



Monitoring report form
(Version 05.1)

Complete this form in accordance with the Attachment “Instructions for filling out the monitoring report form” at the end of this form.

MONITORING REPORT

Title of the project activity	Gudaauri Small Hydropower Project	
UNFCCC reference number of the project activity	9079	
Version number of the monitoring report	8	
Completion date of the monitoring report	6/04/2016	
Monitoring period number and duration of this monitoring period	Monitoring period number 1 : 31/12/2013 to 31/10/2015	
Project participant(s)	Energo – Aragvi Ltd	
Host Party	Georgia	
Sectoral scope(s)	Sectoral scope 1: Energy Industries (renewable-/ non-renewable sources)	
Selected methodology(ies)	AMS-I.D. ver. 17 - Grid connected renewable electricity generation	
Selected standardized baseline(s)	Not applicable	
Estimated amount of GHG emission reductions or net GHG removals by sinks for this monitoring period in the registered PDD	37,141 tCO ₂ e	
Total amount of GHG emission reductions or net GHG removals by sinks achieved in this monitoring period	GHG emission reductions or net GHG removals by sinks reported up to 31 December 2012	GHG emission reductions or net GHG removals by sinks reported from 1 January 2013 onwards
	0	33,030 tCO ₂ e

SECTION A. Description of project activity**A.1. Purpose and general description of project activity**

>>

Purpose of the project activity and the measures taken to reduce greenhouse gas emissions:

The purpose of the registered project activity is to generate electricity by using the renewable hydraulic resources to meet the demand for energy demand in Georgia. The development of registered project activity has resulted into reduction of Green House Gas (GHG) emissions produced by Georgian grid, which includes several fossil fuel based power plants.

Brief description of the installed technology and equipment:

The proposed project activity initially involves the installation of a new 9.72 MW grid connected hydro power plant developed by Energo-Aragvi Ltd, Gudauri at a site where there was no renewable energy power plant operating prior to the implementation of the project activity. Hence the project is a Greenfield activity. The installation of the proposed capacity of the project is planned to be carried out in two phases :

- Stage I consists of 8.52 MW generating 50.6 GWh/ yr. The stage I was commissioned in February 2014.
- The stage-II , 1.2 MW, is currently under conception phase. The detail of the stage II implementation is mentioned below:

Stage	Total Capacity (MW)	Turbine Details	Generator details	Net Generation (GWh/ yr)
I	8.52	2 turbines : Manufacturer : Kössler Model : PV4I- 1050/310 Max output : 4.397 MW	2 x 4.26 MW (4,734 kVA) Manufacturer : Indar Model: L3A-900-L-10.	50.6
II	1.2	(1 x 1.2 MW)		9.3

