VERIFICATION REPORT

ARTVİN ÇORUH ELEKTRİK ÜRETİM SAN. VE TİC. A.Ş.

VERIFICATION OF THE

ARALIK HEPP

REPORT NO. BVC/TURKEY-VR/CER.TR1542889.13.C45/2014

REVISION NO. 01

BUREAU VERITAS CERTIFICATION

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Report No: BVC/TURKEY-VR/CER.TR1542889.13.C45/2014 rev. 01

VERIFICATION REPORT

Date of first issue:	Organizational unit:
20/01/2014	Bureau Veritas Certification Holding SAS
Client:	Client ref.:
ARTVİN ÇORUH ELEKTRİK ÜRETİM SAN. VE TİC. A.Ş.	Mr. Gani Eldeleklioğlu

Summary:

Bureau Veritas Certification has conducted the periodic verification of Aralık HEPP, GS Registration Reference Number GS663, owned by Artvin Çoruh Elektrik Üretim San. ve Tic. A.Ş, which is located in Aralık River in Borcka district of Artvin, and applying the methodology , on the basis of UNFCCC criteria for the CDM Methodology, Gold Standard v.2.2, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM rules and modalities and the subsequent decisions by the CDM Executive Board, as well as the host country criteria.

The verification scope is defined as an independent and objective review and ex-post determination of the monitored GHG emission reductions, and consisted of the following three phases: i) desk review of the project design, the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion. The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

In summary, Bureau Veritas Certification confirms that the project is implemented as planned and described in the validated and registered project design documents. Installed equipments being essential for generating emission reduction run reliably and are calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions. The GHG emission reductions are calculated without material misstatements, and the emission reductions verified totalize 77,956 tons of CO2e for the monitoring period.

Our opinion relates to the projects' GHG emissions and resulting GHG emission reductions reported and related to the valid and registered project baseline, approved monitoring plan and its associated documents.

Reporting period (01/05/2010 – 30/09/2013)

Baseline emissions 2010 (01/05/2010 – 31/12/2010) : 6,827 t CO2 equivalents.
Baseline emissions 2011 : 29,939 t CO2 equivalents.
Baseline emissions 2012 : 23,465 t CO2 equivalents.
Baseline emissions 2013 (01/01/2013 – 30/09/2013) : 20,725 t CO2 equivalents.

** "Baseline emissions for the years 2010 to 2013 is calculated with subtracting the project emission"*

Baseline emissions Total : 77,960 t CO_2 equivalents.
Project emissions : 4 t CO_2 equivalents.
Leakage emissions : 0 t CO_2 equivalents.
Emission Reductions (Monitoring Period) : 77,956 tCO_2 equivalents.

Report No.:	Subject Group:
BVC/TURKEY-VR/CER.TR1542889.13.C45/2014	GS-VER
Project title: ARALIK HEPP	
Work carried out by: Furkan SADIKOĞLU - Team Leader	
Internal Technical Review carried out by: Mrs. Burcu MUTMAN BORAN	
Date of this revision: 20/01/2014	Rev. No.: 01 / Number of pages: 63

Indexing terms

Work approved by: Mr. Matthieu Martini

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Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reductions
CL	Clarification Request
CO2	Carbon Dioxide
CO2e	Carbon Dioxide Equivalent
DOE	Designated Operational Entity
DRR	Daily Reading Record
ETN	Electricity Transaction Note
FAR	Forward Action Request
GHG	Green House Gas(es)
MoV	Means of Verification
MP	Monitoring Plan
MR	Monitoring Report
MRR	Monthly Reading Record
PDD	Project Design Document
PLF	Plant Load Factor
PP	Project Participant
PPA	Power Purchase Agreement
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard

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1. INTRODUCTION

Artvin Çoruh Elektrik Üretim San. ve Tic. A.Ş has commissioned Bureau Veritas Certification to verify the emissions reductions of its GS-VER Aralık HEPP (hereafter called "**the Project**") at Aralik River in Borcka district of Artvin.

This report summarizes the findings of the verification of the Project, performed on the basis of UNFCCC criteria, Gold Standard (GS) v.2.2 as well as criteria given to provide for consistent project operations, monitoring and reporting.

1.1. Objective

The objective of CDM verification is to conduct a thorough, independent assessment of the registered project activities.

In carrying out its verification work, the DOE shall ensure that the project activity complies with the requirements of paragraph 62 of the CDM modalities and procedures. In particular, this assessment shall:

(a) Ensure that the project activity has been implemented and operated as per the registered GS-VER-PDD or any approved revised GS-VER-PDD, and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place;

(b) Ensure that the monitoring report and other supporting documents provided are complete in accordance with latest applicable version of the completeness checklist for requests for issuance of VERs, verifiable, and in accordance with applicable CDM and GS requirements;

(c) Ensure that actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan or any revised approved monitoring plan, and the approved methodology including applicable tool(s);

(d) Evaluate the data recorded and stored as per the monitoring methodology including applicable tool(s).

1.2. Scope

The verification scope is defined as an independent and objective review and ex-post determination of the monitored GHG emission reductions. The verification is based on the validated and registered project design document, the monitoring report, emission reduction calculation spreadsheet, and supporting documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC and GS v.2.2 rules and associated interpretations.

The verification is not meant to provide any consulting service towards the PPs. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project monitoring towards reductions in the GHG emissions.

1.3. GHG Project Description

The Project consists of 2 sets of Andtritz Horizontal Pelton Type turbine with a unit installed capacity of 6.205 MWe, providing a total installed capacity of 12.41 MW. The annual expected electricity supplied to is 45,150 MWh and the annual estimated emission reductions are 25,374 tCO_2e. The expected emission reduction according to monitoring period is calculated and confirmed as 86,694 tCO2e.

Project title:	Aralık HEPP
GS ref number:	GS 663
Registration Date:	18/11/2011
Crediting Period:	01/05/2010 – 30/04/2017(renewable)
Monitoring Period:	01/05/2010 – 30/09/2013
Project Participants:	Artvin Çoruh Elektrik Üretim San. ve Tic. A.Ş (Project Owner) Global Tan Energy Ltd. (Project developer)
Methodologies used	AMS I.D Version 14
Location of the Project:	Aralik River in Borcka district of Artvin
Geo coordinates:	Weir Latitude: 41°23′53″ N, Longitude: 41°44′06″ E Powerhouse Latitude: 41°23′36″ N, Longitude: 41°41′49″ E

No post registration changes have been requested.

FAR31 *was raised for the suitable assessment of the project owner by the validating DOE. During the site visit, it is confirmed by the verification team that the project owner is available for the necessity of regular qualification refreshments so the forward action request is closed.*

CAR04 *has been raised by the verification team for the project location. Required geographical information has been added under section A.2 of the monitoring report and the corrective action request is closed.*

1.4. Verification Team

The assessment team and internal technical reviewer team consist of the following personnel:

FUNCTION	NAME	TA 1.2	TA 1.3	TASK PERFORMED*
Team Leader	Furkan SADIKOĞLU	☒	☐	☒**DR** ☒**SV** ☒**RI** ☐**TR**
Team Member (Trainee)	N.A	☐	☐	☐**DR** ☐**SV** ☐**RI** ☐**TR**
Technical Specialist	N.A.	☐	☐	☐**DR** ☐**SV** ☐**RI** ☐**TR**
Internal Technical Reviewer (ITR)	Mrs. Burcu MUTMAN BORAN	☒	☐	☐**DR** ☐**SV** ☐**RI** ☒**TR**
Specialist supporting ITR	N.A	☐	☐	☐**DR** ☐**SV** ☐**RI** ☐**TR**

*DR = Document Review; SV = Site Visit; RI = Report issuance; TR = Internal Technical Review

2. METHODOLOGY

The overall verification, from Contract Review to Verification Report & Opinion, was conducted using Bureau Veritas Certification internal procedures.

In order to ensure transparency, a verification protocol was customized for the project, according to the version 04.0 of the Clean Development Mechanism Validation and Verification Standard, issued by CDM Executive Board after its 74th meeting on 29/07/2013 /8/. The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from verifying the identified criteria. The verification protocol serves the following purposes:

- It organizes, details and clarifies the requirements a CDM project is expected to meet;
- It ensures a transparent verification process where the verifier will document how a particular requirement has been verified and the result of the verification.

The completed verification protocol is enclosed in Appendix A to this report.

2.1. Review of Documents

The assessment of the project documentation provided by the project participant is based upon both quantitative and qualitative information on emission reductions. Quantitative information comprises the reported numbers in the monitoring report (MR) version dated /5/ and emission reduction calculation spreadsheet version dated /6/. Qualitative information comprises information on internal management controls, calculation procedures, procedures for transfer of data, frequency of emissions reports, and review and internal audit of calculations.

In addition to the monitoring documentation provided by the project participants, the DOE reviews:

(a) The registered PDD and the monitoring plan /1//2/;

(b) The validation report /2/

(c) Previous verification reports /3/;

(d) The applied monitoring methodology /7/;

2.2. Follow-up Interviews

On 24/10/2013 Bureau Veritas Certification performed a site visit and interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Artvin Çoruh Elektrik Üretim San. ve Tic. A.Ş and Global Tan Energy Ltd. were interviewed (see References). The main topics of the interviews are summarized in Table 1.

