	
GS principles & requirements version 1.2 under clause 4.1.52	
OFN Sheet	
1 st Response from PD	Date: 13/11/2024

- The Total Comprehensive Income is only 6.03 crores post-tax, not 603 crores. The amount mentioned in CA certified income and expenses statement is in lakhs. Supporting documents are being submitted to VVB team. - As per the registered PDD, the assumed values were considered at the time of validation, and During RCP the actual values are used. PD mentioned all details in Section B.5 of PDD. - The company has allocated approximately Rs 46 lakhs to CSR activities during the current year. With a Total Comprehensive Income of Rs 6.03 crore for the period ending 31.03.2024, PP has surpassed the mandated 2% CSR expenditure.	
Documents provided by PD for review	
Revised OFN sheet	
Revised OFN Sheet	
1 st Review by Assessment Team	Date: 04/12/2024
- During assessment it was observed that PD has now explained the scenario and mentioned why they require revenues from GS VERs. Closed. - During assessment it was observed that PD has now mentioned details about the escalation per year of the project costs assumed in the additionality description in PDD. Closed. - During assessment it was observed that PD has allocated funds for CSR since it is mandatory for companies which make 5 crores profit. Closed.	

HISTORY OF THE DOCUMENT

Version	Date	Amendment Summary*	Prepared By	Approved By
3.1	21.05.2024	Signature section added for Approver and Authorized signatory	Apoorva Gupta	Dr. Vikas Kumar Aharwal
3.0	01.12.2023	Changes done in all the sections as per the requirements of GS	Apoorva Gupta	Dr. Vikas Kumar Aharwal
2.1	22/07/2021	NA	Ayushi Garg	Vikas Aharwal
2.0	29/03/2021	NA	Ayushi Garg	Dr. Vikas Kumar Aharwal
1.0	23/09/2020	NA	Ayushi Garg	Dr. Vikas Kumar Aharwal

*Amendment Summary adopted in VKU System on 12.10.2022