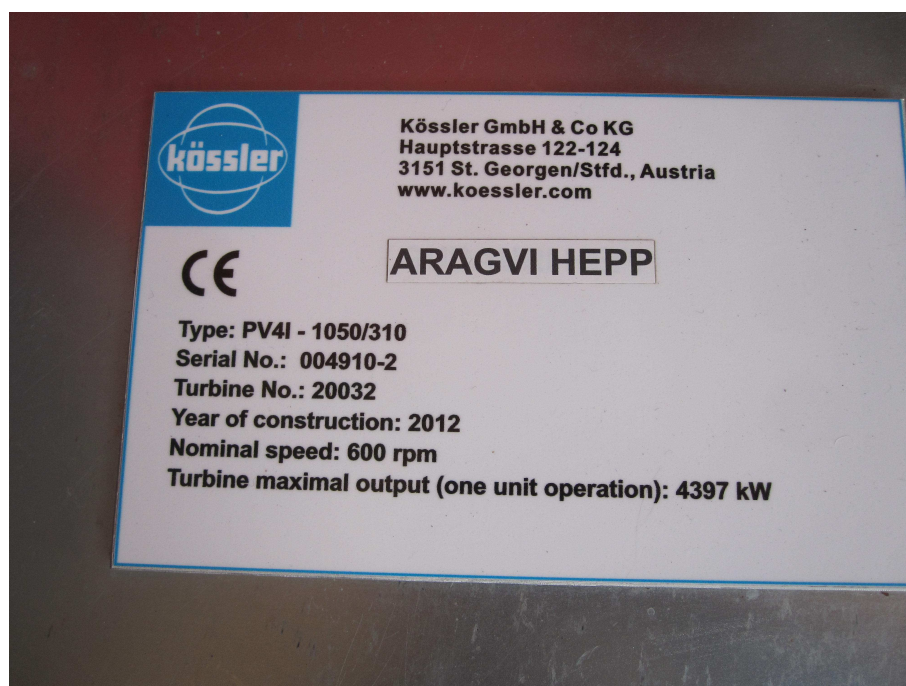


Figure 1 : Turbine's plate of Unit 1 and 2



Figure 2 : Generator's plate of Unit 1 and 2

The purpose of Gudaauri Project activity is to generate electrical energy by using the hydropower potential of Tetri Aragvi River to meet the demand for electrical energy in the Gudaauri region. The proposed project activity being a grid connected project will be designed to feed the total power generated from the project activity after meeting the auxiliary demand and other line losses of the proposed power plant to the National Grid of Georgia via 110 kV transmission line.

The technical specifications of equipment are :

Stage I:

The water from the left tributary is collected by a Tyrolean weir at an elevation 1812.80 m asl and collects 3.6 m³/s leading to a sand trap and from there on to a reservoir (or buffer basin) with 53,463 m³ volume (for a surface of 9795 m²) and a water level of 1800 m asl. The buffer basin constitutes a 8 hours power reserve (or 4h on maximum power load). At the weir intake a discharge of 0.4 m³/s residual water is provided. The water from the right tributary is collected by a Tyrolean weir at an elevation 1810 m asl and collects max 2.5 m³/s leading to a sand trap and from there on to the buffer basin described above. From the reservoir 3.6 m³/s for energy generation is transferred through a penstock of 5,135 m length and a diameter 1,400 and 1,500 mm.

At the powerhouse two Pelton turbines each with an installed capacity of 4,260 kW including the generator and electrical equipment as per requirement is installed. The produced energy is transferred through a 10 kV cable to the 10/110 kV substation located nearby power house, from where in about 1,000 m distance above the powerhouse with tie connection method linked to the 110 kV existing transmission line (national grid of Georgia).

Particulars	Units	Value
Design Discharge	m ³ /s	3.6
Turbine Type	kW	4397 (Pelton)
Generator	kW	4260
No. of Turbines		2
Net Head	m	240
Diameter of the Penstock	mm	1500/1400
Average Annual Energy Production	GWh	50.6

Stage II:

The water will be collected by a Tyrolean weir at an elevation 2,000 m asl and will collect max 1.0 m³/s leading to a sand trap. From the sand trap the water will be transferred by polyethylene pipes with a diameter of 700 mm and a length of 2,800 m to a daily pondage with a capacity of 5,000 m³ volume and a water level of 1,975 m asl. From the daily pondage 0.8 m³/s for energy generation will be transferred through a penstock of 350 m length and a diameter 600 mm in steel pipes to the powerhouse located at the reservoir for stage I.

At the powerhouse one Pelton turbine with an installed capacity of 1,200 kW including the generator and electrical equipment as per requirement will be installed. The produced energy will be transferred through a 10 kV transmission line to the powerhouse of stage I.

Particulars	Units	Value
Design Discharge	m ³ /s	0.8
Turbine Type	kW	1200 (Pelton)
No. of Turbines		1
Net Head	m	167.44
Average Annual Energy Production	GWh	9.3

Relevant dates for the project activity:

The relevant dates to the project activity are summarized in the table below.

Date	Event
27/01/2012	Land Permission issued to PP by the Chairman of Kazbegi Municipality Administration, Mr. G.Malania
15/02/2012	Construction activities start at project site (preparatory works)
17/02/2012	Permission for construction of the hydro power project issued to PP by Kazbegi Municipality Administration
01/06/2012	Contract awarded for civil works
21/12/2012	UNFCCC registration date/crediting period start date
26/12/2013	Construction works completed for Phase I
31/12/2013	start of the first monitoring period
03/02/2014	Operation start of Phase I/
7/07/2015	Heavy flood forced the project activity to stop for repair works
5/08/2015	End of repair works. Restart of production
31/10/2015	End of the first monitoring period
Mid 2016	Construction start of phase II
End 2017	Operation start of phase II

After land permission was awarded to Energo-Aragvi Ltd in January 2012, preparatory works started on site in February 2012. Permission for construction was granted the 17/02/2012 and civil works started during the summer after a contract was signed with Peri Ltd. On 1/06/2012. Construction of phase I was completed on 26/12/2013 and the plant started to deliver power to the grid the 3/02/2014.