Table 1 Interview topics

Interviewed organization	Interview topics
Artvin Çoruh Elektrik Üretim San. ve Tic. A.Ş (the Project Owner)	➢ Implementation of the project ➢ Review of the data flow for generating, aggregating and reporting the monitoring parameters ➢ Information the monitoring equipment ➢ The data for cross the values on the Monitoring Report ➢ PMUM records ➢ Training records ➢ Social Security Records (SGK) of the employees ➢ Water Quality and Quantity ➢ Biodiversity
Global Tan Energy Ltd. (the Consultant)	➢ Monitoring Plan ➢ Monitored data and Monitoring Report ➢ GHG Calculations

Besides these, the nearest settlement is choosen for the interviews with locals. Interviewed locals were indicated in the references with contact information. Any impact of the project on site was questioned as well as project's benefits to the local settlements were discussed.

2.3 Resolution of Clarification, Corrective and Forward Action Requests

The objective of this phase of the verification is to resolve issues related to the monitoring, implementation and operations of the registered project activity that could impair the capacity of the registered project activity to achieve emission reductions or influence the monitoring and reporting of emission reductions prior to Bureau Veritas Certification's positive conclusion on the GHG emission reduction calculation.

Findings established during the verification can either be seen as a non-fulfillment of criteria ensuring the proper implementation of a project or where a risk to deliver high quality emission reductions is identified.

A Corrective Action Request (CAR) is raised, if one of the following situations occurs:

(a) Non-compliance with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;

(b) Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;

(c) Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;

(d) Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants.

A Clarification Request (CL) is raised, if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

A Forward Action Request (FAR) is raised, for actions if the monitoring and reporting require attention and/or adjustment for the next verification period.

To guarantee the transparency of the verification process, the concerns raised are documented in more detail in the verification protocol in Appendix A.

2.4 Internal Technical Review

The verification report underwent an Internal Technical Review (ITR) before requesting issuance of VERs for the project activity.

The ITR is an independent process performed to examine thoroughly that the process of verification has been carried out in conformance with the requirements of the verification scheme as well as internal Bureau Veritas Certification procedures.

The Team Leader provides a copy of the verification report to the reviewer, including any necessary verification documentation. The reviewer reviews the submitted documentation for conformance with the verification scheme. This will be a comprehensive review of all documentation generated during the verification process.

When performing an Internal Technical Review, the reviewer ensures that:

- The verification activity has been performed by the team by exercising utmost diligence and complete adherence to the CDM rules and requirements.
- The review encompasses all aspects related to the project which includes project design, baseline, additionality, monitoring plans and emission reduction calculations, internal quality assurance systems of the project participant as well as the project activity, review of the stakeholder comments and responses, closure of CARs, CLs and FARs during the verification exercise, review of sample documents.

The reviewer may raise Clarification Requests to the verification team and discusses these matters with Team Leader.

After the agreement of the responses on the Clarification Requests from the verification team as well as the PP(s), the finalized verification report is accepted for further processing such as uploading via the UNFCCC interface.

3. VERIFICATION CONCLUSIONS

In the following sections, the conclusions of the verification are stated.

The findings from the desk review of the original monitoring documents and the findings from interviews during the follow up visit are described in the Verification Protocol in Appendix A.

The Clarification, Corrective and Forward Action Requests are stated, where applicable, in the following sections and are further documented in the Verification Protocol in Appendix A. The verification of the Project resulted in 13 CAR(s) and 3 CL(s)

The CARs, CLs and FARs were closed based on adequate responses from the Project Participant(s) which meet the applicable requirements. They have been reassessed before their formal acceptance and closure.

The number between brackets at the end of each section corresponds to the VVS paragraph.

3.1. Remaining issues from validation or previous verification (213)

All CARs and CLs raised were successfully closed during the validation stage and previous verification of the Project, no remaining issues were left.

3.2. Compliance of the project implementation with the registered project design document (228)

Bureau Veritas Certification has performed a site visit and found that the Project has been put into operation and the electricity generated is supplied to according to the signed commissioning of the project activity. 2 sets of Andtritz Horizontal Pelton Type turbine with a unit capacity of 6.205 MWe, providing a total installed capacity of 12.41 MW have been in operation during the monitoring period.

No changes to the project design have been identified during this verification. The implementation and operation of the project activity have been conducted in accordance with the description contained in the registered GS-VER- PDD.

[Power System]

As described in the generation license of the project activity /11/, the electricity generated by the Project is delivered to the grid substation through a 34.5 kV line and then delivered to 33 kV Borcka substation.

[Metering System]

There are two meters installed for the Project.

The main meter was installed at the output of the on-site substation to measure the electricity exported to and imported from the grid by the Project.

The backup meter was installed beside the main meter to measure the electricity exported to and imported from the grid by the Project.

FAR11 *was raised to check the installation of the metering devices during the first verification by the validating DOE. The installation of the metering devices were checked during the site visit by the verification team so the forward action request is closed.*

[Management and Operation]

The PP has operated the Project as per the registered PDD. The monitoring organization has been set up and all monitoring staffs have been trained. Meter reading records of all the meters are based on continuously measurement and monthly recorded by the PP and TEIAS.

Each month, an officer from TEIAS and the plant manager/electricity technician of the plant will record the reading and sign. Employment records of personnel /9/ and internal training records /10/ have been provided and verified by the verification team.

- Corresponding to the paragraph 228 of VVS version 03.0, Bureau Veritas Certification can confirm that:

- The implementation of the Project is consistent with the registered GS-VER-PDD.

- The Project is operated as per the registered GS-VER-PDD by the PP.

3.3. Compliance of the monitoring plan with the monitoring methodology including applicable tool(s) (232)

The verification team has verified the monitoring plan, including the data and parameters required to be monitored, measurement procedures, monitoring frequency and QC/QA procedures as described in the registered GS-VER- PDD.

- Corresponding to the paragraph 232 of VVS version 03.0, Bureau Veritas Certification can confirm that the monitoring plan is in accordance with the approved methodology including applicable tool(s) applied by the Project.

3.4. Compliance of monitoring activities with the monitoring plan (235-236)

Monitoring has been carried out in accordance with the monitoring plan contained in the registered GS-VER-PDD.

[Parameters and information flow]

The parameters required by the monitoring plan and how Bureau Veritas Certification has verified the information flow (from data generation, aggregation, to recording, calculation and reporting) for these parameters including the values in the monitoring report are described below:

Parameters monitored:

(1) $EG_{facility,y}$, net electricity supplied to the grid by the Project

The net electricity supplied to the grid by the Project is the electricity exported to the grid minus the electricity imported from the grid by the Project which is measured by the bidirectional main meter. Therefore EGy can be calculated as below:

$EG_y = EG_{export} - EG_{import}$

As described above, the meters have been installed in accordance with the registered GS-VER-PDD. The verification team has checked on-site the location of the meters against the diagram of power connection system and found them to be consistent.

The readings of the meters are continuously monitored and monthly recorded by the PP and the grid company. Each month, an officer from TEIAS and the plant manager/electricity technician of the plant will record the reading and sign. After a cross-check with PMUM records for 2010 and 2013 vintage, the project owner provided the signed monthly reading records.

The verification team has verified the values provided in the monitoring report and ER spreadsheet against the relevant documented evidences i.e the Monthly Reading Records /11/ and the PMUM screens /12/ and found them to be consistent with the evidences. The Monthly Reading Records and the PMUM screens can cover the monitoring period from 01/05/2010 and 30/09/2013.

CL02 *has been raised for the QA/QC procedures of the* $EG_{facility,y}$ *parameter. QA/QC procedures are revised in line with the registered PDD. Last calibration date and serial numbers of the meters are added and cross-check process has been described. After the revisions the clarification request is closed.*

(2) $FC_{i,j,y}$, Quantity of Fuel Type Combusted in Diesel Power Generator

This value is calculated through the total working hour of the generator and the maximum hourly consumption of the generator. Total working hour is confirmed during the site visit and the maximum consumption value is confirmed through the manufacturer's specification sheet./13/

(3) Cap_{PJ}, Installed Capacity of Hydro Power Plant

The value is the installed capacity of the hydro power plant after the implementation of the project activity. This is verified during the site visit by turbines plates.

(4) A_{PJ}, Area of the reservoir

The value of A_{PJ} is equal to area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full.

Reservoir area is verified through the reservoir map of the project activity.

(5) Air Quality : SO2 and NOx emission reductions

According to total generation in 2011 SO2 emission per MWh is calculated as 2.71 kg/MWh and NOx emission per MWh is calculated as 1.15 kg. For the monitoring period total electricity generation value is confirmed as 138,720 MWh. SO2 emission reduction and NOx emission reduction is calculated and confirmed as 375,7 tons and 159,6 tons through the total electricity generation.

(6) Biodiversity

- *The functionality of the fish passage*

The functionality of the fish passage is monitored record of the flow rates of the fish passage. Records According to Assesment of Environmental Flow, Sediment Transport and Fish Efficiency of Aralık HEPP dd. July 2013 flow rates should be between 0.35 m^3/s and 1.06 m^3/s. The flow rates are monitored by the project owners to the validation team. Flow rates are higher than the defined values in the report. The flow rate records were between September 2012 and May 2013. It is show that there isn't any negative situation for the fish passage effectiveness.

