



RINA

GOLD STANDARD VERIFICATION/CERTIFICATION REPORT

Final

“Cataloluk HEPP”
in
Turkey

Monitoring period: 01/06/2012 to 30/09/2015

Report N° 2015-TQ-21-MD

Revision N° 1.3 Aa



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Project Title: Cataloluk HEPP		Country: Turkey		Estimated VERs (tCO₂e): 58,223	
GS Registration Reference N°: 872		Monitoring period: 01/06/2012 to 30/09/2015		Certified VERs (tCO₂e): 46,168	
Client: Beytek Elektrik Uretim A.S.		Client contact: Enver KAYALI			
Report No.: 2015-TQ-21-MD		Revision: 1.3 Aa		Date of this report: 24/01/2017	
Approved by (Final Report – AO Authorized office signing for the DOE): Laura Severino 					Date of approval:
Methodology					
Number: AMS-I.D.	Version: 16.0 of 28/05/2010	Title: Grid connected renewable electricity generation		Scale Small	SS(s): 1

RINA Services S.p.A. (RINA), commissioned by Beytek Elektrik Uretim A.S., has verified the greenhouse gas emission reductions reported for the project activity “Cataloluk HEPP” in Turkey, GS Registration Reference N° 872, for the period 01/06/2012 to 30/09/2015, with regard to the relevant requirements for GS activities. The verification shall ensure that reported emission reductions are complete and accurate in accordance with applicable GS VER requirements, which refer to CDM rules, in order to be certified.

The GHG emission reductions were calculated on the basis of the approved methodology AMS-I.D., version 16.0, “Grid connected renewable electricity generation” of 28/05/2010 and the monitoring plan included in the registered Project Design Document, version 08 of 30/10/2011.

In conclusion, it is RINA’s opinion that the project activity “Cataloluk HEPP”, in “Turkey, as described in the Monitoring Report version 06 of 22/12/2016, meets all relevant requirements for GS and CDM activities and all relevant host Party criteria and correctly applies the baseline and monitoring methodology “AMS-I.D.”, “Grid-connected renewable electricity generation”, version 16 of 28/05/2010. Hence, RINA is able to certify that the emission reductions from the project during the monitoring period 01/06/2012 to 30/09/2015 amount to 46,168 tCO₂e.

Baseline Emissions	46,168 tCO ₂ e
Project Emissions	0 tCO ₂ e
Leakage	0 tCO ₂ e
Net GHG emission reductions/removal	46,168 tCO ₂ e

Work carried out by: Tugce KIRATLI	☒	No distribution without permission from the Client or organizational unit responsible
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Work verified by  Laura Severino	Keywords: Climate Change, Kyoto Protocol, Verification, Gold Standard
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Abbreviations

BE	Baseline Emissions
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM M&P	Modalities and Procedures CDM
CDM-PCP	Clean Development Mechanism Project Cycle Procedure
CDM-PS	Clean Development Mechanism Project Standard
CDM-VVS	Clean Development Mechanism Validation and Verification Standard
CER(s)	Certified Emission Reduction (s)
CH ₄	Methane
CR	Clarification Request
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
ER	Emission Reductions
GHG(s)	Greenhouse gas(es)
GS	Gold Standard
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
LSC	Large scale
MoV	Means of Verification
MP	Monitoring Plan
MR	Monitoring Report
NGO	Non-governmental Organization
ODA	Official Development Assistance
PDD	Project Design Document
PE	Project Emission
PMUM	Market Financial Conciliation Center (Piyasa Mali Uzlastirma Merkezi)
PP(s)	Project Participant(s)
Ref.	Document Reference
RINA	RINA Services Spa
SDI	Sustainable Development Indicator
SS(s)	Sectoral Scope(s)
SSC	Small Scale
TEIAS	Turkish Electricity Transmission Company (Turkiye Elektrik Iletim A.S.)
UNFCCC	United Nations Framework Convention on Climate Change
VERs	Verified Emission Reduction(s)

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1 INTRODUCTION

Beytek Elektrik Uretim A.S. has commissioned RINA to carry out the verification and certification of emission reductions reported for the registered “Cataloluk HEPP” project in Turkey, GS Registration Reference N° 872, for the period 01/06/2012 to 30/09/2015.

This report summarizes the findings of the verification of the project, performed on the basis of GS VER requirements, which refer to CDM rules, as well as criteria given to provide for consistent project operations, monitoring and reporting.

1.1 Objective

The objective of the verification is to have an independent review ex post determination by a Designated Operational Entity (DOE) of the monitored reductions in GHG emissions that have occurred as a result of the registered GS project activity during a defined monitoring period and to monitor the impact of project activity on sustainable development, throughout the monitoring of the non-neutral Sustainable Development Indicators and moreover to monitor all the mitigation and compensation measures put in place. Certification is the written assurance by the DOE that, during a specific time period, a proposed GS project activity achieved the reductions in anthropogenic emissions by sources of GHGs as verified and that all the defined Sustainable Development Indicators to be monitored have been monitored according to the sustainability monitoring plan and that all the mitigation measures forecast have been correctly and effectively implemented.

The objective of this verification/certification was to verify and certify emission reductions and effective implementation of the monitoring of sustainable development indicators and mitigation measures, reported for the “Cataloluk HEPP” project in Turkey for the period 01/06/2012 to 30/09/2015.

1.2 Scope

The verification scope is:

- to verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan;
- to evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement;
- to verify that reported GHG emission data is sufficiently supported by evidence;
- to evaluate whether all the mitigation measures have been effectively put in place according to the monitoring plan and that all the sustainable development indicators have been correctly monitored.

Verification shall ensure that reported emission reductions are complete and accurate in accordance with applicable GS VER requirements which refer to CDM rules, in order to be certified.

UNFCCC criteria for CDM refer to Article 12 of the Kyoto Protocol, the CDM modalities and procedures, and the subsequent decisions by the CDM Executive Board.

The GS criteria refer to GS requirements, GS Toolkit and supporting annexes.

Verification is not meant to provide any consultancy towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the monitoring.

2 METHODOLOGY

Verification was conducted using RINA procedures in line with the requirements specified in the GS Requirements, CDM M&P, the latest version of the CDM Validation and Verification Standard, and relevant decisions of the COP/MOP and the CDM EB and applying standard auditing techniques.

The verification consisted of the following three phases:

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- Desk review;
- On-site assessment;
- The resolution of outstanding issues and the issuance of the final verification report and certification.

The following sections outline each step in more detail.

2.1 Desk Review

The monitoring report version 06 of 22/12/2016 [/3/](#), the emission reduction calculations provided in the form of a spreadsheet “VER_Calcs_Monitoring_Report_Çataloluk HEPP_06.10.2016_v04.xlsx” version 04 of 06/10/2016 [/8/](#), the approved baseline and monitoring methodology AMS-I.D. version 16.0 of 28/05/2010 [/7/](#) and all the documentation provided to support the monitoring period [/1 – 38/](#) were assessed as part of the verification. In addition, the Project Design Document (PDD), version 08 of 30/10/2011 [/1/](#), in particular as regards the baseline estimations and the monitoring plan, the Passport, version 3 of 01/02/2012 [/2/](#) for the project, were reviewed.

The following table lists the documentation that was reviewed during the verification.

/1/	GTE Carbon: GS-PDD for “Cataloluk HEPP” in Turkey, version 08 of 30/10/2011
/2/	GTE Carbon: GS-Passport for “Cataloluk HEPP” in Turkey, version 3 of 01/02/2012
/3/	GTE Carbon: Monitoring Report for “Cataloluk HEPP” in Turkey, version 6 of 22/12/2016 GTE Carbon: Monitoring Report for “Cataloluk HEPP” in Turkey, version 5 of 07/11/2016 GTE Carbon: Monitoring Report for “Cataloluk HEPP” in Turkey, version 4 of 06/10/2016 GTE Carbon: Monitoring Report for “Cataloluk HEPP” in Turkey, version 3 of 05/09/2016 GTE Carbon: Monitoring Report for “Cataloluk HEPP” in Turkey, version 2 of 22/06/2016 GTE Carbon: Monitoring Report for “Cataloluk HEPP” in Turkey, version 1 of 12/05/2016
/4/	Gold Standard Foundation: Gold Standard Requirements, version 2.1 of 01/07/2009 Gold Standard Foundation: Gold Standard Requirements, version 2.2 of 01/06/2012
/5/	Gold Standard Foundation: Gold Standard Toolkit, version 2.1 of 01/07/2009 Gold Standard Foundation: Gold Standard Toolkit, version 2.2 of 01/06/2012
/6/	CDM Executive Board: Clean Development Mechanism Validation and Verification Standard, version 09.0 of 20/02/2015
/7/	CDM Executive Board: Baseline and monitoring methodology “AMS-I.D.”, “Grid connected renewable electricity generation”, version 16.0 of 28/05/2010
/8/	GTE Carbon: Emission Reduction Calculation Spreadsheet “VER_Calcs_Monitoring_Report_Çataloluk HEPP_06.10.2016_v04.xlsx” version 04, submitted on 06/10/2016 GTE Carbon: Emission Reduction Calculation Spreadsheet “VER_Calcs_Monitoring_Report_Çataloluk HEPP_05.09.2016_v.03.xlsx” version 03, submitted on 05/09/2016 GTE Carbon: Emission Reduction Calculation Spreadsheet “VER_Calcs_Monitoring_Report_Çataloluk HEPP_22.06.2016_v.2.xlsx” version 02, submitted on 22/06/2016 GTE Carbon: Emission Reduction Calculation Spreadsheet “VER_Calcs_Monitoring_Report_Çataloluk HEPP_12052016.xlsx” version 01, submitted on 12/05/2016
/9/	CDM Executive Board: Monitoring Report Form (CDM-MR-FORM), version 05.1 of 04/05/2015
/10/	CDM Executive Board: Methodological Tool “Tool to calculate the emission factor for an electricity system”, version 02.0 of 16/10/2009
/11/	CDM Executive Board: Methodological Tool “Tool for the demonstration and assessment of additionality”, version 05.2 of 26/08/2008