Because of heavy rainfalls hitting Georgia in July 2015, the part of penstock was flooded and damaged. The Project Participant had to shut down the plant for repair works for one month (until 5/08/2015). This flood had also convince Energo-Aragvi Ltd to redesign Phase II in a way that it would be less vulnerable to flooding. The reparation works and the redesign have delayed the whole implementation of phase II which has not started yet, but which is expected for 2016 with a targeted start of operation end of 2017.

Total emission reductions achieved in this monitoring period:

During the current monitoring period, the project has achieved emissions reduction of 33,030 tCO₂e

A.2. Location of project activity

>> The Gudauri Small Hydropower Project is located upstream the village Kvesheti on the river Tetri Aragvi close to the Gudauri ski resort and Gudauri region. The powerhouse is located at Aragvi river. It is bounded by 42°26'42" N latitude and 44°28'52"E longitude.

The power plants are located in the northern part of Georgia as shown on the map below.



A.3. Parties and project participant(s)

Party involved (host) indicates a host Party)	Private and/or public entity(ies) project participants (as applicable)	Indicate whether the Party involved wishes to be considered as project participant (yes/no)
Georgia	Energio – Aragvi Ltd	No

A.4. Reference of applied methodology and standardized baseline

>> The proposed project activity falls into: Project Type: I Renewable energy projects Project Category: AMS- I.D. Grid connected renewable electricity generation, version 17, valid from June 17, 2011 onwards.

The tools referenced in this methodology:

1. Tool to calculate the emission factor for an electricity system (Version 02.2.1), EB 63, Annex19, valid from 29/09/2011¹
2. Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion, EB41, Annex11, version02²

Please click following link for more information about the methodology and tool:

<http://cdm.unfccc.int/methodologies/DB/RSCTZ8SKT4F7N1CFDXCSA7BDQ7FU1X>

A.5. Crediting period of project activity

>> The project was registered with UNFCCC on 21/12/2012 with 1st renewal crediting period starting from 31/12/13 to 30/12/2020.

A.6. Contact information of responsible persons/entities

>>

Organization:	“Energo – Aragvi” Ltd
Street/P.O.Box:	3, Gotua str. 0162
Building:	
City:	Tbilisi
State/Region:	Tbilisi
Postfix/ZIP:	0162
Country:	Georgia
Telephone:	+995 599 563506
FAX:	+995 32 2371874
E-Mail:	taras@energo-aragvi.ge
URL:	N/A
Represented by:	Mr. Taras Nizharadze
Title:	Director
Salutation:	N/A
Last Name:	Nizharadze
Middle Name:	N/A
First Name:	Taras
Department:	N/A
Mobile:	+995 599 563506
Direct FAX:	N/A

¹ <http://cdm.unfccc.int/methodologies/PAMethodologies/tools/am-tool-07-v2.2.1.pdf>

² <http://cdm.unfccc.int/methodologies/PAMethodologies/tools/am-tool-03-v2.pdf>

Direct tel:	+995 32 2371874
Personal E-Mail:	taras.nizharadze@gmail.com

SECTION B. Implementation of project activity

B.1. Description of implemented registered project activity

>>The registered project activity is operational since 3/02/2014 and the implementation of stage II has not started yet.

During current monitoring period, actual operations were normal except in July 2015 where a flood (7/07/2015) has forced the Project Participant to shut down the plant for repair and reinforcement works for one month. This flood had also convinced Energo-Aragvi Ltd to redesign Phase II in a way that it would be less vulnerable to flooding. The repair works and the redesign has delayed the whole implementation of phase II which has not started yet. Currently the plan is to reach investment decision and start the construction in 2016. In this scenario operation is planned for end of 2017.

Apart from this event, there were no other specific event that needs to be described. The plant shut down a few times for maintenance and for non-availability of the grid.

B.2. Post-registration changes

B.2.1. Temporary deviations from registered monitoring plan, applied methodology or applied standardized baseline

>> Not applicable

B.2.2. Corrections

>>Not applicable

B.2.3. Changes to start date of crediting period

>> Not Applicable.