FAR32 *was raised for the suitable independent experts study for the functionality of the fish passage and the effects of the project for biodiversity by the validating DOE. During the site visit; it is confirmed through the Assesment of Environmental Flow, Sediment Transport and Fish Efficiency of Aralık HEPP dd. July 2013 Report that there is not any negative impact for the fish passage effetiveness so the forward action request is closed.*

- *Payment made to Directorate of Forestry*

Payments records are provided to the verification team. The bank invoices for the cost for afforestation and land allocation are checked and confirmed by the validation team. The bank invoices are dd. 07/04/2006, 18/09/2007, 21/05/2009 and 26/01/2010. /14/

FAR28 *was raised for the cutting trees by the validating DOE. The project owner intends to pay compensation or plant new trees as equalization for damage during plant construction. During the site visit payment records are provided to the verification team so the forward action request is closed.*

(7) Work Safety : Number of people trained (certificates)

According to Work Safety parameter, recruited people are trained about health, safety and environmental issues. Records are provided to the verification team /10/. The letter from the Borcka Governorship declares that the 4 personnel is trained about the first safety on county community health center dd. 18-21 June 2013.

(8) Precautionary Measures: Building fences around the weir

This parameter is confirmed during the site visit by the verification team. Fences built around the weir to prevent risk to humans or animals. Photographs are recorded and stored by the verification team.

FAR28 *was raised for the building of fences by the validating DOE. PP intends to build fences to prevent people from getting hurt by falling into the channel or the weir. During the site visit, it is observed by the verification team that fences built around the weir so the forward action request is closed.*

(9) Quality of Employment: Number of People trained (certificates)

This parameter allows monitoring of qualitative employment through acquired certificates and provided trainings. Training records according to first aid and high voltage are provided to verification team. Training records are checked and confirmed. /10/

CAR13 *has been raised for the training records and certificates of the employee. Training records are provided for 4 employees are provided and corrective action request is closed.*

(10) Quantitative Employment and Income Generation: Locally Recruited Staff

According to job recruitment documents 15 employee are confirmed as local. On the other hand social security documents of these 15 employees are controlled by the validation team. /15/.

(11) Balance of Payments: Decrease dependency on fossil fuel through increasing use of local resources.

The balance of the payment calculation is checked and confirmed by the verification team. Calculations are based on the total natural gas usage, Turkey total electricity generation and electricity generation by the project activity. In 2011, about 22.8 bn m^3 natural gas been sued for about 103,916 GWh electricity generation and about 6.2 Euro bn has been spent. During monitoring period, about 30 million m^3 NG has been saved which approximately corresponds to 8.2 million Euro.

(12) Water Quality and Quantity

- *Flow rate of water released from the weir*

Flow rate of water released from the weir is evaluated in an expert report with title “Assessment of Environmental Flow, Sediment transport and Fish Passage Efficiency of ARALIK HPP dd. July 2013. The report did not find any conflictions about the water quality and quantity. Also the flow records are provided to the verification team. Flow records are between September 2012 and May 2013.

- *Waste Water*

During the site visit dd. 24/10/2013 it is confirmed that the all wastes are collected carefully as required by the local regulations. No waste water disposal occurred during the monitoring period.

(13) Soil Condition

- *Storage of excavation wastes in appropriate locations*

During the site visit waste storage areas have been seen by the verification team. All wastes have been stored appropriately as required by the regulations.

- *Accumulation of Sediment*

During the site visit according to stakeholders’ comments no sediment accumulation has been observed in the river.

- *Soil Erosion*

During the site visit it is confirmed that no erosion has been observed due to project activity after implementation of the project has started through the stakeholders’ comments.

(14) Other Pollutants : Waste Oil

During the site visit waste oil storage area is visited by the verification team. No oil spillage or leakage was reported during the monitoring period. Storage will continue still containers are full and a receipt will be kept. There is also an isolated underground oil drainage system in the project site.

(15) Livelihood of the poor

- *Voluntary Contributions*

It is confirmed that the contributions to local community made during the construction in terms of renovation of roads and public schools, mosques etc. This parameter is confirmed through the letter of Aralık Village Muhtar regarding to contributions/16/ and letter of Aralık Village Meryem Acar school council chairman /17/ regarding to contributions. Some of the contributions are provided in the letters as follows;

1) Fences have been made to the school and entrance door of the school is renewed.
2) Painting the walls of the school is renewed.
3) Stationery help to school
4) Cleaning materials help to school
5) Renovation of the existing roads and paving steeps pathways with concrete
6) Construction of village water reservoir
7) Rehabilitation of the village clinic
8) Donating chairs and desks for the village marriage hall
9) Rehabilitation of the Aralık Village Camii
10) Construction of a village mill

These parameters are also discussed with the stakeholders during the site visit. They also confirmed the contributions of the project activity.

- *Existence of natural Spring*

This parameter is confirmed through the interview of the stakeholders. All stakeholders declared that no springs have been disappeared due to project activity. The interviewed stakeholder list is provided under 'Person Interviewed' section.

***CAR12** has been raised for the sustainable development parameters. All parameters are revised according to GS Passport Ver08 dd. 07/07/2011. Taken actions during to monitoring period are provided by objective evidences and the corrective action request is closed.*

Parameters determined ex-ante:

(1) EFgrid,CM,y, emission factor of the grid

The emission factor of the 1st crediting period of the Project has been determined ex-ante in the registered GS-VER-PDD as ***0.562 tCO2e/MWh***. The emission factor used in the monitoring report has been verified against the GS-VER-PDD and found them to be consistent.

✌ Corresponding to the paragraph 235 and 236 of VVS version 03.0, Bureau Veritas Certification can confirm that:

- The monitoring has been carried out in accordance with the monitoring plan contained in the registered GS-VER- PDD.
- All parameters required by the monitoring plan have been sufficiently monitored and correctly listed. The monitored data for required parameters have been verified by checking the whole information flow.

3.5. Compliance with the calibration frequency requirements for measuring instruments (243)

The registered monitoring plan requires that as the meters are sealed by TEIAS, Artvin Çoruh Elektrik Üretim San. ve Tic. A.Ş cannot intervene with the devices by themselves. TEIAS performs a regular maintenance on a regular basis. TEIAS is the main responsible for calibration and maintenance of the devices. TEIAS performs the necessary maintenance and calibration. Meters should not require calibration for a periodic of less than 10 years as per the regulations and be in compliance with the regulations of EMRA. /18/

The project activity consists by two metering devices. During this monitoring period, the installed measuring instruments have been operating well and did not require out of schedule calibration and the first periodic calibration has been made on 30/04/2010. /19/

Table 2 The calibration records of the meters

Meter ID	Serial number	Accuracy	Calibration date	Calibration entity
Main	376500	0.2S	30/04/2010	TEIAS
Back-up	376498	0.2S	30/04/2010	TEIAS

***CAR07** has been raised for the calibration dates of the meters. Calibration dates are provided through the TEIAS test protocols to the verification team and the corrective action request is closed.*

During the site visit meters' consumption and generated values are recorded as follows;

Main Meter

Brand: ELSTER A1500

Serial Number: 00376500 2008

2.8.0 (Generation): 136,383.85 MWh

1.8.0 (Consumption): 7,294.86 MWh

Backup Meter

Brand: ELSTER A1500

Serial Number: 00376498 2008

2.8.0 (Generation): 136,403.76 MWh

1.8.0 (Consumption): 7,294.56 MWh

It is confirmed that there is no big difference between the main and back-up meters according to site visit records by the verification team.

[Instrument accuracy]

The verification team has verified the calibration records and TEIAS is the sole responsible. All the meters meet the rated accuracy level as described in the monitoring plan and are in compliance with the regulations/18/.

[Calibration frequency]

The calibration frequency fulfills the requirement as described in the monitoring plan and is in compliance with the regulations/18/.

- Corresponding to the paragraph 243 of VVS version 03.0, Bureau Veritas Certification can confirm that:

  - The calibration is conducted at the frequency as specified by the methodology and the monitoring plan contained in the registered GS-VER-PDD.

3.6. Assessment of data and calculation of emission reductions (246)

A complete set of data for the specified monitoring period is available.

The critical parameter used for the determination of the Emission Reductions is the net electricity supplied to the grid by the Project. The data pertaining to the above parameter are maintained in the identified records. All the data are in compliance with that stated in the Monitoring Report version .

As per the methodology AMS Version 14 and the registered GS-VER-PDD, the emission reductions for the Project are calculated as the baseline emissions minus the project emissions and leakage. Hence the emission reduction is determined by the following formula:

$ER_y = BE_y - PE_y - L_y$

Where,

ER_y: Emission reductions

BE_y: Baseline emissions

PE_y: Project emissions

L_y: Emissions due to leakage

[Baseline emissions]

The baseline emissions are the baseline emission factor times the net electricity supplied to the grid Therefore,

$BE_y = EG_{BL,y} * EF_{CO2}$

Where:

BEy = Baseline Emissions in year y; t CO2
$EG_{BL,y}$ = Energy baseline in year y; kWh
EF_{CO2} = Emission Factor in year y; t CO2e/kWh

EF_{CO2}: GHG emission factor of the Turkish national Grid, calculated ex-ante in the registered GS-VER-PDD as 0.562 tCO_2e/MWh.