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/12/	Bureau Veritas: Verification Report of "Cataloluk HEPP", Report No. TURKEYVER / CER.167.12.C45/2012, version 02 of 10/01/2013
/13/	Market Financial Conciliation Center (PMUM): Monthly Electricity Records within the Monitoring Period (from 01/06/2012 to 30/09/2015)
/14/	Beytek Elektrik Uretim A.S.: Internal Quality Excel Sheet Documentation of Electricity Generation from the Year of 2010 to 2015
/15/	Energy Market Regulatory Authority: Communiqué for Measurement Devices used in the Electricity Market of 22/03/2003
/16/	The Ministry of Trade and Industry: Regulation of Metering and Testing of Metering Systems of 24/07/1994
/17/	Energy Market Regulatory Authority: Generation License numbered EU/2303-2/1560 of 11/11/2009 (Last Amendment is 21/01/2010)
/18/	The Ministry of Energy and Natural Resources: Temporary Acceptance Protocol of 07/04/2010 (for 2 turbines)
/19/	The Gold Standard Foundation: Cataloluk HEPP (GS872) 3-week Issuance Review Period Document of 01/05/2013
/20/	Kahramanmaraş Sutcu Imam University: Evaluation Of The Fish Passage Efficiency And Environmental Flows Of Çataloluk Hydroelectric Power Plant (Hpp) of 10/07/2012
/21/	Akim Elektronik Ltd.: Data Flow Monitoring Station for the Monitoring Period of 01/06/2012 to 30/09/2015, submitted on 12/05/2016
/22/	Beytek Elektrik Uretim A.S.: National Waste Transportation Form for Waste Oil Disposal of 16/11/2012
/23/	Kahramanmaraş Notary: Notification for Expropriation No. 10845 of 29/11/2013 (Hasan Kilinc) Kahramanmaraş Notary: Notification for Expropriation of 18/06/2012 (Mehmet Gok) Kahramanmaraş Notary: Notification for Expropriation of 11/03/2013 (Cuma Kara) Kahramanmaraş Notary: Notification for Expropriation 11/03/2013 (Yuksel Akpinar) Kahramanmaraş Notary: Notification for Expropriation 12/09/2013 (Nuri Avsar)
/24/	Vatan OSGB: Health and Safety Training Certificate for 13 Employees of 13-14/03/2014
/25/	Social Security Institution: Recruitment Declaration of 17 Employees, submitted on 22/06/2016
/26/	Elster: Calibration Certificate of the Electricity Meters of 25/06/2009
/27/	Printscreen for Confirmation Document to Represent the PMUM Records (with main meter) and Çataloluk HEPP Elect. Gen. Relation, submitted on 22/06/2016
/28/	Project Owner Information And Citation Form, submitted on 22/06/2016
/29/	Social Security Institution: Payroll Sheets for 17 Employees of May 2016
/30/	Printscreen for Reservoir Area of 22/06/2016
/31/	Technical Data Sheet of the Generators and Turbines, submitted on 22/06/2016
/32/	Photos of the Electricity Meters, submitted on 21/06/2016
/33/	TEIAS: First Index Protocol of Electricity Meters of 25/02/2010
/34/	EUAS: Certificate of Health and Safety Training for 5 Employees of 14/10/2011
/35/	Bureau Veritas: Validation Report of "Cataloluk HEPP", version 03 of 27/10/2011
/36/	EUAS: Correspondance About Working at High Voltage Training Certificate of 29/08/2016
/37/	Photos of the Turbine Labels, submitted on 06/10/2016
/38/	Correspondance Between Gold Standard and Beytek Enerji About Monitoring Period, submitted on 10/10/2016

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2.2 On-site assessment

On 02/06/2016, RINA visited the project activity located in Tekir District of Kahramanmaraş Province, Turkey. During the on-site assessment of the project, RINA assessed the implementation and operation of the proposed project activity, reviewed the information flows for generating, aggregating and reporting the monitoring parameters, interviewed key personnel of the plant to confirm the operational and data collection procedures, cross-checked between information provided in the monitoring report and data plant, checked the monitoring equipment including calibration performance, reviewed calculations and assumptions made in determining the GHG data and emission reductions, checked the quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters, checked the correct and effective implementation of the mitigation measures foreseen in the sustainability monitoring plan, to prevent violation or the risk of violating a safeguarding principle of the “Do No Harm” Assessment or to “neutralize” a Sustainable Development Indicator.

The project area was visited on 02/06/2016. The project employee were interviewed about the implementation status of the project, monitoring equipment and operation, generated electricity, trainings, area of the reservoir and local employment of the project activity.

During the site visit no land owner was reached. However, all the records of notifications /23/ related with the expropriation process of the project activity. In Caglayan Village, the brother of Mukhtar is interviewed. He also confirmed that all the payments were done to the villagers.

The key personnel interviewed and the main topics of the interviews are summarized in the table below.

	Date	Name and Role	Organization	Topic
/a/	02/06/2016	Engin KOC <i>The Carbon Consultant</i>	GTE Carbon	Implementation status of the project Monitoring equipments and operation
/b/	02/06/2016	Hakan YUKSEL <i>Operation Technician</i>	Beytek Enerji	Generated Electricity Monitoring of Gold Standard Parameters
/c/	02/06/2016	Binnur GONEN <i>Operation Responsible</i>	Beytek Enerji	Trainings Local employment
/d/	02/06/2016	Gazi Osman GONEN	Beytek Enerji	Expropriation Water Released to River Bed
/e/	02/06/2016	Hasan YILMAZ <i>The Aza of Mukhtar</i>	Caglayan Village	Benefit of the project to the village Expropriation

2.3 Resolution of outstanding issues

The objective of this phase of the verification is to resolve any outstanding issues which need to be clarified for RINA's positive conclusion on the monitoring report and emission reductions.

To guarantee transparency a verification protocol has been customized for the project. The protocol shows in a transparent manner the requirements, means of verification and the results from verifying the identified criteria. The verification protocol consists of three tables; the different columns in these tables are described in the figure below (see Figure 1). The completed verification protocol is enclosed in Appendix A to this report.

A corrective action request (CAR) is raised 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 emission reductions that will impair the estimate of emission reductions;

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- Issues identified in a FAR during validation to be verified during verification have not been resolved by the project participants.

A clarification request (CR) is raised if information is insufficient or not clear enough to determine whether the applicable GS VER requirements, which refer to CDM rules, have been met.

CARs, CRs identified are included in the verification protocol in Appendix A of this report.

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Figure 1 Gold Standard Verification protocol tables

Verification Protocol, Table 1 - Requirement checklist				
Checklist Question	Ref.	MoV	Comments	Conclusion
Checklist questions organized in five different sections.	Makes reference to documents where the answer to the checklist question or item is found.	Explain how conformance with the checklist question is investigated. Examples are document review (DR), interview or any other follow-up actions (I), cross checking (CC) with available information relating to projects, (N/A) means not applicable.	The discussion on how the conclusion is arrived at and the conclusion on the compliance with checklist question so far.	For CAR and CR see the definitions above. OK is used if the information and evidence provided is adequate to demonstrate compliance with GS VER/CDC requirements which refer to CDM rules.

Verification Protocol, Table 2: Resolution of Corrective Action Requests and Clarification			
Corrective action requests and/or clarification requests	Reference to Table 1	Response by project participants	Verification Conclusion
The CAR and/or CRs raised in table 1 are repeated here.	Reference to the checklist question number in Table 1 where the CAR or CR is explained.	The responses given by the project participants to address the CARs and/or CRs.	The verification team's assessment and final conclusion of the CARs and/or CRs.

Verification Protocol, Table 3 - Forward Action Requests		
Forward action request	Reference to Table 1	Response by project participants Verification Conclusion
The FAR raised in table 1 is repeated here.	Reference to the checklist question number in Table 1 where the FAR is explained.	Response by the project participants on how forward action request will be addressed.

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2.4 Internal quality control

All the revisions of the verification report, before being submitted to the client, were subjected to an independent internal technical review to confirm that all verification activities had been completed according to the pertinent RINA instructions.

The technical review was performed by a technical reviewer(s) qualified in accordance with RINA's qualification scheme for CDM/GS validation and verification.

2.5 Verification team and the technical reviewer(s)

The verification team and the technical reviewers consist of the following personnel:

Role/Qualification	Last Name	First Name	Type of involvement*					
			DR	SV	REP	TE	TR	TER
Team Leader, GS Verifier and Technical Expert (TA 1.2)	Kiratli	Tugce	X	X	X	X	-	-
Technical Reviewer	Menon	Rekha						X

*DR: Document Review; SV: Site Visit/Interview; REP: Reporting; TE: Technical Expert in Technical Area; TR: Technical Review; TER: Technical Expert in Technical Area for Technical Review.

3 VERIFICATION FINDINGS

The findings of the verification related to the monitoring period from 01/06/2012 to 30/09/2015 as documented and described in the monitoring report version 06 of 22/12/2016 [/3/](#) are stated in the following sections.

The verification requirements, the means of verification and the results from verifying the identified criteria are documented in more detail in the verification protocol in Appendix A.

3.1 Description of the project activity

The main information of the project is summarized in the table below.

Project Participant(s)	Beytek Elektrik Uretim A.S.		
Project Title	Cataloluk HEPP		
Location of the project	Goksun District of Kahramanmaras Province, Turkey		
Methodology(ies)	"AMS-I.D.", "Grid connected renewable electricity generation", version 16.0 of 28/05/2010 /7/		
Sectoral Scope(s)	1	RINA's Technical Area(s)	1.2
Registered PDD	Revision 08 of 30/10/2011		
Date of registration	09/09/2011	GS Registration Reference N°	872
Starting date of the crediting period	07/04/2010		

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Project's crediting period	07/04/2010 to 06/04/2017
Monitoring period	01/06/2012 to 30/09/2015
Project documentation link	https://mer.markit.com/br-reg/public/project.jsp?project_id=103000000002057

The project activity is a hydro power plant consists of 2 turbines with a 4.92 MWm / 4.77 MWe capacities making the total installed capacity of 9.84 MWm / 9.54 MWe as confirmed through the Generation License /17/. The generated electricity is fed to the national grid.