B.2.4. Inclusion of a monitoring plan to the registered PDD that was not included at registration

>> Not applicable

B.2.5. Permanent changes from registered monitoring plan, applied methodology or applied standardized baseline

>>There are currently two changes from the registered monitoring plan :

- As per PPA a bidirectional billing meter (main meter PM4, see Section C for details) has been installed after the transformer on the 110 kV on top of the 10 kV side as stated in the registered monitoring plan. This change in the monitoring plan allows to take into account losses in the transformer and provides more conservative measures of the quantity of net electricity provided to the grid.

- The registered monitoring plan states that the power meters will have an accuracy level of 0.2S while the meters that have been installed have a 0.5S accuracy level. As per Appendix 1 of the version 9 of the CDM Project Standard³, the net quantity of electricity supplied to the grid ($EG_{facility,y}$) will be discounted by a factor of 0.003.
- Frequency of the calibration is set to 10 years as the lowest value between national regulation (12 years) and manufacturer's recommendations (10 years).

B.2.6. Changes to project design of registered project activity

>> There are two changes to project design of registered project activity. Both are related to some optimizations of project design that occurred after registration. Both changes do not affect significantly the project design.

Change in installed capacity :

The capacity of the two phase I generator is 4260 kW each (the plate states 4734 KVA with a power factor of $\cos \phi = 0.9$. $4734 * 0.9 = 4260$ kW) instead of 4000 kW in the PDD. This change affects each unit taken individually but not the maximum output of the two turbines. Indeed, when the two units are operated simultaneously, double volume water flows in the penstock and due to a more friction and consequently head loss the total power output is 4000 kW for each unit.

This change does not affect the expected annual generation output, because the effective maximum power output is 8MW which is exactly the design of the plant at the time the PDD was registered to the UNFCCC. As a matter of fact and as can be seen in section E.6., the planned electricity generation is pretty similar to what the project achieved.

It also does not affect the demonstration of additionality as the total installed capacity ($4260 + 4260 + 1200 = 9720$ kW) is still below the 15 MW mall scale threshold for type I project activities.

Change of the buffer basin volume :

The exact volume of the reservoir is 53,463 m³ while PDD states 50,000 m³. The difference is negligible and is not affecting the total annual output of the hydropower station, and the power density remains far below the 4W/m².

B.2.7. Types of changes specific to afforestation or reforestation project activity

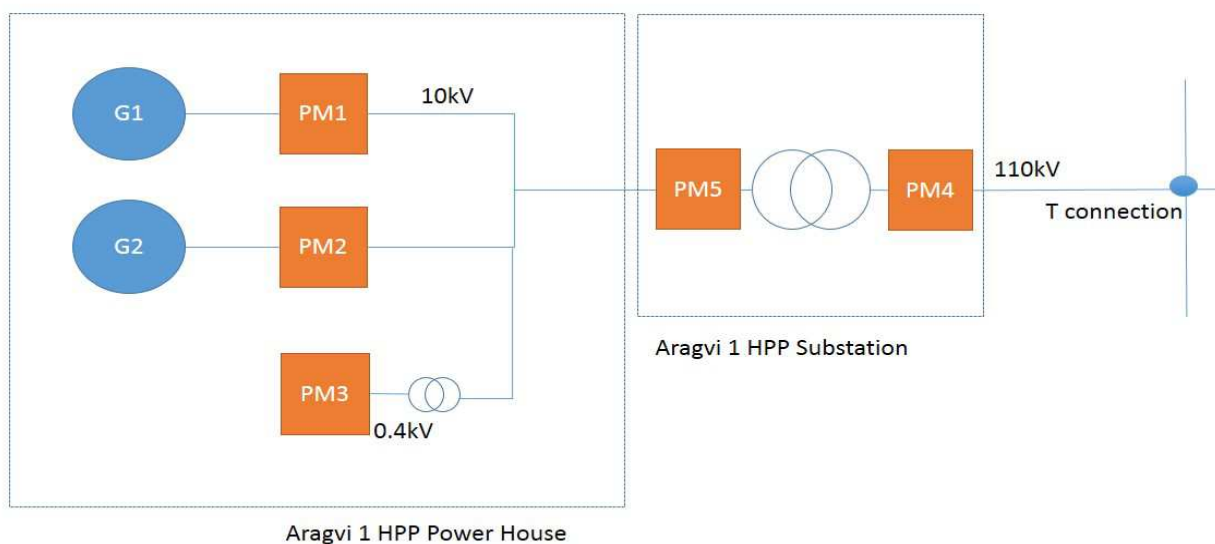
>> Not Applicable.