The net electricity delivered to the grid (EG_y) can be calculated as:

$EG_y = EG_{export} - EG_{import}$

The verification team has cross-checked the values from the Monthly reading records /16/ with the PMUM screens /17/ for the period from . The conservative values are used for emission reductions calculation. The verified values are shown in the .

Table 3 The verified electricity generation values (GWh)

Period	Export (GWh)	Import (GWh)	Verified EGy (GWh)
May 2010	4.981,101	0,1	4.981,001
June 2010	1.212,813	0,041	1.212,772
July 2010	609,706	2,368	607,338
August 2010	306,810	7,030	299,780
September 2010	370,565	5,060	365,505
October 2010	2.071,105	3,650	2.067,455
November 2010	2.359,320	0,050	2.359,270
December 2010	261,280	6,210	255,070
		TOTAL 2010	***12.148191***
January 2011	474,140	4,770	469,370
February 2011	2.548,170	0,200	2.547,970
March 2011	5.323,010	0,400	5.322,610
April 2011	7.760,680	0,130	7.760,550
May 2011	8.433,940	0,030	8.443,910
June 2011	3.781,950	0,010	3.781,940

July 2011	1.250,840	0,940	1.249,900
August 2011	1.509,290	0,010	1.509,280
September 2011	2.600,990	0,030	2.600,960
October 2011	6.566,140	0,250	6.565,890
November 2011	4.214,010	0,030	4.213,980
December 2011	3.479,970	0,150	3.479,820
		TOTAL 2011	***47.936180***
January 2012	2.289,490	0,050	2.289,440
February 2012	1.847,980	0,050	1.847,930
March 2012	3.793,800	0,060	3.793,740
April 2012	8.545,990	0,020	8.545,970
May 2012	8.339,150	0,020	8.339,130
June 2012	3.868,200	0,020	3.868,180
July 2012	2.056,401	0,003	2.050,398
August 2012	1.593,140	0,030	1.593,110
September 2012	1.082,150	2,690	1.079,460
October 2012	1.982,310	0,070	1.982,240
November 2012	2.940,420	0,030	2.940,390
December 2012	3.420,290	0,100	3.420,190
		TOTAL 2012	***41.756178***
January 2013	3.418,810	0,580	3.418,230
February 2013	3.444,170	0,030	3.444,140
March 2013	6.323,140	0,090	6.323,050
April 2013	7.378,160	0,020	7.378,140
May 2013	4.113,740	0,020	4.113,720
June 2013	2.069,899	0,000	2.069,899
July 2013	2.991,667	0,006	2.991,661
August 2013	2.432,096	0,010	2.432,086
September 2013	4.708,727	0,030	4.708,697
		TOTAL 2013	***36.879623***
Total	**138.755,560**	**35,388**	**138.720,172**

CAR09 *has been raised by the verification team for the correcting total electricity generation values. Electricity generation values are corrected through the monthly reading records. The values are confirmed by DOE and cross-checked with the PMUM screens.*

EGy 2010 is calculated and confirmed as 12.1481 GWh

EGy 2011 is calculated and confirmed as 47.9361 GWh

EGy 2012 is calculated and confirmed as 41.7561 GWh

EGy 2013 is calculated and confirmed as 36.8796 GWh

The baseline emissions of the Project are calculated as:

$BE_{2010} = EF_{1st\ CP}$* EGy,2010= 562 tCO2e/GWh* 12.1481 GWh= 6,827.3 tCO2e

$BE_{2011} = EF_{1st\ CP}$* EGy,2011= 562 tCO2e/GWh* 47.9361 GWh = 26,940.1 tCO2e

$BE_{2012} = EF_{1st\ CP}$* EGy,2012= 562 tCO_2e/GWh* 41.7561 GWh = 23,467 tCO_2e

$BE_{2013} = EF_{1st\ CP}$* EGy,2013= 562 tCO_2e/GWh* 36.8796 GWh = 20,726 tCO2e

$BE_{1stMP} = BE_{2010}+BE_{2011}+BE_{2012} + BE_{2013}$ = 6,827. + 26,940 + 23,467 +20,726 = 77,960 tCO2e

[Project emissions]

According to AMS I.D Version 14 project emission is added to Emission reduction calculations. The total working hour of the diesel generator is confirmed as 57 hours during the site visit by the validation team. Maximum hourly fuel consumption of the generator was also used for conservativeness. Maximum hourly consumption of the generator is confirmed as 22L/h through the generator specification document. /13/

The amount of consumption is calculated by multiplying the total working hour and maximum hourly consumption as 57h x 22L/h = 1254 liters.

Total amount of consumed diesel was converted into mass units by using literature value for density of diesel;

Mass of diesel = 1,254 Litres x 0.844 kg/Litres = 1,058.4 kg

Emission factor coefficient was calculated by multiplying the NCV(Net Calorific Value) and CO2 emission factor for diesel:

41.4 Gj/t x 72.6 tCO2/Tj = 3.01 t/tCO2

PEy was calculated by multiplying the consumed amount of diesel with the emission factor coefficient

PEy= 1,058.4 t x 3.01 t/tCO2 $\approx$ 3.18 tCO2e

PEy is rounded up to 4 tCO2e as a conservative approach. ***PEy= 4 tCO2e***

**** The project emission is subtracted from the baseline emissions for the 2010 to 2013 vintages separately.***

CL01 *has been raised for the project emission calculations. Project emission calculation is provided through the total working hour of the generator and maximum hourly consumption of the generator.*

[Leakage emissions]

No leakage needs to be considered according to AMS I.D Version 14.

[Emission reductions]

The emission reductions during the monitoring period from are calculated as:

$ER_y = BE_y-PE_y-L_y$= 77,960 - 4 -0 = 77,956 tCO_2e

[Comparison of ERs]

The annual estimated emission reductions are 25,374 tCO2e as per the registered PDD. The actual operation days of the Project in the monitoring period are 1247 days. The corresponding estimate in the monitoring period are **86,694** (=25,374*1247/365) tCO2e. The actual emission reductions are **10%** less than the estimated value in the monitoring period.

The variation is due to season conditions on site and it is deemed to be reasonable. In Hydro power projects season conditions can changeable, therefore acceptable.

- Corresponding to the paragraph 246 of VVS version 03.0, Bureau Veritas Certification can confirm that:

- Data used for the determination of the emission reductions are available and monitored in accordance with the monitoring plan contained in the registered GS-VER- PDD.

- Information and data provided in the monitoring report have been cross-checked with other sources such as plant logbooks, inventories, purchase records, laboratory analysis.

- Appropriate methods and formulae for calculating baseline emissions, project emissions and leakage have been followed.

- Assumptions, emission factors and default values that were applied in the calculations have been justified.

4. VERIFICATION OPINION

Bureau Veritas Certification has performed the periodic verification of Aralık HEPP, GS Registration Reference Number 663, which is located in Aralık River in Borcka district of Artvin, and applying the methodology . The verification was performed based on the requirements set by the CDM methodology, GS v.2.2 and relevant guidance provided by CMP and the CDM Executive Board.

The verification consisted of the following three phases: i) desk review of the project design, the baseline and monitoring plan; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion.

The management of Global Tan Energy Ltd. is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions of the project on the basis set out within the monitoring plan contained in the registered GS-VER-PDD. The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of GHG emission reductions from the project, is the responsibility of the management of the project.

Bureau Veritas Certification has verified the project Monitoring Report version dated 13/12/2013 for the reporting period as indicated below. Bureau Veritas Certification confirms that the project is implemented as described in the validated and registered project design documents. Installed equipments being essential for generating emission reductions run reliably and are calibrated appropriately. The monitoring system is in place and the Project is generating GHG emission reductions as a GS-VER project.

Bureau Veritas Certification can confirm that the GHG emission reductions are calculated without material misstatements. Our opinion relates to the projects' GHG emissions and resulting GHG emission reductions reported and related to the validated and registered project baseline, monitoring plan and its associated documents. Based on the evidence and information that are considered necessary to guarantee that GHG emission reductions are appropriately calculated, Bureau Veritas Certification confirms the following statement:

Reporting period (01/05/2010 – 30/09/2013)

Baseline emissions 2010 (01/05/2010 - 31/12/2010)	: 6,827	tCO_2 equivalents
Baseline emissions 2011	: 26,939	tCO_2 equivalents
Baseline emissions 2012	: 23,465	tCO_2 equivalents
Baseline emissions 2013 (01/01/2013 - 30/09/2013)	: 20,725	tCO_2 equivalents

** "Baseline emissions for the years 2010 to 2013 is calculated with subtracting the project emission"*

Baseline emissions (Total)	: 77,960	tCO_2 equivalents
Project emissions	: 4	tCO_2 equivalents
Leakage emissions	: 0	tCO_2 equivalents
Emission Reductions 2010 (01/05/2010 - 31/12/2010)	: 6,827	tCO_2 equivalents
Emission Reductions 2011	: 26,939	tCO_2 equivalents
Emission Reductions 2012	: 23,465	tCO_2 equivalents
Emission Reductions 2013 (01/01/2013 - 30/09/2013)	: 20,725	tCO_2 equivalents
Emission Reductions (Monitoring Period)	: 77,956	tCO_2 equivalents