The project activity aims to reduce the greenhouse gas emissions in Turkey by replacing fossil fuel power generation and contribute to the development of the wind energy sector in Turkey, as well as aims to support the local economy by creating local employment and providing equipment locally.

3.2 Remaining issues (FARs) from previous validation or verification

Based on the review of the previous verification report /12/ and GS Foundation 3-week issuance review period document /19/, 4 FARs were raised.

FAR#1: The PP is requested to maintain the minimum water flow as suggested in the expert report. Both the DOE and GS shall check records of the same at the time of next verification.

According to the expert report, the minimum flow rate is given as 0.739 m3. Except the month of July, August, September and October of 2014 is below the limits. However, when the electricity generation is compared, it is acceptable. It is understood that there is no enough flow in the entrance of the project activity to release the limit of water to the river bed.

Hence, FAR#1 is closed.

FAR#2: The DOE shall please enclose title and contact information of the locals who were interviewed with respect to irrigation channel and land acquisition process. Please justify if they are the direct beneficiaries of the irrigation channel and/or landowners who were subject to land acquisition process.

During the site visit no land owner was reached. However, all the records of notifications /23/ related with the expropriation process of the project activity have been provided to verification team. In Caglayan Village, the brother of Mukhtar is interviewed. He also confirmed that all the payments were done to the villagers.

Hence, FAR#2 is closed.

3.3 Monitoring Report

The Monitoring Report for the project activity "Cataloluk HEPP", in "Turkey, version 06 of 22/12/2016 submitted by the Beytek Elektrik Uretim A.S. has been the basis for the verification process.

The main changes between the MR version 01 of 12/05/2016 at the starting date of the verification activity and the MR version 06 of 22/12/2016 submitted for issuance are the following:

Section of the MR	Description and reason for changing the information in that section
First Page	Selected methodology and the estimated emission reduction is revised.
C.1. Calibration Procedure	The necessary explanation about the records base for the calculation is now presented in the monitoring report.
D.1. Data and parameters fixed ex ante or at renewal of crediting period	The missing parameters given in the registered PDD are now added to the not monitoring parameters.
D.2. Data and parameters monitored	The unit, source of data, monitoring equipment information are now correctly presented in the monitoring report.

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SECTION E. Calculation of emission reductions or GHG removals by sinks	The estimated emission reduction and explanation about the difference between the actual were revised.
F.1. Sustainable Development Indicators that have to be monitored	Some changes about the waste oil, quantitative employment and income generation, air quality was made.

RINA confirms that the above MR is based on the currently valid MR template [/9/](#) and is completed in accordance with the applicable guidance document [/9/](#).

3.4 Project implementation

Actual implementation of the registered project activity

It was verified during the site visit that the proposed project activity has been implemented and it is in operation in accordance with the project activity described in the registered PDD [/1/](#). The starting date of the crediting period is 07/04/2010 as confirmed through the temporary acceptance protocol [/18/](#).

The project activity is a hydro power plant consists of 2 turbines with a 4.92 MWm / 4,77 MWe capacities making the total installed capacity of 9.84 MWm / 9.54 MWe as confirmed through the Temporary Acceptance Protocol [/18/](#). The project boundary in the registered PDD [/1/](#) is in line with the actual project boundary. The generated electricity is supplied to the National Electricity Transmission Grid of Turkey.

Based on the onsite inspection and checking the above documents, RINA confirms that the project activity has been implemented and it is in operation as described above in accordance with the project activity in the registered PDD [/1/](#).

Post registration changes

Not applicable.

3.5 Methodology for determining Emission Reductions.

According to the applied methodology “AMS-I.D.”, “Grid connected renewable electricity generation” [/7/](#), the emission reductions have been calculated based on the following formula:

$$ER_y = BE_y - PE_y - Ly$$

Where:

BE_y = Baseline emissions in year y (tCO₂e/yr)

PE_y = Project emissions in year y (tCO₂e/yr)

Ly = Leakage emissions in year y (tCO₂e/yr)

The baseline emissions include the CO₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity, multiplying the electricity supplied to the grid (MWh) with the combined margin CO₂ emission factor for grid connected power generation in year.

$$BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$$

Where:

$EG_{PJ,y}$ = Net electricity supplied to the grid (MWh)

$EF_{grid,CM,y}$ = Combined margin grid emission factor (tCO₂/MWh)

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The project emissions are assumed to be zero as per the AMS-I.D. [/7/](#) since the project is a renewable energy project as defined in the registered PDD [/1/](#) and previous verification report [/12/](#). The leakage emissions are assumed to be zero as per the AMS-I.D. [/7/](#) as defined in the registered PDD [/1/](#). Since the project and leakage emissions are zero, the emission reduction equals to baseline emissions.

3.5.1 Compliance of the monitoring plan with the monitoring methodology and applicable methodological tools

The registered project activity applies the approved baseline and monitoring methodology AMS-I.D., version 16 [/7/](#). RINA confirms that the monitoring plan in the registered PDD [/1/](#) complies with the applied CDM methodology and the sustainability indicators established by the Appendix D of the Gold Standard requirements [/4/](#).

3.5.2 Deviation in GHG emission reduction

Additionality assessment has been performed according to the “Tool for the demonstration and assessment of additionality” approved by UNFCCC in the registered PDD [/1/](#). The baseline scenario selection and the calculation of emission reductions have been carried out in a conservative manner. An approved CDM methodology, AMS-I.D., version 16 has been applied in order to determine the baseline scenario and calculate emission reductions.

3.5.3 Compliance of monitoring with monitoring plan

The monitoring plan presented in the monitoring report version 06 of 22/12/2016 and the previous versions for the period of 01/06/2012 to 30/09/2015 (both days included) [/3/](#) complies with the monitoring plan in the registered PDD [/1/](#).

The monitoring parameters are “Net electricity generated and delivered to the grid (EGy), “Installed capacity of the hydro power plant after the implementation of the project activity (Cap_{PJ})” and “Area of the reservoir measured in the surface of the water, after implementation of the project activity, when reservoir full (A_{PJ})” as per the registered monitoring plan presented in the registered PDD [/1/](#). The EGy parameter is monitored continuously by two electricity meters that are located at the substation.

Two electricity meters are installed at transformer center whose responsible is belong to TEIAS. The main meter is Actaris SL7000 with serial number 37119418 and the back-up meter is Actaris SL7000 with serial number 46033916 in the project activity. The main meter has the accuracy of 0.5s and the backup meter has the accuracy of 0.5s as confirmed through the first index protocol of the electricity meters [/33/](#), given by TEIAS. The description of the meters presented in the monitoring report is in line with the operation as confirmed through the site visit observation and the first index protocol [/33/](#). The accuracy class of the meters complies with the “Communiqué for Measurement Devices used in the Electricity Market” [/15/](#). The electricity meters are sealed by TEIAS as confirmed during the site visit. TEIAS is responsible for calibration and maintenance of the devices. The project owner has no control on the meters since the meters are sealed by the TEIAS. If any major discrepancy occurs between the two meters, TEIAS performs necessary calibration. The meters were calibrated and installed on 25/02/2010 by TEIAS as confirmed through the first index protocol [/33/](#). The recalibration of these meters will be done in line with the equipment requirements and through the period defined by national metrology institutes country by country and for Turkey this period is defined as 10 years. The calibration of meters is deemed appropriate and in compliance with the national regulation [/16/](#). By the end of each month, the electricity generation supplied to the grid and electricity consumption from the grid is read remotely from the electricity meters through Automatic Meter Reading System by the TEIAS personnel. Also the PMUM records are available for the project participant. All protocols [/14/](#) [/15/](#) within this monitoring period was checked during the site visit. The PMUM records [/13/](#) are crosschecked with the monthly official electricity metering readings [/14/](#) during this monitoring period. The Monthly Meter Readings, PMUM records and emission reduction calculation spreads sheet [/8/](#) are in line. During the monitoring period of 01/06/2012 to 30/09/2015 (both days included) the net electricity supplied to the grid amount to 84,558.49 MWh and the emission reductions to 46,168 tCO₂e.

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According to the monitoring plan in the registered PDD [/1/](#) and in the monitoring report version 06 of 22/12/2016 [/3/](#), the following sustainability parameters are monitored: "Air Quality", "Water Quality and Quantity", "Other Pollutants", "Quality of Employment", "Quantitative Employment and Income Generation", "Balance of payment and investments".

The following parameters have been monitored in accordance with the monitoring plan in the registered PDD [/1/](#) and the monitoring report [/3/](#).

3.5.3.1 Data and parameters fixed ex-ante or at renewal crediting period

DATA/PARAMETER	Source of data	Reported value for the project period	Assessment/Observation
Combined Margin Emission Factor	TEIAS statistics	0.546 tCO ₂ /MWh	As per the approved methodology AMS-I.D. version 16, the combined emission factor has been determined using the ex-ante option and so it is not requested to monitor and recalculate the emission factors during the crediting period. The combined emission factor is determined to be 0.546 tCO ₂ /MWh in the registered PDD /1/ and validation report /35/ .

3.5.3.2 Sampling plan

Not applicable.