SECTION C. Description of monitoring system

>> The purpose of the monitoring plan is to ensure that the monitoring and calculation of emission reductions of the project within the crediting period is complete, consistent, clear and accurate.

The power metering system of the Gudaauri hydropower plant consists of four power meters, one main and four used for backup. They function to measure electricity generation of the plant as well as electricity imported by the plant from the national grid. The following diagram indicates the power meters location:

³ https://cdm.unfccc.int/filestorage/e/x/t/extfile-20150225165200470-reg_stan01.pdf/reg_stan01.pdf?t=U0h8bnpcq2J4fDD4OnWds1FHQJ7lxsrhTFdD



Legend :

G1	Generator 1 of phase I	4.260MW
G2	Generator 2 of phase I	4.260MW

Name	Serial number	Comment	Model/Class	Last calibration
PM1	16827095-13g	From October 2014	Mercury 230/0.5S	17/12/2013
PM2	16827081-13g	From October 2014	Mercury 230/0.5S	13/12/2013
PM3	11130132-12g	From February 2014	Mercury 230/0.5S	28/05/2012
PM4	01270885	From April 2014	A1805RAL-Elster/ 0.5S	28/03/2014
	01185826	Feb and March 2014	A1805RAL-Elster/ 0.5S	27/05/2009
PM5	00485666	From operation start (3/02/2014)	Elster A1500 /0.5S	10/12/2013

All the power meters of the Gudauri hydropower plant have been calibrated by a third party and sealed to prevent any illegal interference.

PM5 is operational since 3/02/2014. PM5, located at the 10kV side of the transformer, was meant to be the main power meter according to registered PDD. For conservativeness reasons and in agreement with local regulations, PM5 was replaced by PM4 as main meter. PM4 is located at the 110kV side of the transformer. However PM5 is still operational and in use as a cross-check.

PM1 and PM2 are measuring the electricity produced by each unit (Respectively Generator 1 and 2). These meters were installed in May 2014 but were not properly shunt and as a consequence overestimating the power produced. This problem was fixed in September 2014 and since the meters are working properly.

The main billing meter PM4 has been changed in March 2014 for a new model which is able to communicate via GSM with the grid operator.

On top of the set of 5 power meters described above, there is a SCADA specially designed for this plant by Schubert Elektroanlagen Ges.m.b.H. which continuously measures the voltage and amperage at several points and can be therefore used to cross-check the energy produced and exported.

CDM project management system

A CDM team/committee comprising of persons from relevant departments, which will be responsible for monitoring of all the parameters mentioned in this section. The CDM team also comprises of a special group of operators who are assigned the responsibility of monitoring different parameters and record. On a monthly basis, the monitoring reports are checked and discussed by the seniors CDM team members/managers. In case of any irregularity observed by any of the CDM team member, it is informed to the concerned person for necessary actions

Article I. Data to be monitored and recorded

The monitoring plan for Gudauri Small Hydropower Project requires the project owner to monitor the power generation from the proposed project. The net MWh generated from the proposed project and supplied to the grid is monitored continuously by an on-site power meter (PM4) installed at the 110 kV level in the substation in accordance with applicable national standards.

The data is collected on a monthly basis by GSE (Georgian State Electrosystem) in presence of ESCO (Electricity Commercial Operator) and Energo Aragvi LTd.

In parallel to the main billing power meter, the monitoring plan includes three additional power meters used for cross-check : PM1, PM2 and PM3 which data is also collected in parallel to PM4 by GSE, ESCO and Energo Aragvi Ltd. on a monthly basis.

On top of that, Energo Aragvi Ltd. (the “Company”) has also installed a 5th power meter at the 10kV side of the transformer (PM5) and operates a SCADA system which continuously monitors voltage and amperage at many levels of the HPP. These additional systems are also used as a crosscheck.

Installation of Meters

The Grid Operator has installed at the Point of Delivery (substation 110 kV line) one calibrated meter comprising a bidirectional Main Billing meter with an accuracy class of 0.5s to measure the Electrical Energy/Net Electrical Output supplied to the national grid by the Company and the Electrical Energy imported from the Grid System by the Company at the Point of Delivery. Metering is done at the 110 kV-level (PM4).