Mrs. BURCU MUTMAN BORAN
Internal Technical Reviewer

Mr. FURKAN SADIKOĞLU
Team Leader

5. REFERENCES

Documents reviewed:

/1/ Registered GS-VER-PDD version 09 dated , GS ref no.GS 663
/2/ Validation Report revision 01, dated 16/08/2011
/3/ -
/4/ Monitoring Report version 04, dated 13/12/2013
/5/ ER Calculation Sheet version 04, dated 13/12/2013
/6/ AMS I.D Version 14, applied approved CDM methodology
/7/ Validation and Verification Standard Version 04.0 dated 20/07/2013
/8/ EMRA Electricity Generation License dd. 16/05/2006
/9/ Social Security Records of the Employee
/10/ Internal Training Records and Qualification Certificate of Operation Staff
/11/ Monthly Reading Records (01/05/2010 – 30/09/2013)
/12/ PMUM Screens (01/05/2010 – 30/09/2013)
/13/ Diesel Gen. Tech. Specs.
/14/ The bank invoices to Directorate of Forestry dd. *07/04/2006, 18/09/2007, 21/05/2009 and 26/01/2010*
/15/ Recruitment Documents
/16/ The letter of Aralık Village Muhtar regarding to contributions
/17/ Letter of Aralık Village Meryem Acar school council chairman regarding to contributions
/18/ www.epdk.gov.tr/web/elektrik-piyasasi-dairesi/44
/19/ TEIAS Meter Test Protocol 30/04/2010
/20/ Provisional Acceptance 30/04/2010

Persons interviewed:

Reşadiye Hamzalı Elk. Ur. San. Tic.

- Hüseyin Göze – Plant Manager
- Murat Kemalarslan – Project Operator

GTE Carbon

- Gani Eldeleklioğlu – Consultant

Stakeholders

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6. CURRICULA VITAE OF THE DOE'S VERIFICATION TEAM MEMBERS

Mr. Furkan SADIKOĞLU	Bureau Veritas Certification, Turkey	Team Leader, Climate Change Lead Verifier, Furkan Sadıkoğlu is an Electrical & Electronics engineer. He has an experience in renewable energy and LED lightning sectors and he has over 2 years' experience in energy sectors. He has participated online seminars in the Gold Standard Academy in 2012 and 2013 and is a lead verifier for GHG emission reduction projects.

Mrs. Burcu MUTMAN BORAN	Bureau Veritas Certification, Turkey	Technical Reviewer, Climate Change Lead Verifier. Burcu Mutman is an auditor for environment, safety and quality management systems. Has participated various online trainings, seminars and personal trainings on Gold Standard also participated in the Gold Standard Academy in 2009 and 2010.

APPENDIX A: CDM PROJECT VERIFICATION PROTOCOL

Table 1 Verification requirements based on VVS version 03.0 (EB 70 Annex 3), PS version 02.1 (EB 70 Annex 2), PCP version 03.1 (EB 70 Annex 4), and Guidelines for completing the Monitoring Report Form version 03.1 (EB 70 Annex 11)

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Part I Cover Page					
(a) Is the title of the project activity provided?	MR		Title is given as “ARALIK HEPP” in line with GS Registry.	**OK**	**OK**
(b) Is the reference number of the project activity provided?	MR		GS project ID is given as GS 663.	**OK**	**OK**
(c) Is the version number of the monitoring report indicated?	MR		01	**OK**	**OK**
(d) Is the completion date of the monitoring report provided in DD/MM/YYYY format?	MR		27/09/2013	**OK**	**OK**
(e) Is the registration date of the project activity provided in DD/MM/YYYY format?	MR		18/11/2013	**OK**	**OK**
(f) Are the monitoring period number and duration of this monitoring period (first and last days included in DD/MM/YYYY format) provided?	MR		1st Period 01/05/2010 – 31/05/2013	**OK**	**OK**
(g) Are project participants indicated?	MR		1- Artvin Çoruh Elektrik Üretim San. ve Tic. A.Ş (Private Entity, Project Owner) 2- Global Tan Energy Ltd. (Private Entity, Project Developer)	**OK**	**OK**
(h) Is the host party(ies) indicated?	MR		Turkey	**OK**	**OK**
(i) Are the sectoral scope(s) and applied methodology(ies) indicated?	MR		Sectoral Scope 1, Energy Industries (Renewable-/non – renewable sources). Applied methodology : AMS I.D Version 14	**OK**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
(j) Is the estimated amount of GHG emission reductions or net anthropogenic GHG removals by sinks for this monitoring period in the registered PDD indicated?	MR		78,236 tCO2	**OK**	**OK**
(k) Are the actual GHG emission reductions or net anthropogenic GHG removals by sinks achieved in this monitoring period indicated?	MR		71,786 tCO2	**OK**	**OK**
(l) Are the actual GHG emission reductions or net anthropogenic GHG removals by sinks achieved during the period up to 31 December 2012 indicated (if applicable)?	MR		N/A	**OK**	**OK**
(m) Are the actual GHG emission reductions or net anthropogenic GHG removals by sinks achieved during the period from 1 January 2013 onwards indicated (if applicable)?	MR		N/A	**OK**	**OK**
Part II Monitoring Report					
Description of project activity					
Purpose and general description of project activity					
Is the description of the project activity to be presented in this section a brief summary of the detailed description given in the section B.1 Implementation status of the project activity?	MR		Section briefly summarizes implemented project while B.1 points out to specific updates in the implementation during this monitoring period.	**OK**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Does this description include:					
Purpose of the project activity and the measures taken for GHG emission reductions or net anthropogenic GHG removals by sinks?	MR		The main goal of the project activity is not provided under section A.1. Please provide.	**CAR01**	**OK**
Brief description of the installed technology and equipments?	MR		Under section A.1 a brief description of the installed technology and equipments is not provided. Please provide. Please also remove future tenses under section A.1 of the monitoring report.	**CAR02**	**OK**
Relevant dates for the project activity (e.g. construction, commissioning, continued operation periods, etc.)?	MR		Construction start date is given as 21/03/2008 which is line with the registered PDD.	**OK**	**OK**
Total GHG emission reductions or net anthropogenic GHG removals by sinks achieved in this monitoring period?	MR		Under section A.1 total GHG emission reductions during the monitoring period is not provided. Please provide.	**CAR03**	**OK**
Location of project activity					
Is the information on the location of the project activity provided, including Host Party(ies), Region/State/Province, City/Town/Community, Physical/ Geographical location etc.?	MR		Under section A.2 the information on the location (Country, Region/State/Province, City/Town/community) of the project activity is not provided. Please provide.	**CAR04**	**OK**
Parties and project participant(s)					

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Is the Party(ies) and project participant(s) involved in the project activity listed in the provided table?	MR		The project activity is listed under section A.3 of the monitoring report.	**OK**	**OK**
Reference of applied methodology					
Is the exact reference (number, title, version) of the methodology(ies) indicated?	MR		Approved consolidated baseline methodology AMS I.D Version 14.	**OK**	**OK**
Is the exact reference (number, title, version) of any tools and other methodologies to which the applied methodology(ies) refers indicated?	MR		The methodology tools are not listed under section A.4 of the monitoring report.	**CAR05**	**OK**
Crediting period of project activity					
Are the type, start date and length of the crediting period corresponding to this monitoring period provided?	MR		Crediting period of the project is 7 years which is twice renewable.	**OK**	**OK**
Implementation of project activity					
Description of implemented registered project activity					
Is the description of the installed technology, technical processes and equipments provided, include diagrams where appropriate?	MR PS	191(a)	Under section B.1 of the monitoring report the description of the installed technology, technical processes and equipments is provided. Also single line diagram of the project activity is provided.	**OK**	**OK**
Is the information on the implementation and actual operation of the project activity, including	PS	191(b)	Relevant dates are not provided under section B.1 of the monitoring report. Please provide.	**CAR06**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
relevant dates (e.g. construction, commissioning, continued operation periods, etc.) provided?					
Is the description of: (i) the events or situations that occurred during the monitoring period that may impact the applicability of the methodology (ii) how the issues resulting from these events or situations have been addressed provided?	PS	191(c)	N/A	**OK**	**OK**
Have the project participants addressed the FARs identified during validation or previous verification(s)?	VVS	213	No FAR has been raised during the validation.	**OK**	**OK**
Have the implementation and operation of the project activity been conducted in accordance with the description contained in the registered PDD?	VVS	226	Operation has been conducted in accordance with the registered PDD.	**OK**	**OK**
Are all physical features of the project activity in the registered PDD in place?	VVS	227	All physical features were observed to be in place in line with the registered PDD.	**OK**	**OK**
Have the project participants operated the project activity as per the registered PDD or any approved revised PDD?	VVS	227	Project was operated in line with the registered PDD.	**OK**	**OK**
Was an on-site visit conducted?	VVS	227	An onsite visit was conducted on 24/10/2013	**OK**	**OK**
If an on-site visit is not conducted, is the rationale of the decision justified?	VVS	227	N/A	**OK**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Post registration changes					
Temporary deviations from registered monitoring plan or applied methodology					
Is it indicated whether any temporary deviations have been applied during this monitoring period?	MR		N/A	**OK**	**OK**
Is a description of the deviation(s) in accordance with applicable provisions in the Project standard provided?	MR		N/A	**OK**	**OK**
Are the reasons for the deviation(s), how it deviates from the monitoring plan and/or applied methodology(ies), the duration for which the deviation(s) is(are) applicable and justification on the conservativeness of the approach included in the description?	MR		N/A	**OK**	**OK**
For deviation(s) that require prior approval by the Board, are the date of approval and reference number included in the description?	MR		N/A	**OK**	**OK**
Corrections					
Is it indicated whether any corrections to project information or parameters fixed at validation have been approved during this monitoring period or submitted with	MR		N/A	**OK**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
this monitoring report?					
In cases where the correction(s) and the revised PDD are approved prior to the submission of this monitoring report for request for issuance, are the approval date and reference number provided? Otherwise, are the version number and the completion date of the revised PDD provided?	MR		N/A	**OK**	**OK**
Permanent changes from registered monitoring plan or applied methodology					
Is it indicated whether any permanent changes from the registered monitoring plan or applied methodologies have been approved during this monitoring period or submitted with this monitoring report?	MR		N/A	**OK**	**OK**
In cases where the change(s) and the revised PDD are approved prior to the submission of this monitoring report for request for issuance, are the approval date and reference number provided? Otherwise, are the version number and the completion date of the revised PDD provided?	MR		N/A	**OK**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Changes to project design of registered project activity					
Is it indicated whether any changes to the project design of the project activity have been approved during this monitoring period or submitted with this monitoring report?	MR		N/A	**OK**	**OK**
In cases where the change(s) and the revised PDD are approved prior to the submission of this monitoring report for request for issuance, are the approval date and reference number provided? Otherwise, are the version number and the completion date of the revised PDD provided?	MR		N/A	**OK**	**OK**
Changes to start date of crediting period					
Is it indicated whether any changes to the start date of the crediting period have been approved during this monitoring period?	MR		N/A	**OK**	**OK**
In cases where the changes and the revised PDD are approved prior to the submission of this monitoring report for request for issuance, are the approval date and reference number provided?	MR		N/A	**OK**	**OK**
Types of changes specific to afforestation or					