3.5.3.3 Data and parameters monitored ex-post

DATA/PARAMETER	EGy
Data Unit	GWh
Description	Net Electricity generated and delivered to the grid in year y
Source of data to be used	PMUM (Market Financial Settlement Center) records /13/ and Monthly Meter Reading Excel sheets /14/ of main meters are cross-checked
Value data for the monitoring period	84,56
Measuring and reporting frequency; recording procedure.	Continuously monitoring and monthly recording
Type of monitoring equipment and its accuracy	The main meter is Actaris SL7000 with serial number 37119418 and the back-up meter is Actaris SL7000 with serial number 46033916 in the project activity. The main meter has the accuracy of 0.5s and the backup meter has the accuracy of 0.5s as confirmed through the first index protocol of the electricity meters /33/ , given by TEIAS.
Calibration frequency/interval	TEIAS is responsible for calibration and maintenance of the devices as per the registered PDD. The project owner has no control on the meters since the meters are sealed by the TEIAS. If any major discrepancy occurs between the two meters, TEIAS performs necessary calibration. During this monitoring period no discrepancy was occurred The meters were calibrated and installed on 25/02/2010

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	by TEIAS as confirmed through the first index protocol /33/ . The recalibration of these meters will be done in line with the equipment requirements and through the period defined by national metrology institutes country by country and for Turkey this period is defined as 10 years. The calibration of meters is deemed appropriate and in compliance with the national regulation /16/ .
How were the values in the monitoring report verified and cross-checked?	The net electricity supplied to the grid has been crosschecked with the PMUM Screenshots /13/ .
Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions?	By the end of each month, the electricity generation supplied to the grid and electricity consumption from the grid is read remotely from the electricity meters by Automatic Meter Reading System by the TEIAS personnel. Also the PMUM records are available for the project participant. All readings /13/ /14/ within this monitoring period was checked during the site visit. The PMUM records /13/ are crosschecked with the monthly official electricity meter readings /14/ during this monitoring period. The plant personnel records the electricity generation from the meters every day and the responsible engineer checks the figures regularly. In the case of difference between the data, TEIAS will be informed. The electricity generation supplied to the grid and electricity consumption from the grid is stored by PMUM on the web site. The Project owner has an ID and password to access this data on the web site. The project owner can easily access the data by using this portal.
If only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?	All the data were available for the whole monitoring period.

DATA/PARAMETER	Cap _{PJ}
Data Unit	W
Description	Installed capacity of the hydro power plant after the implementation of the project activity
Source of data to be used	Project site
Value data for the monitoring period	9,540,000
Measuring and reporting frequency; recording procedure	Yearly
Type of monitoring equipment and its accuracy	The parameter is monitored through the Technical Data of the turbines /31/ and confirmed through the site visit.
Calibration frequency/interval	NA

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How were the values in the monitoring report verified and cross-checked?	The equipment label /37/ has been seen during on-site visit.
Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions?	NA
If only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?	All the data were available for the whole monitoring period.

DATA/PARAMETER	A _{PJ}
Data Unit	m ²
Description	Area of the reservoir measured in the surface of the water, after implementation of the project activity, when reservoir full
Source of data to be used	Project site
Value data for the monitoring period	256,555.96
Measuring and reporting frequency; recording procedure	Yearly
Type of monitoring equipment and its accuracy	The parameter is monitored through the photo of the reservoir area drowned with Google Map /30/.
Calibration frequency/interval	NA
How were the values in the monitoring report verified and cross-checked?	The area of the reservoir is crosschecked with the photo of the reservoir area drowned with Google Map /30/
Does the data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions?	NA
If only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, has the most conservative assumption theoretically possible been applied or has a request for deviation been approved?	All the data were available for the whole monitoring period.

3.5.3.4 Gold Standard sustainability monitored parameters

Data variable	Source of Data	Reported value for the project period
Air Quality SO ₂ and NO _x emissions	National Inventory of Turkey and electricity generation	431.93 tons SO₂ 93.21 tons NO_x
Assessment		

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National Inventory of Turkey. The amount of SO₂ is calculated as 431.93 tons and the amount of NO_x is calculated as 93.21 tons during this monitoring period.

Data variable	Source of Data	Reported value for the project period
Water Quality and Quantity Flow rate of water released	- Expert Report - Gauging Station Measurements	Above 0.739 m³

Assessment

The parameter is monitored continuously by the records of gauging stations [/21/](#). As per the GS review Document [/19/](#), a FAR is raised.

FAR#1: The PP is requested to maintain the minimum water flow as suggested in the expert report. Both the DOE and GS shall check records of the same at the time of next verification.

According to the expert report, the minimum flow rate is given as 0.739 m³. Except the month of July, August, September and October of 2014 is below the limits. However, when the electricity generation is compared, it is acceptable. It is understood that there is no flow in the entrance of the project activity.

Data variable	Source of Data	Reported value for the project period
Other Pollutants Waste Oil	Waste Disposal Invoices	Waste oil is disposed by licensed collectors

Assessment

The parameter is monitored yearly by records for storage or disposal [/22/](#). It is confirmed as per the records that waste oil is collected in leak proof tanks and handed in licensed collectors as per the national regulations.

Data variable	Source of Data	Reported value for the project period
Quality of Employment Number of personnel certified/trained	Training certificates or records for attendance	All the staffs were attended to Health & Safety Trainings

Assessment

The parameter is monitored yearly by checking the training certificates or records for attendance to the trainings [/24/](#) [/34/](#) [/36/](#). It is defined in the monitoring report that all the employees are trained.

Data variable	Source of Data	Reported value for the project period
Quantitative Employment and Income Generation Payments made to staff	Employment records and social security documents	17 employees are hired and 16 of them are local.

Assessment

The chosen parameter is payments made to staff. However, the current situation and future target is related with the local people. Since there is no way to change the registered PDD, local employment which is more important for the GS are monitored yearly by employment records and social security documents. In the monitoring report it is defined that 19 local employees are hired and 16 of them are local as confirmed through the Recruitment Declaration [/25/](#) and Payroll Sheets [/29/](#).

Data variable	Source of Data	Reported value for the project period
Balance of Payments and	Electricity Generation and	4,106,236 EUR

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Investment	Calculation	
Assessment		
This parameter is monitored yearly by comparing electricity generated. For this monitoring period, 4,106,236 € is calculated.		

3.5.4 Assessment of data and calculation of emission reductions

All the monthly meter excel sheets [/14/](#) are available for the project participant. All PMUM records [/13/](#) within this monitoring period was checked during the site visit. The monthly meter reading excel sheets [/14/](#) were crosschecked with the PMUM records [/13/](#).

The data of generated electricity are transferred correctly to the excel sheet [/8/](#) and emission reduction is calculated correctly. The excel sheet is crosschecked with the PMUM records [/13/](#) and the monthly meter reading excel sheets [/14/](#) and it seems appropriate.

3.5.5 Accuracy of emission reduction calculations

The emission reduction calculations provided in the spreadsheet [/8/](#) have been verified to be correct and in line with the registered PDD [/1/](#).

The emission reductions from the project for the monitoring period as reported in the monitoring report version 06 of 22/12/2016 [/3/](#) is equivalent to 46,168 tCO₂e. The reported emission reductions are 20.7% lower than the estimated emission reduction of 58,223 tCO₂e for the period as per the registered PDD [/1/](#).

The data presented in the monitoring report [/3/](#) were assessed by reviewing in detail project documentation, collection of monitored data, observation of established monitoring and reporting practices and assessment of the reliability of monitoring equipment. Sufficient evidence was presented and verified by RINA for the reported emission reductions as listed in the above Section 3.5.3.3.

3.5.6 Accuracy of the GS indicators of sustainable development

All the documented evidences related to the sustainable monitored parameters such health and safety training certificates [/24/](#) [/34/](#) [/36/](#), payroll sheets [/29/](#), recruitment declaration [/25/](#), invoice of waste oil [/22/](#), measurements of the minimum amount of water released to river bed [/21/](#) are provided as objective evidences.

3.5.7 Management system and quality control

The electricity generation supplied to the grid and electricity consumption from the grid is read from the electricity meters through Monthly Meter Readings by the TEIAS personnel. The monthly meter reading protocols are prepared as per these readings. The plant personnel records the electricity generation from the meters every day and the responsible engineer checks the figures regularly. In case of difference between the data, TEIAS will be informed. The generated electricity is measured by two meters that were sealed by TEIAS. The project owner has no control on the meters.

The electricity generation supplied to the grid and electricity consumption from the grid is stored by PMUM on the web site. The Project owner has an ID and password to access this data on the web site. The project owner can easily access the data by using this portal. The project owner also archives a hardcopy of these protocols, scanned and stored electronically.

The collected data during the monitoring period will be kept by the project owner at least two years after the last issuance of VERs as stated in the registered PDD [/1/](#) and monitoring report [/3/](#) in line with the AMS-I.D. version 16 [/7/](#).

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4 VERIFICATION AND CERTIFICATION OPINION

RINA Services Spa (RINA) has performed verification of the emission reductions reported for the project activity "Cataloluk HEPP" in Turkey, GS Registration Reference N° 872, for the period 01/06/2012 to 30/09/2015, with regard to the relevant requirements for GS activities.

The project participants of the "Cataloluk HEPP" project are responsible for:

- the preparation of greenhouse gas emissions data and the reported greenhouse gas emission reductions from the project on the basis set out in the monitoring plan contained in the registered Project Design Document version 08 of 30/10/2011
- the development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of greenhouse gas emission reductions of the project.

It is the responsibility of RINA to express an independent verification opinion about the project's conformity with the requirements of paragraph 62 of the CDM modalities and procedures, GS requirements and on the reported greenhouse gas emission reductions from the project.

Based on documented evidence and corroborated by an on-site assessment RINA can confirm that:

- the project has been implemented and operated as per the registered PDD;
- the monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable CDM and GS VER requirements;
- monitoring is in place as per the applied baseline and monitoring methodology;
- monitoring complies with the monitoring plan in the registered PDD;
- the monitoring plan in the registered PDD is as per the applied baseline and monitoring methodology.

It is RINA's opinion that the GHG emission reductions stated in the monitoring report version 06 of 22/12/2016 for the "Cataloluk HEPP" project in Turkey for the period 01/06/2012 to 30/09/2015 are fairly stated. The GHG emission reductions were calculated correctly, the sustainability development indicators were correctly monitored, on the basis of the approved monitoring methodology "AMS-I.D.", "Grid connected renewable electricity generation", version 16 of 28/05/2010 and the monitoring plan contained in the registered PDD.