The Company is providing in addition one set of four as back-up Meters:

- PM1 to measure the power generated by generator 1
- PM2 to measure the power generated by generator 2
- PM3 to measure the consumption of the auxiliaries.
- PM5 to measure the electricity at the 10kV transformer side

The company will also provide all accessories and expenses for installation of the above mentioned meters. The company will install and maintain in good order the 5 Meters.

The calibration of the electronic meters will be done every 10 years by an authorised laboratory. 10 years has been chosen conservatively as the shortest period between manufacturer's recommendation (10 years) and Georgian legislation (12 years).

The Company and the grid operator will respect the IEC standards.

Inspection and Testing

Grid Operator will inspect power meter PM1, PM2, PM3 and PM4 upon installation, and thereafter at intervals following their procedures. The Company shall have a representative present during such inspection of the Metering System or adjustment thereof.

Testing and calibration of the meters will be done in an authorised laboratory only.

Each set of meters may also be inspected at any reasonable time upon request of the Company.

Sealing

PM1, PM2, PM3 and PM4 are sealed with a seal owned by each of the Parties and may not be opened without the presence of a representative of each parties.

Readings

The net electric energy delivered to the grid from the Project will be measured on the basis of meter readings from the bidirectional meter PM4.

The timing of readings

The Company, GSE and ESCO jointly conduct visual readings of PM1, PM2, PM3 and PM4 on the first day of each month. The parties will prepare joint statements recording the readings of the meters for the relevant month immediately following the reading of the meters. If the readings are significantly different from each other and / or demonstrate a level of inaccuracy outside standard class 0.5, then the Billing Meters and / or the Back-up Meters will immediately be tested by the Parties.

Readings are consigned in a document called ACT in Georgia and signed by the three parties.

If the Company's representative is not present, then the grid operator shall provide the Company with a signed copy of the meter reading within forty-eight (48) hours of each reading of the Metering System. Such meter reading shall be treated as the accurate and final measurement of the Net Electrical Output supplied to the grid by the Company for the concerned month.

If the Grid Operator does not read the meters on the specified date of any month, the Company shall read the meters on its own and these readings shall be treated as an accurate and final measurement of the Net electrical Output supplied by the Company to the Grid Operator. The Company shall provide signed copies of the meter reading to the grid within forty-eight (48) hours of such reading.

Inaccuracy of Meters

If, the and main meter PM4 is not in service as a result of maintenance, repairs, testing, or fails to register or, upon being tested, if found not to be with in accuracy standards Class 0.5, the Net Electrical Output of the Project will be measured as the lowest value between :

- i) The net export provided by the SCADA system; and
- ii) The net export calculated as $(PM1 + PM2 - PM3) * (1 - \text{transformer loss})$. Transformer losses will be calculated by comparing PM4 and PM5 during the three previous months before the problem occur.

SECTION D. Data and parameters

D.1. Data and parameters fixed ex ante or at renewal of crediting period

Data/parameter:	$EF_{CO_2, grid, y}$
Unit	tCO ₂ / MWh
Description	CO ₂ emission factor of the grid electricity per year y
Source of data	As per the “baseline emission factor for the electricity system of Georgia” published for the year 2008 ⁴ , version 1Please refer Annex 3 of the PDD for further details.
Value(s) applied)	0.3999
Choice of data or measurement methods and procedures	The baseline emission factor was provided by the DNA in accordance with the Ministry of Energy and other relevant authorities. It is fixed ex-ante for the entire crediting period.
Purpose of data	
Additional comments	The grid emission factor is fixed <i>ex-ante</i> .

Data/parameter:	$EF_{grid, BM, y}$
Unit	tCO ₂ /MWh
Description	Build margin for the grid electricity system of Georgia

⁴

http://moe.gov.ge/files/Klimatis%20Cvileba/Sufta%20Ganvitarebis%20Mekanizmi/SMG%20Erovnuli%20Ufle bamosili%20Organo/Baseline_EF_2004-2006.pdf

Source of data	As per the “baseline emission factor for the electricity system of Georgia” published for the year 2008, version 1 Please refer Annex 3 of the PDD for further details.
Value(s) applied)	0.523
Choice of data or measurement methods and procedures	The baseline emission factor was provided by the DNA in accordance with the Ministry of Energy and other relevant authorities. It is fixed ex-ante for the entire crediting period.
Purpose of data	
Additional comments	The build margin is fixed <i>ex-ante</i> .