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
reforestation project activity					
Is it indicated whether any changes specific to afforestation or reforestation project activities have been applied during this monitoring period based on applicable provisions in the Project standard that do not require prior approval by the Board?	MR		N/A	**OK**	**OK**
If changes were applied, are the version number and the completion date of the revised PDD provided?	MR		N/A	**OK**	**OK**
Description of monitoring system					
General requirements					
Have project participants described the monitoring system and provided line diagrams (graphical schemes) showing all relevant monitoring points?	MR PS	193	The project participant have described the monitoring system and provided (graphical schemes) showing all relevant monitoring points under section C.1 of the monitoring report. Please add the first calibration date of the meters under section C.1 and in all related sections.	**CAR07**	**OK**
Does this description where appropriate include data collection procedures (information flow including data generation, aggregation, recording, calculations and reporting), organizational structure, roles and	MR PS	193	Data collection procedures, organizational structure, roles and responsibilities of personnel and emergency procedures for the monitoring system is provided.	**OK**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
responsibilities of personnel, and emergency procedures for the monitoring system?					
Is the monitoring plan of the project activity in accordance with the applied methodology including applicable tool(s)?	VVS	229	Monitoring plan is line with the applied methodology.	**OK**	**OK**
For monitoring aspects that are not specified in the methodology, particularly in the case of small-scale methodologies (e.g. additional monitoring parameters, monitoring frequency and calibration frequency), are there any issues which may enhance the level of accuracy and completeness of the monitoring plan and should bring to the attention of the Board?	VVS	231	N/A	**OK**	**OK**
Has the monitoring plan been properly implemented and followed by the project participants?	VVS	234(a)	The electricity generation main source is monthly reading protocols and PMUM records will be used for cross checking. GS sustainability parameters were monitored. Please provide the registered GS Passport.	**CAR08**	**OK**
Have all parameters stated in the monitoring plan and relevant Board decisions been monitored and updated as applicable, including:	VVS	234(b)		**-**	**-**
Project emission parameters?	VVS	234(b)	Project emissions are 5tCO2e. Please clarify the details of the consumed amount of diesel or working hour of	**CL01**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
			the diesel generator.		
Baseline emission parameters?	VVS	234(b)	EF has been fixed ex-ante for the crediting period and EG was monitored as defined.	**OK**	**OK**
Leakage parameters?	VVS	234(b)	Leakage is 0 in line with the applied methodology.	**OK**	**OK**
Management and operational system: the responsibilities and authorities for monitoring and reporting are in accordance with the responsibilities and authorities stated in the monitoring plan?	VVS	234(b)	No discrepancies were observed.	**OK**	**OK**
Data and parameters					
Data and parameters fixed ex ante or at renewal of crediting period					
For "Purpose of data", is one of the following options chose: (a) Calculation of baseline emissions or baseline net GHG removals by sinks; (b) Calculation of project emissions or actual net GHG removals by sinks; (c) Calculation of leakage?	MR		Under section D.1 ex ante parameters are stated in line with the registered PDD.	**OK**	**OK**
For "Value(s) applied", if applicable, is one table used to report multiple values referring to the same data and parameter? If necessary, are reference(s) to electronic spreadsheets used?	MR		The parameters are same with the registered GS-VER-PDD.	**OK**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Is the source of data provide and/or identified?	PS	195(d)	The source of data is provided in line with the registered GS-VER-PDD.	**OK**	**OK**
Is information about appropriate emission factors, IPCC default values and any other reference values that have been used in the calculation of GHG emission reductions or net GHG removals provided?	PS	195(g)	The parameters are same with the registered GS-VER-PDD.	**OK**	**OK**
Data and parameters monitored					
For "Purpose of data", is one of the following options chose: (a) Calculation of baseline emissions or baseline net GHG removals by sinks; (b) Calculation of project emissions or actual net GHG removals by sinks; (c) Calculation of leakage?	MR		The parameter is EGfacility,y and it will be used for baseline emission calculations. The QA/QC procedures are not line with the PDD. (please add last calibration date, cross check process transpatently) and please also clarify the FC,I,j,y parameter. If any calculation change will be performed for the project emission please provide the details.	**CL02**	**OK**
For "Value(s) of monitored parameter", if applicable, is one table used to report multiple values referring to the same data and parameter? If necessary, are reference(s) to electronic spreadsheets used?	MR		The monitored value for the parameter is 122.774 GWh for the current monitoring period (37 months)	**OK**	**OK**
Are the values of the monitored parameter for the purpose of calculating GHG emission reductions or net GHG removals provided? Where data are measured continuously, are	PS	195(a)	Signed monthly reading records are not provided to verification team for the source of data. Please provide the signed monthly reading records for the current monitoring period.	**CAR09**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
they presented using an appropriate time interval? For default values (such as an IPCC value), where it is ex post confirmed, is the most recent value applied?					
Is the equipment used to monitor each parameter described, including details on accuracy class, and calibration information (frequency, date of calibration and validity), if applicable as per monitoring plan?	PS	195(b)	The measured electricity is agreed with TEIAS and the measurements are the basis monthly records. Serial numbers of the meters are not provided. Please add.	**CAR10**	**OK**
Is the equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan, the applied methodology, the Board guidance, local/national standards, or as per the manufacturer's specification?	VVS	234(c)	Please see CAR10	**CAR10**	**OK**
Is the calibration of those measuring equipments that have an impact on the claimed emission reductions conducted by the project participants at a frequency specified in the applied monitoring methodology and/or the monitoring plan?	VVS	237	Please see CAR10.	**CAR10**	**OK**
If, during verification of a certain monitoring period, the calibration has been delayed and the calibration has been implemented after the monitoring period in consideration (i.e. the results of delayed calibration are available), is the following conservative approach	VVS	238	This question will be closed after CL02 is closed.	**OK**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
adopted in the calculation of emission reductions:					
Applying the maximum permissible error of the instrument to the measured values taken during the period between the scheduled date of calibration and the actual date of calibration, if the results of the delayed calibration do not show any errors in the measuring equipment, or if the error is smaller than the maximum permissible error?	VVS	238(a)	This question will be closed after CL02 is closed.	**OK**	**OK**
Applying the error identified in the delayed calibration test, if the error is beyond the maximum permissible error of the measuring equipment?	VVS	238(b)	This question will be closed after CL02 is closed.	**OK**	**OK**
Has the error has been applied:	VVS	239	-	**-**	**-**
In a conservative manner, such that the adjusted measured values of the delayed calibration shall result in fewer claimed emission reductions?	VVS	239(a)	N/A	**OK**	**OK**
For all measured values taken during the period between the scheduled date of calibration and the actual date of calibration.	VVS	239(b)	N/A	**OK**	**OK**
In cases where the results of the delayed calibration are not available, or the	VVS	240	N/A	**OK**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
calibration has not been conducted at the time of verification, prior to finalizing verification, were the project participants requested to conduct the required calibration have the project participants calculated the emission reductions conservatively using the approach mentioned in item "0" above?					
In cases where it is not possible for the project participants to conduct the calibration at a frequency specified by either the applied methodology, guidance provided by the Board, and/or the registered monitoring plan due to reasons beyond the control of PPs, are the requirements for post registration changes, in section 9.5 of the VVS, followed?	VVS	241	N/A	**OK**	**OK**
In cases where neither the monitoring methodology nor the monitoring plan specify any requirements for calibration frequency for measuring equipments, are the equipments calibrated either in accordance with the specifications of the local/national standards, or as per the manufacturer's specification? If neither local/national standards nor the manufacturer's specification are available, were international standards used?	VVS	242	Frequency and requirements were determined by the national standards and were given in the PDD.	**OK**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Is it described how the parameters are measured/calculated and the measurement and recording frequency?	PS	195(c)	Recording frequency of the parameters are added.	**OK**	**OK**
Are monitoring results consistently recorded as per approved frequency?	VVS	234(d)	TEIAS monthly records will be used for the main source and PMUM records will be used for cross-checking.	**OK**	**OK**
Is the source of data (e.g. logbooks, daily records, surveys, etc.) provide and/or identified?	PS	195(d)	TEIAS records will be used for the main source and PMUM records will be used for cross-checking.	**OK**	**OK**
Where relevant is the calculation method of the parameter provided?	PS	195(e)	Please clarify the calculation methods of the parameters under section D.2 of the monitoring report.	**CL03**	**OK**
Are the QA/QC procedures applied described (if applicable per monitoring plan)?	PS	195(f)	Please see CL02	**CL02**	**OK**
Have quality assurance and quality control procedures been applied in accordance with the monitoring plan or the revised monitoring plan?	VVS	234(e)	Please see CL02	**CL02**	**OK**
Is information about appropriate emission factors, IPCC default values and any other reference values that have been used in the calculation of GHG emission reductions or net GHG removals provided?	PS	195(g)	N/A	**OK**	**OK**
Implementation of sampling plan					