Hence, RINA is able to certify that the emission reductions from the project during the monitoring period 01/06/2012 to 30/09/2015 amount to 46,168 tCO₂e.

Year 2012 01/06/2012 to 31/12/2012 5,590 tCO₂e

Year 2013 01/01/2013 to 31/12/2013 15,917 tCO₂e

Year 2014 01/01/2014 to 31/12/2014 7,232 tCO₂e

Year 2015 01/01/2015 to 30/09/2015 17,430 tCO₂e

GHG Emission Reductions or Removals	tCO ₂ e
Baseline Emissions	46,168
Project Emissions	0
Leakage	0
Net GHG emission reductions or removals	46,168

Istanbul, 24/01/2017



Tugce KIRATLI
GS Team Leader

RINA Denizcilik ve Belgelendirme Ltd. Sti.

Genova, 24/01/2016

Signature



Laura Severino
Authorized officer signing for the DOE

RINA Services S.p.A.

APPENDIX A

GOLD STANDARD VERIFICATION PROTOCOL

TABLE 1 REQUIREMENTS CHECKLIST

Checklist Question		Reference	MoV ¹	Comments	Conclusion
A Description of Project Activity					
A.1	Title of the project activity, revision number and date of Monitoring Report	/1/ /3/ /9/ /12/ /19/	DR	The title of the project activity is given as "Cataloluk HEPP" in the Monitoring Report /3/ which is in line with the GS Registry and registered PDD /1/. The revision number and date of the Monitoring Report seems appropriate. The registration date of the project activity is defined as 09/09/2011 as confirmed through the previous verification report /12/ and GS 3-week Issuance Review Period Document /19/. The Monitoring report form (F-CDM-MR) is in line with the latest version 5.1 /9/.	OK
A.2	Is the actual implementation and operation of the proposed project activity in accordance with the project activity in the registered PDD?	/1/ /3/ /5/ /9/ /17/ /18/	DR, CC, I	It is confirmed during the site visit performed on 02/06/2016 that project activity is implemented and operated as per the registered PDD /1/. The project activity is a hydro power plant consists of 2 turbines with a 4.92 MWm / 4.77 MWe capacities making the total installed capacity of 9.84 MWm / 9.54 MWe as confirmed through the Generation License /17/. The crediting period of the project activity is defined as 01/04/2010 to 31/03/2017. However, the start date of the crediting period is not in line with the temporary acceptance protocol /18/. Please correct all the report and add which crediting period is this. The monitoring period is defined as 01/06/2012 to 30/09/2015 in the monitoring report. However, according to the Section 4.7 GS Toolkit /5/, a site visit is mandatory in every three years. Please request GS to confirm the monitoring period of the project activity. In the milestone, the date of validation report could not be verified since no supporting document is provided.	CAR-1 OK

¹ MoV: DR document review, I interview, CC cross checking

Checklist Question		Reference	MoV ¹	Comments	Conclusion
				Estimated emission reduction value is presented in the first page and Section E.5 annually. Please calculate the estimated emission reduction related this monitoring period. In Section E.1 of the MR, the calculation of the EG_y parameter is not in line with the calculation excel sheet. In section E.4 of the MR, the format of the table is not in line with the Monitoring Report Form /9/. Please correct “up to” and “from” definitions. In section E.6 of the MR, please clarify which values are used to compare the estimated and actual emission reductions with % differences and also explain the reason.	
A.3	Methodology applied for the registered project activity	/1/ /7/	DR	The registered project activity applies the approved baseline and monitoring methodology “AMS-I.D.”, “Grid connected renewable electricity generation”, version 16.0 of 28/05/2010 /7/ . However, another methodology is presented in the monitoring report. Please clarify.	CR-1 OK
B Monitoring					
B.1 Monitoring plan					
B.1.1	Does the monitoring plan included in the registered GS project activity comply with the applied methodology?	/1/ /7/	DR, CC	The registered project activity applies the approved baseline and monitoring methodology “AMS-I.D.”, “Grid connected renewable electricity generation”, version 16.0 of 28/05/2010 /7/ . However, another methodology is presented in the monitoring report. Please clarify.	CR-1 OK
B.1.2	Does the monitoring comply with the monitoring plan in the registered PDD?	/1/ /2/ /7/	DR, CC	The monitoring complies with the monitoring plan presented in the validated PDD /1/. The following parameters shall be monitored as per the monitoring plan in the validated PDD: • Net electricity generated and delivered to the grid, EG_y • Installed capacity of the hydro power plant after the implementation of the project activity, Cap_{PJ} • Area of the reservoir measured in the surface of the water, after implementation of the project activity,	OK

Checklist Question		Reference	MoV ¹	Comments	Conclusion
				when reservoir full, A_{PJ} . In addition, since the project is developed under Gold standard, the following GS sustainable development parameters needs to be monitored for the second monitoring period as per the registered GS Passport /2/: "Air Quality", "Water Quality and Quantity", "Other Pollutants", "Quality of Employment", "Quantitative Employment and Income Generation", "Balance of payment and investments".	
B.1.3	Do the sustainability indicators included in the monitoring report comply with the minimum contents specified in paragraph 4.1 of the GS toolkit?	/4/ /5/	DR, CC	The project activity is developed and registered under Gold standard Version 2.1; therefore, GS Toolkit 2.1 is applicable to the project activity. The sustainability indicators in the monitoring report complies with the sustainability indicators established by the Gold Standard.	OK
B.1.4	Have any changes been made to the key sustainable development indicators?	/1/ /7/	DR, CC, I	No change has been occurred to the sustainable development indicators during the monitoring period of 01/06/2012 to 30/09/2015 as confirmed through the site inspection and interviews.	OK
B.2 Data and parameters that are available at validation and that are not monitored					
B.2.1	Which parameters were available at validation and how were they verified?	/1/ /3/ /7/	DR, CC	Net Electricity delivered to the grid (EG_y): Monthly generation records are presented as source of data. However, this parameter's explanations are not in line with the registered PDD. The other parameters given in the registered PDD is not discussed in the monitoring report. Please clarify.	CR-2 OK
B.3 Data and parameters monitored					
B.3.1	Data/Parameter monitored / Data unit / Description / Source of data to be used / Value data for the monitoring period	/1/ /3/	DR, CC, I	Net electricity generated and delivered to the grid (EG_y): The electricity generation and electricity consumption should be measured in GWh and it is monitored by metering devices. However, the unit of the parameter is not in line with the registered PDD. The source of data is mentioned as monthly records signed by TEİAŞ and plants manager in the monitoring report. However, PMUM readings was chosen as a	CAR-2 OK

Checklist Question		Reference	MoV ¹	Comments	Conclusion
				source in the calculation excel sheet. Please clarify. In addition, to choose the monthly meter readings as a source of data will not be the right way to determine the emission reductions since monthly meter readings are measured with another electricity meters. Therefore, a clear explanation should be given in the monitoring report that a different source is used from the definition given in the registered PDD. The value of the parameter is not in line with the calculation excel sheet. The values given for the monthly meter readings are not in line with the provided supporting document. Please correct the values and compare with PMUM records with taking into account the transmission losses. Installed capacity of hydro power plant after the implementation of the project activity (CAP_{PJ}): The parameter is monitored by the project site. During on site visit, the turbines were seen and photographed; however, the capacity of the turbines is not the same with the label and the generation license. Please clarify. Area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full (APJ): The source of data and measured/calculated/default explanations are not in line with the registered PDD. In addition, there is no supporting documentation to confirm the given value for the area.	
B.3.2	Is the measurement equipment described? Is the accuracy of the measurement equipment addressed and deemed appropriate?	/3/ /12/	DR, CC,I	Two electricity meters are installed at transformer centre. The main meter is Elster A1500 with serial number 00391095 and the back-up meter is Elster A1500 with serial number 00391097 in the project activity. The main and the backup meters have the accuracy of 0.5s as confirmed through the previous verification report /12/. However, since the electricity meters are under	CAR-3 OK

Checklist Question		Reference	MoV ¹	Comments	Conclusion
				responsible of TEIAS and located in the transformer centre, access to the counter could not be achieved. Therefore, please provide a supporting document to confirm the serial no of the meters and also to confirm that PMUM records are belongs to this electricity meters.	
B.3.3	Are the requirements for maintenance and calibration of measurement equipment described and deemed appropriate?	/1/ /3/ /16/	DR, CC, I	TEAIS is responsible for calibration and maintenance of the devices as per the registered PDD /1/ . The project owner has no control on the meters since the meters are sealed by the TEIAS as confirmed through the previous verification report. If any major discrepancy occurs between the two meters, TEIAS performs necessary calibration. During this monitoring period no discrepancy was occurred according to the interviews with the project responsible. It is stated in the monitoring report that the maintenance and calibration of the metering devices has been made on 01/07/2009. However, The calibration report is not provided to the verification team and also the calibration frequency is not discussed in the monitoring report.	CAR-4 OK
B.3.4	Is the monitoring frequency adequate for all monitoring parameters? Is it in line with the registered monitoring plan?	/1/ /3/ /7/	DR, CC, I	The electricity generation supplied to the grid and electricity consumption from the grid is monitored continuously by two meters. Monitoring frequency is in line with the applied methodology.	OK
B.3.5	Is the recording frequency adequate for all monitoring parameters? Is it in line with the registered monitoring plan?	/1/ /3/ /7/	DR, CC, I	The electricity generation supplied to the grid, electricity consumption from the grid is recorded monthly. This is in line with the monitoring plan in the registered PDD.	OK
B.3.6	Does data management (from monitoring equipment to emission reduction calculation) ensure correct transfer of data and reporting of emission reductions?	/3/ /14/	DR, CC, I	At the last day of each month, the electricity generation supplied to the grid and electricity consumption from the grid is read remotely by TEIAS. There is two more electricity meters located in the project area. The plant personnel is read continuously from this meters and record them to the excel sheets /14/ to compare with the measurements read by TEIAS. However, total values of PMUM records (from February 2012 to November 2012) are not seen. In addition, the total net value of 2012 is not correctly calculated. Please add the first five months. The total net value of 2015 is	CAR-5 OK