Data/parameter:	$EF_{grid,OM,y}$
Unit	tCO ₂ /MWh
Description	Simple Operating margin for the grid electricity system of Georgia
Source of data	As per the “baseline emission factor for the electricity system of Georgia” published for the year 2008, version 1. Please refer Annex 3 of the PDD for further details.
Value(s) applied)	0.276
Choice of data or measurement methods and procedures	The baseline emission factor was provided by the DNA in accordance with the Ministry of Energy and other relevant authorities. It is fixed ex-ante for the entire crediting period.
Purpose of data	
Additional comments	The simple operating margin is fixed <i>ex-ante</i> .

D.2. Data and parameters monitored

Data/parameter:	$EG_{facility,y}$
Unit	MWh/year
Description	Quantity of net electricity supplied to the grid in year y
Measured/calculated/default	Plant log book data recorded from the energy meter
Source of data	
Value(s) of monitored parameter	82 845 MWh

Monitoring equipment	<p><u>Data type:</u></p> <p><u>Monitoring procedure:</u> is monitored through a bidirectional energy meter installed at 110kV side of the substation (PM4).</p> <p><u>Accuracy class of energy meter:</u> 0.5S</p> <p>Specifications of meters :</p> <table border="1" data-bbox="523 448 1457 1120"> <thead> <tr> <th>Name</th><th>Serial number</th><th>Comment</th><th>Model/Class</th><th>Last calibration</th></tr> </thead> <tbody> <tr> <td>PM1</td><td>16827095-13g</td><td>From October 2014</td><td>Mercury 230/0.5S</td><td>17/12/2013</td></tr> <tr> <td>PM2</td><td>16827081-13g</td><td>From October 2014</td><td>Mercury 230/0.5S</td><td>13/12/2013</td></tr> <tr> <td>PM3</td><td>11130132-12g</td><td>From February 2014</td><td>Mercury 230/0.5S</td><td>28/05/2012</td></tr> <tr> <td rowspan="2">PM4</td><td>01270885</td><td>From April 2014</td><td>A1805RAL-Elster/ 0.5S</td><td>28/03/2014</td></tr> <tr> <td>01185826</td><td>Feb and March 2014</td><td>A1805RAL-Elster/ 0.5S</td><td>27/05/2009</td></tr> <tr> <td>PM5</td><td>00485666</td><td>From operation start (3/02/2014)</td><td>Elster A1500 /0.5S</td><td>10/12/2013</td></tr> </tbody> </table>	Name	Serial number	Comment	Model/Class	Last calibration	PM1	16827095-13g	From October 2014	Mercury 230/0.5S	17/12/2013	PM2	16827081-13g	From October 2014	Mercury 230/0.5S	13/12/2013	PM3	11130132-12g	From February 2014	Mercury 230/0.5S	28/05/2012	PM4	01270885	From April 2014	A1805RAL-Elster/ 0.5S	28/03/2014	01185826	Feb and March 2014	A1805RAL-Elster/ 0.5S	27/05/2009	PM5	00485666	From operation start (3/02/2014)	Elster A1500 /0.5S	10/12/2013
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Measuring/reading/recording frequency:	<p>Monitoring Frequency: Continuously</p> <p><u>Recording Frequency:</u> Monthly</p>																																		
Calculation method (if applicable):																																			
QA/QC procedures:	<p>The data is monitored regularly with the bidirectional meter (PM4) installed at substation to the national grid, see monitoring plan. The calibration of the installed meters has to be organised by the owner. The electronic meters will be calibrated normally every 10 years by a certified laboratory following the national standards and specifications set up by the relevant electricity board.</p> <p>The cross-check of the monitoring data is done thanks to a set of power meters installed (PM1, 2,3 and 5) and a SCADA system, see monitoring plan.</p> <p>In case of failure of PM4, the SCADA and the set of meters (PM1, PM2, PM3 and PM5) will be used as a back-up option.</p>																																		
Purpose of data:																																			
Additional comments:	Monthly readings and the SCADA data will be archived electronically for crediting period+2 years																																		

D.3. Implementation of sampling plan

>> Not applicable

SECTION E. Calculation of emission reductions or GHG removals by sinks**E.1. Calculation of baseline emissions or baseline net GHG removals by sinks**

>>The baseline emissions are the product of electrical energy baseline EG_y expressed in MWh of electricity produced by the renewable generating unit multiplied by the grid emission factor.