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Is a description provided on how project participants implemented the sampling efforts and surveys for those data and parameters according to the sampling plan, Include:	MR		No sampling plan is applicable to the project activity and hence N/A	**OK**	**OK**
Description of implemented sampling design?	MR		N/A	**OK**	**OK**
Collected data (electronic spreadsheets may be attached and referenced)?	MR		N/A	**OK**	**OK**
Analysis of the collected data?	MR		N/A	**OK**	**OK**
Demonstration on whether the required confidence/precision has been met?	MR		N/A	**OK**	**OK**
Calculation of emission reductions or GHG removals by sinks					
Calculation of baseline emissions or baseline net GHG removals by sinks					
Are the sample calculations for all formulae used and calculation of baseline emissions or baseline net GHG removals by sinks provided, applying actual values?	MR PS	197(a)	Under section E.1 of the monitoring report baseline emission calculations are not presented for the year 2010, 2011,2012 and 2013. Please add.	**CAR11**	**OK**
Are the electronic spreadsheets to present full calculations in the monitoring report attached?	MR		Aralik baseline calculation excel sheet is provided.	**OK**	**OK**
Calculation of project emissions or actual net					

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
GHG removals by sinks					
Are the sample calculations for all formulae used and calculation of project emissions or actual net GHG removals by sinks provided, applying actual values?	MR PS	197(b)	Please clarify the project emission calculation regarding the current calculation method on site.	**CL04**	**OK**
Are the electronic spreadsheets to present full calculations in the monitoring report attached?	MR		N/A	**OK**	**OK**
Calculation of leakage					
Are the sample calculations for all formulae used and calculation of leakage provided, applying actual values?	MR PS	197(c)	Leakage is considered 0 in line with the guidance of the applied methodology.	**OK**	**OK**
Are the electronic spreadsheets to present full calculations in the monitoring report attached?	MR		N/A	**OK**	**OK**
Summary of calculation of emission reductions or net anthropogenic GHG removals by sinks					
Are the results of above sections summarized and GHG emission reductions or net anthropogenic GHG removals by sinks for this monitoring period presented, using the provided table?	MR PS	197(d)	The results of above sections are summarized and GHG emission reductions or net anthropogenic GHG removals by sinks for this monitoring period presented using the provided table.	**OK**	**OK**
Is a complete set of data for the specified	VVS	245(a)	Complete set of data for the specified monitoring period	**OK**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
monitoring period is available?			is available.		
Has information provided in the monitoring report been cross-checked with other sources such as plant log books, inventories, purchase records, laboratory analysis?	VVS	245(b)	Cross-checking with other sources are applied.	**OK**	**OK**
Have calculations of baseline emissions, and project activity emissions and leakage, as appropriate, been carried out in accordance with the formulae and methods described in the monitoring plan and the applied methodology document?	VVS	245(c)	Yes.	**OK**	**OK**
Have any assumptions used in emission calculations been justified?	VVS	245(d)	N/A	**OK**	**OK**
Have appropriate emission factors, IPCC default values and other reference values been correctly applied?	VVS	245(e)	N/A	**OK**	**OK**
Comparison of actual emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD					
Is a comparison of actual GHG emission reductions or net anthropogenic GHG removal of the project activity achieved during this monitoring period with the estimates in the registered PDD provided?	MR PS	198	Emission reduction is estimated in the registered PDD is 78,236 tCO2e and the achieved value in the monitoring period is 71,786 tCO2e.	**OK**	**OK**
Remarks on difference from estimated value in					

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
registered PDD					
For any registered CDM project activity, except A/R project activities, have project participants explained the cause of any increase in the actual GHG emission reductions achieved during the current monitoring period (e.g. higher water availability, higher plant load factor, etc.), including all information (i.e. data and/or parameters) that is different from that stated in the registered PDD?	MR PS	199	The value in the registered PDD is calculated ex-ante for a duration of one complete year and assuming the plant is working at optimum output rate. Since the project is an HPP, seasonal effects are significant on the monthly generation rates and minor deviations from the calculated values are acceptable. In 2011 and 2012, the realised generation has been lower than the expected amount taking ground from uncertainties in water regimes and over estimation of annual gross output.	**OK**	**OK**
Actual emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards					
If the monitoring period starts before 31 December 2012 and ends anytime thereafter, are actual GHG emission reductions or net anthropogenic GHG removals by sinks achieved for the following two periods provided respectively? (a) Up to 31 December 2012 (1st commitment period); (b) From 1 January 2013 onwards.	MR		It is provided under section E.7 of the monitoring report.	**OK**	**OK**

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
Is it ensured that the achieved GHG emission reductions or net anthropogenic GHG removals by sinks are calculated proportionally for each period? In cases where annual caps were applied in the calculations, is it ensured that the annual caps are pro-rated to each period?	MR		It is provided under section E.7 of the monitoring report.	**OK**	**OK**

Table 2 Resolution of Corrective Action /Clarification / Forward Action Requests

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
CAR01 The main goal of the project activity is not provided under section A.1. Please provide.		Main goal of the project activity is added under section A1	**Review 1:** Main goal of the project activity is added under section A1 of the monitoring report. **The corrective action request is closed.**
CAR02 Under section A.1 a brief description of the installed technology and equipments is not provided. Please provide. Please also remove future tenses under section A.1 of the monitoring report.		In section A1 brief descriptions of the installed tech. and equipment have been added. Future referrals are removed. 2nd round response: Footnote added for technical details.	**Review 1:** Brief description of the installed tech. is provided under section A.1. Please provide the reference for the provided tech. as a footnote. **The corrective action request is still open.** **Review 2:** Footnote is added for technical details. **The corrective action request is closed.**
CAR03 Under section A.1 total GHG emission		Net emission reductions associated with the current monitoring plan is now given in the	**Review 1:** Total GHG emission reductions

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
reductions during the monitoring period is not provided. Please provide.		revised version of MR under section A.1	(*77,957 tCO_2e*) during the monitoring period are under section A.1 of the monitoring report. **The corrective action request is closed.**
CAR04 Under section A.2 the information on the location (Country, Region/State/Province, City/Town/community) of the project activity is not provided. Please provide		Required geographical information has been added under section A.2	**Review 1:** The Project is located in Borçka district of Artvin province which is located in the north-eastern Turkey, The site is accessed via Borçka and Artvin by using a paved town road of 10 km and 45 km long respectively. **The corrective action request is closed.**
CAR05 The methodology tools are not listed under section A.4 of the monitoring report.		Tools which are used in the methodology are listed under section A.4	**Review 1:** Tools and the version number are added. **The corrective action request is closed.**

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
CAR06 Relevant dates are not provided under section B.1 of the monitoring report. Please provide.		Project milestones table has been added, indicating the key dates for the project activity.	**Review 1:** Relevant dates of the project activity is line with the registered PDD Version 09 28/02/2012. **The corrective action request is closed.**
CAR07 The project participant have described the monitoring system and provided (graphical schemes) showing all relevant monitoring points under section C.1 of the monitoring report. Please add the first calibration date of the meters under section C.1 and in all related sections.		First calibration date and serial numbers for the metering devices has been added under Section C and Section D. 2nd round response: Calibration date corrected as per the metering test document.	**Review 1:** Metering test records are dated on 30/04/2010. In the monitoring report first calibration date is given as 20/04/2010. Please provide the correct date. **The corrective action request is still open.** **Review 2:** Calibration date corrected according to metering test document. **The corrective action request is closed.**
CAR08 The electricity generation main source is		Registered GS Passport has been submitted to DOE.	**Review 1:** Registered GS Passport has been