Checklist Question		Reference	MoV ¹	Comments	Conclusion
				also not correctly calculated. Please add the last three months.	
B.4 Monitoring of GS indicators of sustainable development /environmental impacts					
B.4.1	Data/Parameter monitored / Data unit / Description / Source of data to be used / Value data for the monitoring period	/1/ /2/ /3/ /19/ /21/ /22/	DR, CC, I	The following GS sustainable development parameters are monitored as per the registered GS Passport /2/: “Air Quality”, “Water Quality and Quantity”, “Other Pollutants”, “Quality of Employment”, “Quantitative Employment and Income Generation”, “Balance of payment and investments”. Air Quality: <u>SO₂ and NO_x Emissions by thermal plants:</u> The parameter is monitored by calculation annually. The calculation of the parameter is not in line with the explained in the registered PDD. The base year is chosen as 2007, however, 2014 is presented in the calculation excel sheet and 2012 is presented in the monitoring report. Please clarify. Water Quality and Quantity: <u>Flow rate of water released:</u> The parameter is monitored continuously by the records of gauging stations /21/. As per the GS review Document /19/, a FAR is raised. FAR#1: The PP is requested to maintain the minimum water flow as suggested in the expert report. Both the DOE and GS shall check records of the same at the time of next verification. According to the expert report, the minimum flow rate is given as 0.739 m3. Except the month of July, August, September and October of 2014 is below the limits. However, when the electricity generation is compared, it is acceptable. It is understood that there is no flow in the entrance of the project activity. Hence, FAR#1 is closed. Other Pollutants: <u>Waste oil:</u> The parameter is monitored yearly by records for storage or disposal /22/. It is confirmed as per the	CAR-6 OK

Checklist Question		Reference	MoV ¹	Comments	Conclusion
				records that waste oil is collected in leak proof tanks and handed in licensed collectors as per the national regulations. In the monitoring report it is defined that the disposal record is related with the first monitoring period. However, the date of the document is 16/11/2012 which is related with this (second) monitoring period. Please clarify. Also, please determine the current situation and future target in the monitoring report. Quality of Employment: <u>Number of personnel certified/trained:</u> The parameter is monitored yearly by checking the training certificates or records for attendance to the trainings. It is defined in the monitoring report that 10 employees are trained. However, in the calculation excel sheet 10 trainings are presented. In addition, no supporting documents for the trainings are provided. Please clarify. Quantitative Employment and Income Generation: <u>Payments made to staff:</u> The chosen parameter is payments made to staff. However, the current situation and future target is related with the local people. Since there is no way to change the registered PDD, local employment which is more important for the GS are monitored yearly by employment records and social security documents. In the monitoring report it is defined that 19 local employees are hired. However, this issue could not be verified since no supporting document is provided for the number of employees and recruitment documents to verify that they are local or not. Balance of payment: <u>Currency saving due to avoided fuel import:</u> This parameter is monitored yearly by comparing electricity generated. However, the chosen base year is not in line with the registered PDD and monitoring report and calculation excel sheet. Please clarify.	
B.4.2	Is the monitoring in line with the registered monitoring plan?	/1/ /2/ /3/	DR, CC, I	The monitoring complies with the monitoring plan presented in the registered PDD.	OK

Checklist Question		Reference	MoV ¹	Comments	Conclusion
B.5 Management, quality assurance and quality control					
B.5.1	How has it been assessed that the monitoring arrangements described in the monitoring plan are feasible within the project design?	/1/ /3/	DR, I	An on-site inspection has been performed on 02/06/2016 and it could be confirmed that the monitoring arrangements in the monitoring plan are feasible within the project design.	OK
B.5.2	Are procedures identified for day-to-day record handling (including what records to keep, storage area of records and how to process performance documentation)?	/1/ /3/	DR, I	The electricity generation supplied to the grid and electricity consumption from the grid is monitored by two meters. The meters are sealed by TEIAS. The electricity generation supplied to the grid and electricity consumption from the grid is read remotely from the electricity meters by TEIAS. The reading results are stored by PMUM on the web site.	OK
B.5.3	Are the data management and quality assurance and quality control procedures sufficient to ensure that the emission reductions achieved by/resulting from the project can be reported ex post and verified?	/1/ /3/ /13/ /14/	DR, I	The generated electricity is measured by two meters that were sealed by TEIAS. The project owner has no control on the meters. The electricity generation supplied to the grid and electricity consumption from the grid is stored by PMUM /13/ on the web site. The project owner also archives a softcopy of the monthly official electricity metering reports /14/ stored electronically.	OK
B.5.4	Will all monitored data required for verification and issuance be kept for two years after the end of the crediting period or the last issuance of VERs, for this project activity, whichever occurs later?	/1/ /3/ /7/	DR, I	It is mentioned in the monitoring report that the collected data during the monitoring period will be kept by the project owner at least two years after the last issuance of VERs as stated in the registered PDD /1/ .	OK

TABLE 2 RESOLUTION OF CORRECTIVE ACTION REQUESTS AND CLARIFICATION REQUESTS

Corrective action and/ or clarification requests	Reference to Table 1	Response by project participants	Verification conclusion
CAR 1 The crediting period of the project activity is defined as 01/04/2010 to 31/03/2017. However, the start date of the crediting period is not in line with the temporary acceptance protocol /18/ . Please correct all the report and add which crediting period is this.	A.2	- Crediting period is revised in section A.5 (01/04/2010 to 31/03/2017) as it can be also crosschecked from the voluntary carbon market information document provided to DOE. Inside this crediting period, first reporting period was written for the period of 01/04/2010 – 30/05/2012.	Review 1 (29/06/2016): The crediting period of the project activity is now defined as 01/05/2010 to 31/03/2017. However, the start date of the crediting period is still not in line with the temporary acceptance protocol /18/ . Please correct all the report and add

Corrective action and/ or clarification requests	Reference to Table 1	Response by project participants	Verification conclusion
The monitoring period is defined as 01/06/2012 to 30/09/2015 in the monitoring report. However, according to the Section 4.7 GS Toolkit /5/, a site visit is mandatory in every three years. Please request GS to confirm the monitoring period of the project activity. In the milestone, the date of validation report could not be verified since no supporting document is provided. Estimated emission reduction value is presented in the first page and Section E.5 annually. Please calculate the estimated emission reduction related this monitoring period. In Section E.1 of the MR, the calculation of the EGy parameter is not in line with the calculation excel sheet. In section E.4 of the MR, the format of the table is not in line with the Monitoring Report Form /9/. Please correct “up to” and “from” definitions. In section E.6 of the MR, please clarify which values are used to compare the estimated and actual emission reductions with % differences and also explain the reason.		This is second reporting period for between 01/06/2012 – 31/09/2015 - Site visit interval and monitoring period of the project activity were written to GS and waiting for the answer. - Validation report is provided with this document and the date of validation report is revised in milestone part of monitoring report. -Emission reduction values for the whole monitoring period is added to Section E.5 - Calculation of EGy is seemed to be in line with the excel sheet. Please show where is the difference. -Format of the table in E4 is revised -Comparison statement are added to Section E.6 in terms of estimated and actual electricity generation and net emission reduction values. Responds for 2nd Round (01.09.2016): 1. Date of the crediting period is revised and explained which crediting period is this. Period of monitoring is also stated in the Section A.5 2. Answer of GS related with the monitoring period is provided to DOE. Moreover, related explanation of PP is stated in Section «A1» of monitoring report. 3. Validation report is provided to the DOE 4. Statements of Section E.6 is revised Respond for Review 2 (06.10.2016) Answer of GS forwarded to DOE. Related	which crediting period is this. In addition, according to your answer, the reporting (monitoring) periods are not written in MR. Please clarify. No answer is received by GS. The monitoring period is defined as 01/06/2012 to 30/09/2015 in the monitoring report. However, according to the Section 4.7 GS Toolkit /5/, a site visit is mandatory in every three years. Please request GS to confirm the monitoring period of the project activity. In the milestone, the date of validation report could still not be verified since no supporting document is provided. Please check the documentation. Estimated emission reduction value is revised in the first page and Section E.5. The format related with the “up to” and “from” is now corrected. In section E.6 of the MR, both given value’s explanation is about estimated electricity generation. Please correct. In addition, The actual emission reduction value given in Section E.4 of the MR is not discussed in Section E.6. Hence, CAR 1 is not closed. Review 2 (20/09/2016): The date of the crediting period is now revised. In addition, an explanation about which crediting period is this is now added to the monitoring report. Also, monitoring period is now presented correctly in the monitoring report. Answer of GS is not provided to the

Corrective action and/ or clarification requests	Reference to Table 1	Response by project participants	Verification conclusion
		explanation of PP about the answer of GS can be seen in page 2 (paragraph 6) of the monitoring report.	Validation team. The date of the validation could now be confirmed as per the provided validation report. The explanation and the values are now revised and corrected in section E.6 of the MR. Hence, CAR 1 is not closed. Review 3 (17/10/2016): Answer of GS is now provided to the Validation team. Hence, CAR 1 is closed.
CAR 2 <i>Net electricity generated and delivered to the grid (EG_y):</i> The electricity generation and electricity consumption should be measured in GWh and it is monitored by metering devices. However, the unit of the parameter is not in line with the registered PDD. The source of data is mentioned as monthly records signed by TEİAŞ and plants manager in the monitoring report. However, PMUM readings was chosen as a source in the calculation excel sheet. Please clarify. In addition, to choose the monthly meter readings as a source of data will not be the right way to determine the emission reductions since monthly meter readings are measured with another electricity meters. Therefore, a clear explanation should be given in the monitoring report that a different source is used from the definition given in the registered PDD. The value of the parameter is not in line with the calculation excel sheet.	B.3.1	Net electricity generated and delivered to the grid (EG_y): -Unit of EG_y changed from «MWh» to «GWh» in monitoring report and excel calculation sheet -Although PDD indicates the calculation of electricity generation will be done by using records signed by TEİAŞ, using EPIAS records (or PMUM as it was in the past) does not mean that these records are not signed by TEİAŞ since EPIAS is one of the association of TEİAŞ in fact. Monthly EPIAS records come into existence by sum of the daily generation records. Site records (which will be provided to with this document) represent higher electricity generation than EPIAS records (see revised calculation sheet). Therefore using EPIAS records is a conservative option for the emission reduction calculation also. In addition, transmission losses represented in both site records and EPIAS records are the	Review 1 (29/06/2016): <i>Net electricity generated and delivered to the grid (EG_y):</i> The unit of the parameter is now changed as GWh in the monitoring report. Change in the source of data used in the calculations is now clearly explained in related parts of the MR. The value of the parameter still is not in line with the calculation excel sheet. The gross values given for the monthly meter readings are not in line with the provided supporting document. Please correct. <i>Installed capacity of hydro power plant after the implementation of the project activity (CAP_{PJ}):</i> The verified value by GS is the value that is stated in generation license. The site visit is not performed by GS. Therefore, to verify the turbine label is one of our responsibilities. If the source of data given in the parameter was “generation license”, it