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
monthly reading protocols and PMUM records will be used for cross checking. GS sustainability parameters were monitored. Please provide the registered GS Passport.			submitted to verification team. **The corrective action request is closed.**
CAR09 Signed monthly reading records are not provided to verification team for the source of data. Please provide the signed monthly reading records for the current monitoring period.		Available signed monthly reading records were submitted to DOE, since the meters have remote reading capability these records are only used for cross checking purposes. 2nd round response: Missing monthly reading records were submitted to the DOE Electricity generation breakdown for years are also added in MR. **3rd round response:** PMUM values were checked and corrected where necessary. PMUM records after May 2013 were previously submitted with file name "Aralık HES_PMUM_Ekran_görüntüleri_6_7_8_9_2013. xlsx" Same file is re-sent with revised MP.	**Review 1:** Monthly reading protocols are not line with the calculation excel sheet. Internal consumption and gross generation values are not clear in monthly reading protocols. On the other hand monthly reading protocols are not available after October 2011 and PMUM records are not available after May 2013. Please provide the records and calculations transparently. Please also add the generation values year by year and totally in the monitoring report. **The corrective action request is still open.** **Review 2:** Metering records are provided

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
			correctly in the excel sheet. Internal consumption values for November 2011 and August 2012 values in the excel sheet are not line with the protocols. On the other hand PMUM values in the excel sheet are not line with the PMUM screen shoots and PMUM records still are not available after May 2013. **The corrective action request is still open.** **Review 3:** Internal consumption values for November 2011 and August 2012 are corrected in the excel sheet and PMUM records after May 2013 are provided to the verification team. **The corrective action request is closed.**
CAR10 The measured electricity is agreed with TEIAS and the measurements are the basis monthly records. Serial numbers of		Serial numbers of the meters are added in Section D. 2nd round response: Meters are labeled as “main” and “back-up”	**Review 1:** The serial numbers are added but which is the main and back-up is not clear. Please provide.

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
the meters are not provided. Please add.		according to their serial numbers	**The corrective action request is still open.** **Review 2:** Main and Back-up meters are added. **The corrective action request is closed.**
CAR11 Under section E.1 of the monitoring report baseline emission calculations are not presented for the year 2010, 2011,2012 and 2013. Please add.		BE calculation summary table has been added for crediting period under Section E.1. Also a sample calculation is presented. 2nd round response: Section E1 revised **3rd round response:** Generation values are revised and effected parameters were checked.	**Review 1:** Generation values are not confirmed through the monthly reading protocols. This corrective action request will be evaluated after generation values are confirmed by the verification team completely. **The corrective action request is still open.** **Review 2:** This corrective action request will be evaluated after generation values are confirmed by the verification team completely.

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
			<u>The corrective action request is still open.</u> **<u>Review 3:</u>** Corrections have been done. **<u>The corrective action request is closed.</u>**
<u>CAR12</u> Under Annex 1 please add description for the parameters which actions are performed during the monitoring period. After definitions are added parameters will be discussed under CAR12.		Under Annex I descriptions for the parameters were added. Further information about the developments for the corresponding parameters are also given as "Current Situation of the Parameter". 2nd round response: **Water Quality and Quantity(No:2)** Expert report has been submitted to the DOE. No waste water disposal occurred during the monitoring period since the number of employees is not many.	**<u>Review 1:</u>** Registered GS Passport has been submitted to verification team. The parameters are evaluated as following; **Air Quality (No:1)** The first parameter is clearly described. Please revise the calculations after total generation value is confirmed by the validation team. **Water Quality and Quantity(No:2)** Expert report and waste water disposal records are not provided and described. Please provide. Also

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
		Soil Condition (No:3) There has not been excavation disposal. Excavation was used back for construction works and landscaping. Some of the materials were also used for supporting the river side line as a precaution for flooding. **Biodiversity (No:4)** Way of monitoring has been revised **DNH 8 – Work Safety (No:7)** Not all of the employees are trained for every discipline. Submitted are the only available training records and certificates during this monitoring plan. Complete list of trainees is at the end of the MR, Annex II **Quantitative Income Generation (No:10)** SGK records were already submitted to the DOE before site visit.	waste water disposal records should be provided for this parameter. **Soil Condition (No:3)** Permissions and records for disposal are not provided for excavation wastes. Please provide and add description. **Biodiversity (No:4)** Way of the monitoring is not line with the GS Passport. Expert study should be provided for this parameter. Please provide. **Biodiversity (No:5)** A payment record for plantation is provided.06/04/2007. OK **Balance of Payments (No:6)** Please revise the balance of payments according to revised total generation. **DNH 8 – Work Safety (No:7)** Training records are provided for 4 employees. Please provide the all

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
		3rd round response: Air Quality, Balance of Payments and Quantitative income generation parameters were revised as per the actual generation.	technical staff is occurring by 4 employees. **DNH 9 – Precautionary Measures (No:8)** This parameter is confirmed during the site visit. OK **Other Pollutants (No:9)** Disposal records and any spillage have occurred or not during the monitoring are not provided. Please provide. **Quantitative Income Generation (No:10)** SGK records are not provided for 14 local employees. Please provide transparently. **Livelihood of the poor (No:11)** This parameter is confirmed through the Meyrem Acar head of family unity and Aralık Village Muhktar signed statements.OK **Livelihood of the poor (No:12)** This parameter is confirmed during

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
			the site visit. OK ***Additional Note:*** *Some of the parameters descriptions are not line with the GS Passport. Please check and correct.* The corrective action request is still open. **Review 2:** **Air Quality (No:1)** The first parameter is clearly described. Please revise the calculations after total generation value is confirmed by the validation team. **Not Closed.** **Water Quality and Quantity(No:2)** Expert report is provided and No waste water disposal occurred during the monitoring period since the number of employees is not many. **OK Closed.** **Soil Condition (No:3)**

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
			There has not been a need for disposing excavation as the materials were used back for landscaping and other construction works. There are no excavation at the project site as the construction works are over. **OK Closed.** **Biodiversity (No:4)** Way of the monitoring is revised according to GS Passport. **OK Closed.** **Balance of Payments (No:6)** Please revise the balance of payments according to revised total generation. **Not Closed.** **Other Pollutants (No:9)** Disposal records and any spillage have occurred or not during the monitoring are provided. **OK Closed.**

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
			DNH 8 – Work Safety (No:7) Training records are provided for 4 employees. **OK Closed.** **Quantitative Income Generation (No:10)** SGK records are provided to the validation team, but it does not include 14 local people which are defined under the “Quantitative Income generation” parameter. Please clarify. **Not Closed.** <u>The corrective action request is still open.</u> **<u>Review 3:</u>** Corrections have been done. **<u>The corrective action request is closed.</u>**

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
CAR13 Please provide the training records and certificates of the employee. Please also provide the voluntary contributions of the project activity by references.(13 matter).		Requested training records and documents regarding local contributions associated with the current monitoring period have been submitted to the DOE along with the revised version of the MP.	**Review 1:** This corrective action request will be answered after CAR 12 is closed. The corrective action request is still open. **Review 2:** Training records are provided for 4 employees. **The corrective action request is closed.**
CL01 Project emissions are 5tCO2e. Please clarify the details of the consumed amount of diesel or working hour of the diesel generator.		Project emissions were revised based on maximum fuel consumption of the diesel generator. Diesel generator working hours data was obtained during site visit and technical specs were submitted to DOE 2nd round response: Details of calculation has been added. 1254Liters is the volume of the consumed fuel, that figure was converted into mass units through its density for unit consistency in calculations	**Review 1:** During the site visit it is confirmed that the total working hour as 57 hours. In the monitoring report, mass of diesel is given as 1,254 liters. Please provide the how project emission is calculated according to mass of diesel. The clarification request is still open. **Review 2:**

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
		3rd round response: Diesel generator specification table with references is added under section B1. Project Emissions calculation were explained under section E2.	Please provide the total consumption of diesel generator which is defined as 1,254 liters by objective evidence. The clarification request is still open. **Review 3:** The calculation is clearly presented under section B.1 **The clarification request is closed.**
CL02 The parameter is EGfacility,y and it will be used for baseline emission calculations. The QA/QC procedures are not line with the PDD. (please add last calibration date, cross check process transpatently) and please also clarify the FC,I,j,y parameter. If any calculation change will be performed for the project emission please provide the details.		QA/QC procedures are revised in line with the registered PDD. Last calibration date and serial numbers of the meters are added. Cross-check process has been described in detail.	**Review 1:** Definitions are added. **The clarification request is closed.**
CL03		Only calculated parameter is the fuel consumption of diesel generator in section D2	**Review 1:**

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
Please clarify the calculation methods of the parameters under section D.2 of the monitoring report.		and detailed calculation method is provided under relevant sections. 2nd round response: Calculation method for project emissions are added in section D.2 and E.2 **3rd round response:** Diesel generator specification table with references is added under section B1. Project Emissions calculation were explained under section E2.	During the site visit it is confirmed that the total working hour as 57 hours. In the monitoring report, mass of diesel is given as 1,254 liters. Please provide the how project emission is calculated according to mass of diesel. The clarification request is still open. **Review 2:** Please provide the total consumption of diesel generator which is defined as 1,254 liters by objective evidence. The clarification request is still open. **Review 3:** The calculation is clearly presented under section B.1 **The clarification request is closed.**