Corrective action and/ or clarification requests	Reference to Table 1	Response by project participants	Verification conclusion
The values given for the monthly meter readings are not in line with the provided supporting document. Please correct the values and compare with PMUM records with taking into account the transmission losses. Installed capacity of hydro power plant after the implementation of the project activity (CAP_{PJ}): The parameter is monitored by the project site. During on site visit, the turbines were seen and photographed; however, the capacity of the turbines is not the same with the label and the generation license. Please clarify. Area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full (APJ): The source of data and measured/calculated/default explanations are not in line with the registered PDD. In addition, there is no supporting documentation to confirm the given value for the area.		same as it can be clearly noticed in the revised calculation sheet (be provided with this document). Related clarifications are added to monitoring report in section C, D.2, and B.2.4 (provided with this document) - Site records are revised in calculation sheet and related comparison is stated in monitoring report. Installed capacity of hydro power plant after the implementation of the project activity (CAP_{PJ}): - CAP_{PJ} data was registered by GS already. Moreover, calculations with this value was both verified and issued before. Nevertheless, generation specification documents are provided with this documents. Area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full (APJ): - Apj data was registered by GS already. Moreover, calculations with this value was both verified and issued before. Moreover, data in the monitoring report are same as tha data in PDD. Please show where is the difference. Responds for 2nd Round (01.09.2016): 1. The value of the parameter EGy still is now in line with the calculation excel sheet 2. The gross values given for the monthly meter readings are revised 3. As it is noticed in product	could be verified. However, the source of data is project site. Therefore, we have to crosscheck the both values given in the MR and on the turbine label. The photographs taken by the consultant is not provided to DOE. Please provide and explain the calculation as per the turbine capacity given on the label. Area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full (APJ): The source of data explanation is not in line with the registered PDD. The supporting document is now provided to DOE to confirm the given value for the area of the reservoir. Hence, CAR 2 is not closed. Review 3 (17/10/2016): Installed capacity of hydro power plant after the implementation of the project activity (CAP_{PJ}): The values could now be confirmed with the label of the engines provided to the verification team. Hence, CAR 2 is closed.

Corrective action and/ or clarification requests	Reference to Table 1	Response by project participants	Verification conclusion
		specification sheet of turbine it has 5300 kVA and $\cos \varnothing : 0.8$, capacity which results $0.8 \times 5300 = 4.24$ MWe and this value is conservative than the value indicated in both PDD, Generation Licence and Validation Report which is 4.77 MWe. Moreover photos of the labels is provided with this document. Response for Review 2 (06.10.2016) Label of the turbine and generator are provided to DOE. Related values using in the calculation above can be checked from the label.	
CAR 3 Since the electricity meters are under responsible of TEIAS and located in the transformer centre, access to the counter could not be achieved. Therefore, please provide a supporting document to confirm the serial no of the meters and also to confirm that PMUM records are belongs to this electricity meters.	B.3.2	- Related supporting documents are provided with this document. Please find them in the attachments. Responds for 2nd Round (01.09.2016): 1. First index document is provided to the DOE and this document includes both serial number and the calibration date of the metering devices. Explanation about serial number, accuracy class and model were also added to the monitoring report.	Review 1 (30/06/2016): The necessary documentation is provided to DOE. According to this document, Actaris with a serial no 37119418 electricity meter is the measurement equipment. Please revise all the report as per this meter and a back up meter explanations are also be given in the report. The explanation should be contain mark, model, serial no, accuracy class, calibration date and calibration frequency. Necessary documentation should also be provided to DOE. Hence, CAR 3 is not closed. Review 2 (21/09/2016): All the report is revised as per the main and back up meter with a serial no

Corrective action and/ or clarification requests	Reference to Table 1	Response by project participants	Verification conclusion
			37119418 and 46033916. The explanation is now contains mark, model, serial no, accuracy class, calibration date and calibration frequency. Hence, CAR 3 is closed.
CAR 4 It is stated in the monitoring report that the maintenance and calibration of the metering devices has been made on 01/07/2009. However, The calibration report is not provided to the verification team and also the calibration frequency is not discussed in the monitoring report.	B.3.3	- Calibration of the metering was verified in previous verification report which is already shared and as per the regulations, meters should not require calibration before 10 years. Related explanation about calibration frequency is added to monitoring report. Responds for 2nd Round (01.09.2016): 1. First index document is provided to the DOE	Review 1 (30/06/2016): The provided calibration record is related with the electricity meters Elster A1500 that are located in the project area. However, the measurement and the emission reduction calculation is made by the Actaris with a serial no 37119418. Please provide the calibration document and revise the MR accordingly. Hence, CAR 4 is not closed. Review 2 (21/09/2016): The provided calibration record is related with the current electricity meters Actaris with a serial no 37119418. The calibration documents are provided to the verification team. Hence, CAR 4 is closed.
CAR 5 The total values of PMUM records (from February 2012 to November 2012) are not seen. In addition, the total net value of 2012 is not correctly calculated. Please add the first five months. The total net value of 2015 is also not correctly calculated. Please add the last three months.	B.3.6	- First five months of 2012 is not a period within this monitoring period. Moreover, PP is aware of that the total net value of 2015 is also not calculated until the end of 2015 especially. Responds for 2nd Round (01.09.2016): 2012 electricity generation data is provided to DOE. Moreover, firts five months of 2012 and last three months of the 2015 is deleted from the excel	Review 1 (30/06/2016): If the first 5 month is not included to this period, please remove the values since no relation is stated within this monitoring period. In addition, the total values of PMUM records (from June 2012 to November 2012) are still not seen. Please provide a new supporting document. Hence, CAR 5 is not closed. Review 2 (21/09/2016): The unnecessary months not related to

Corrective action and/ or clarification requests	Reference to Table 1	Response by project participants	Verification conclusion
		calculation sheet as desired.	this monitoring period is now removed from the calculation excel sheet. Hence, CAR 5 is closed.
CAR 6 Air Quality: <i>SO₂ and NO_x Emissions by thermal plants:</i> The parameter is monitored by calculation annually. The calculation of the parameter is not in line with the explained in the registered PDD. The base year is chosen as 2007, however, 2014 is presented in the calculation excel sheet and 2012 is presented in the monitoring report. Please clarify. Other Pollutants: <i>Waste oil:</i> The parameter is monitored yearly by records for storage or disposal /22/ . It is confirmed as per the records that waste oil is collected in leak proof tanks and handed in licensed collectors as per the national regulations. In the monitoring report it is defined that the disposal record is related with the first monitoring period. However, the date of the document is 16/11/2012 which is related with this (second) monitoring period. Please clarify. Also, please determine the current situation and future target in the monitoring report. Quality of Employment: <i>Number of personnel certified/trained:</i> The parameter is monitored yearly by checking the training certificates or records for attendance to the trainings. It is defined in the monitoring report that 10 employees are trained. However, in the calculation excel sheet 10 trainings are presented. In addition, no supporting documents for the trainings are provided. Please clarify. Quantitative Employment and Income Generation: <i>Payments made to staff:</i> The chosen parameter is	B.4.3	Other Pollutants: Air Quality: <i>SO₂ and NO_x Emissions by thermal plants:</i> - The latest and updated SO ₂ and NO _x emission related to electricity generation is present for 2012 National Inventory of Turkey. Moreover, lastly updated national electricity generation referred to 2014 in TEIAS statistics. Hence, PP tend to show the more updated figures on that topic to compare with the today's situation of SO ₂ and NO _x emission related to electricity generation. <i>Waste oil:</i> - Statement is clarified in monitoring report and future target is added. Quantitative Employment and Income Generation: <i>Payments made to staff:</i> Total numbers of employees are revised. Insurance and payment documents which is provided with this document and also added to the SD parameters sheet of the verification calculation excel document Quality of Employment: <i>Number of personnel certified/trained:</i> Related documents are provided with this	Review 1 (30/06/2016): Air Quality: <i>SO₂ and NO_x Emissions by thermal plants:</i> The calculation of the parameter is not in line with the explained in the registered PDD. The base year is chosen as 2007, however, 2012 is presented in the calculation excel sheet. Please clarify. Other Pollutants: <i>Waste oil:</i> The current situation and future target is now presented in the monitoring report. However, the date related with this monitoring period is given as "16/112012" Please correct the format of the date. Quality of Employment: <i>Number of personnel certified/trained:</i> The training certificates for 13 employees are now provided to DOE. However, 17 employees are hired by the project activity. All the employees have to be trained about Health & Safety. Please clarify why the remaining employees does not attended to the trainings. Quantitative Employment and Income Generation: <i>Payments made to staff:</i> The necessary supporting document is now provided to DOE. According to the document 17 employments are hired and 16 of them are local. Please clarify. Balance of payment: <i>Currency saving due to avoided fuel import:</i> The chosen base year is not in

Corrective action and/ or clarification requests	Reference to Table 1	Response by project participants	Verification conclusion
payments made to staff. However, the current situation and future target is related with the local people. Since there is no way to change the registered PDD, local employment which is more important for the GS are monitored yearly by employment records and social security documents. In the monitoring report it is defined that 19 local employees are hired. However, this issue could not be verified since no supporting document is provided for the number of employees and recruitment documents to verify that they are local or not. Balance of payment: <i>Currency saving due to avoided fuel import:</i> This parameter is monitored yearly by comparing electricity generated. However, the chosen base year is not in line with the registered PDD and monitoring report and calculation excel sheet. Please clarify.		document. Accordingly both monitoring report and SD parameters sheet of excel calculation documents are revised. Balance of payment: 2014 TEIAS Natural Gas consumption values for electricity generation were taken into account; since, it is the last updated data to reach according to TEIAS statistics . On the other hand, currency is changed as the average during this monitoring period. Hence, PP tends to use the more updated statistics on that topic to show the importance of this renewable energy project by comparing with today's situation. Responds for 2nd Round (01.09.2016): 1. Calculation was corrected by using 2007 (base year) values 2. Date of the last waste oil management document is corrected 3. Remained "Health and Safety" documents are completed and provided to DOE. They are also mentioned in the SD parameters sheet of verification calculation excel document. In addition, one of the employees of the project, namely Hakan Yüksel has certificate for working on high voltage line. A related document was also provided to DOE. 4. Statement of "Quantitative	line with the registered PDD and monitoring report and calculation excel sheet. Please clarify. Hence, CAR 6 is not closed. Review 2 (21/09/2016): Air Quality: <i>SO₂ and NO_x Emissions by thermal plants:</i> The calculation of the SO₂ parameter is now in line with the explained in the registered PDD. However, for NO_x, the value given in the monitoring report and calculation excel sheet is not in line with the registered PDD. Please clarify. Other Pollutants: <i>Waste oil:</i> The date related with this monitoring period is now given as "16/11/2012". Quality of Employment: <i>Number of personnel certified/trained:</i> All the training certificates for 17 employees are now provided to DOE. Quantitative Employment and Income Generation: <i>Payments made to staff:</i> It is now stated in the monitoring report that 17 employments are hired and 16 of them are local. Balance of payment: <i>Currency saving due to avoided fuel import:</i> The chosen base year is now in line with the registered PDD and monitoring report and calculation excel sheet. Hence, CAR 6 is not closed.

Corrective action and/ or clarification requests	Reference to Table 1	Response by project participants	Verification conclusion
		Employment and Income Generation" is revised 5. Calculation of balance of payment is corrected by using 2008 values to be parallel within the statement in Passport of the project Response for Review 2 (06.10.2016): NOx calculation is revised in excel sheet and corrected in monitoring report.	Review 3 (17/10/2016): Air Quality: <i>SO₂ and NO_x Emissions by thermal plants:</i> For NO_x, the value given in the monitoring report and calculation excel sheet is now in line with the registered GS Passport. Hence, CAR 6 is closed.
CR 1 The registered project activity applies the approved baseline and monitoring methodology "AMS-I.D.", "Grid connected renewable electricity generation", version 16.0 of 28/05/2010 /7/. However, another methodology is presented in the monitoring report. Please clarify.	A.3 B.1.1	-Methodology information is revised in monitoring report.	Review 1 (29/06/2016): The correct methodology is now presented in the monitoring report. Hence, CR 1 is closed.
CR 2 Net Electricity delivered to the grid (EG_y): Monthly generation records are presented as source of data. However, this parameter's explanations are not in line with the registered PDD. The other parameters given in the registered PDD is not discussed in the monitoring report. Please clarify.	B.2.1	Net Electricity delivered to the grid (EG_y): -Yearly value of net electricity generation record (in average) is already stated in page 8 in monitoring report under the explanation of parameter EG_y. -Monthly EPIAS records come into existence by sum of the daily generation records within the calculation system of EPIAS. Hence, the source of the data belongs to sum of the daily records. DOE can find the yearly version of these data in calculation excel sheet for 2012, 2013, 2014 and 2015 separately which are gathered by sum of the monthly records also. Hence, it is in line with PDD actually. Responds for 2nd Round (01.09.2016): 1. Explanation of parameter EG_y is	Review 1 (29/06/2016): Net Electricity delivered to the grid (EG_y): Monthly generation records are presented as source of data. However, this parameter's explanations are not in line with the registered PDD. Still there is missing parameter in the MR as per the PDD. The given source of data for FC_{i,y} and NCV is not in line with the registered PDD. Hence, CR 2 is not closed. Review 2 (21/09/2016): Net Electricity delivered to the grid (EG_y): Feasibility Report is now presented as source of data. All the missing parameters are now added

Corrective action and/ or clarification requests	Reference to Table 1	Response by project participants	Verification conclusion
		revised 2. «EGy total» parameter is added to the monitoring report 3. Related link stated in the report includes the 2008 data of TEIAS (between 2006 – 2014). Link is updated since the page of TEIAS was updated and older link does not work	to the MR as per the PDD. The given source of data for FCI,y and NCV is now in line with the registered PDD. Hence, CR 2 is closed.

TABLE 3 FORWARD ACTION REQUEST

Forward action request	Reference to Table 1	Response by project participants Verification conclusion



CERTIFICATO DI QUALIFICA PER GLI SCHEMI VOLONTARI*
QUALIFICATION CERTIFICATE FOR VOLUNTARY SCHEMES*

Si attesta che il sig./sig.ra:
We declare that Mr/Mrs/Ms:

Tugce Kiratli

è qualificato come:
is qualified as:

TEC, VAL, VER, TL

per le seguenti aree tecniche:
for the following technical areas:

AREE TECNICHE TECHNICAL AREAS	DESCRIZIONE DELL'AREA TECNICA TECHNICAL AREA DESCRIPTION	SCOPO SETTORIALE SECTORAL SCOPE
1.2	Renewables	1
13.1	Solid waste and wastewater	13

REVISIONE REVISION	DATA DATE	MOTIVAZIONI PER LA REVISIONE REASON FOR THE REVISION
0	19/07/2016	First issue with new template

Responsabile di schema
Scheme Leader
 Rita Valoroso

*SCHEMI VOLONTARI/ VOLUNTARY SCHEMES: ACR American Carbon Registry, CCB The Climate, Community & Biodiversity Alliance, GS Gold Standard, JI Joint Implementation, SCS Social Carbon Standard, VCS Verified Carbon Standard.

TEC: Technical expert; VAL: Validator; VER: Verifier; TL: Team leader; FIN EXP: Financial Expert; ITRP: Independent technical reviewer

RINA Services S.p.A. è accreditato/riconosciuto da
 RINA Services S.p.A. is accredited /recognized by

UNFCCC	quale Entità Operativa Designata (DOE), per condurre la Validazione e la Verifica di Progetti CDM as Designated Operational Entity (DOE), to carry out Validation and Verification of CDM Projects
VCSA	per condurre la Validazione e la Verifica di Progetti VCS to carry out Validation and Verification of VCS Projects
GS Foundation	per condurre la Validazione e la Verifica di Progetti GS to carry out Validation and Verification of GS Projects
Ecologica Institute	per condurre la Validazione e la Verifica di rapporti SCS to carry out Validation and Verification of SCS Reports
American Carbon Registry ACR	per condurre la Validazione e la Verifica di Progetti ACR to carry out Validation and Verification of ACR projects
The Climate, Community & Biodiversity Alliance CCB	per condurre la Validazione e la Verifica di Progetti co-benefit CCB to carry out Validation and Verification of co-benefit CCB projects



CERTIFICATO DI QUALIFICA PER GLI SCHEMI VOLONTARI*
QUALIFICATION CERTIFICATE FOR VOLUNTARY SCHEMES*

Si attesta che il sig./sig.ra:
 We declare that Mr/Mrs/Ms:

Rekha Menon

è qualificato come:
 is qualified as:

TEC, VAL, VER, TL, ITRP

per le seguenti aree tecniche:
 for the following technical areas:

AREE TECNICHE TECHNICAL AREAS	DESCRIZIONE DELL'AREA TECNICA TECHNICAL AREA DESCRIPTION	SCOPO SETTORIALE SECTORAL SCOPE
1.2	Renewables	1
2.1	Electricity distribution	2
13.1	Solid waste and wastewater	13
13.2	Manure	13
14.1	Afforestation and reforestation	14

REVISIONE REVISION	DATA DATE	MOTIVAZIONI PER LA REVISIONE REASON FOR THE REVISION
0	19/07/2016	First issue with new template (this certificate is linked to CDM qualification)

Responsabile di schema
 Scheme Leader
 Rita Valoroso

*SCHEMI VOLONTARI/ VOLUNTARY SCHEMES: ACR American Carbon Registry, CCB The Climate, Community & Biodiversity Alliance, GS Gold Standard, JI Joint Implementation, SCS Social Carbon Standard, VCS Verified Carbon Standard.

TEC: Technical expert; VAL: Validator; VER: Verifier; TL: Team leader; FIN EXP: Financial Expert; ITRP: Independent technical reviewer

RINA Services S.p.A. è accreditato/riconosciuto da
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UNFCCC	quale Entità Operativa Designata (DOE), per condurre la Validazione e la Verifica di Progetti CDM as Designated Operational Entity (DOE), to carry out Validation and Verification of CDM Projects
VCSA	per condurre la Validazione e la Verifica di Progetti VCS to carry out Validation and Verification of VCS Projects
GS Foundation	per condurre la Validazione e la Verifica di Progetti GS to carry out Validation and Verification of GS Projects
Ecologica Institute	per condurre la Validazione e la Verifica di rapporti SCS to carry out Validation and Verification of SCS Reports
American Carbon Registry ACR	per condurre la Validazione e la Verifica di Progetti ACR to carry out Validation and Verification of ACR projects
The Climate, Community & Biodiversity Alliance CCB	per condurre la Validazione e la Verifica di Progetti co-benefit CCB to carry out Validation and Verification of co-benefit CCB projects