Baseline emission factor is calculated as combined margin, consisting of a combination of operating margin (OM) and build margin (BM) factors (See registered PDD for details)

$$BE_y = EF_y * EG_y$$

Where:

BE_y = are the baseline emission due to displacement of electricity during the year y in tonnes of CO₂e

EF_y = is the net quantity of electricity generated by the project activity during the year y in MWh, and

EG_y = is the CO₂ baseline emission factor for the electricity displaced due to the project activity in tones CO₂/MWh.

As per the registered PDD, combined margin emission factor is 0.399 tCO₂/MWh. Hence the baseline emissions for the project activity for the current monitoring period are as follows.

$$BE_y = EF_y * EG_y = 0.3999 * 82\,845 * (1-0.003) = 33,030 \text{ tCO}_2\text{e (Rounded down conservatively)}$$

E.2. Calculation of project emissions or actual net GHG removals by sinks

>>The registered project activity is a run-of-river hydroelectric project. There are no anthropogenic emissions by sources of GHGs in the project boundary as a result of the project activity.

$$PE_y = 0$$

E.3. Calculation of leakage

>>There are no anthropogenic emissions identified by sources outside the project boundary. Further, the project participant confirms that the equipments used by the project activity are not transferred from another project. Hence, there is no leakage calculation required for the project activity.

$$LE_y = 0$$

E.4. Summary of calculation of emission reductions or net GHG removals by sinks

Item	Baseline emissions or baseline net GHG removals by sinks (t CO ₂ e)	Project emissions or actual net GHG removals by sinks (t CO ₂ e)	Leakage (t CO ₂ e)	GHG emission reductions or net GHG removals by sinks (t CO ₂ e) achieved in the monitoring period		
				Up to 31/12/2012	From 01/01/2013	Total amount
Total	33,030	0	0	0	33,030	33,030

E.5. Comparison of actual emission reductions or net GHG removals by sinks with estimates in registered PDD

With an estimated 20,234 tCO₂e emission reduction per year, the project activity should have generated $20,234 * 670/365 = 37,141$ tCO₂e during this 1st monitoring period.

Item	Values estimated in ex ante calculation of registered PDD	Actual values achieved during this monitoring period
Emission reductions or GHG removals by sinks (t CO ₂ e)	37,086 tCO ₂ e	33,030 tCO ₂ e

E.6. Remarks on difference from estimated value in registered PDD

>>

The actually achieved emission reduction in the current monitoring period is 33,030 tCO₂e for a monitoring period length of 670 days; while the estimated annual emission reduction as per the registered PDD is 37,141 tCO₂e.

A list of technical shutdowns is provided as Appendix 2, most of them are neglected from this discussion for the following two reasons

- (i) either their duration is shorter than 7-8 hours, which means that it can be covered by the power reserve provided by the buffer basin, or
- (ii) It affects only one of the two units in operation, the power station is still active

Finally, we only consider that the plant was not operational before 3/02/2014 (operation start) and off from 8/07/2015 to 5/08/2015 for repair works following a major flooding event.

This means that the Project Activity was only operational 607 days out of the 670 of the monitoring period and should have generated $20,234^5 * 607/365 = 33,649$ tCO₂e.

Thus, the actual emission reduction is $((33,649-33,030)/33,030)$ 1.87% lower than the estimated value. The difference is negligible for this type of project.

⁵ We consider here 20,234 tCO₂e per year instead of 23,954 because Phase II was not operational during the first monitoring period.

Appendix 1. Contact information of project participants and responsible persons/entities

Project participant and/or responsible person/ entity	<input checked="" type="checkbox"/> Project participant <input checked="" type="checkbox"/> Person/entity responsible for completing the CDM-MR-FORM
Organization name	“Energo – Aragvi” Ltd
Street/P.O. Box	3, Gotua str. 0162
Building	
City	Tbilisi
State/region	Tbilisi
Postcode	0162
Country	Georgia
Telephone	+995 599 563506
Fax	+995 32 2371874
E-mail	taras@energo-aragvi.ge
Website	N/A
Contact person	Mr. Taras Nizharadze
Title	Director
Salutation	N/A
Last name	Nizharadze
Middle name	N/A
First name	Taras
Department	N/A
Mobile	+995 99 563506
Direct fax	N/A
Direct tel.	+995 32 2371874
Personal e-mail	taras.nizharadze@gmail.com

Appendix 2. List of Shutdowns

Energo`-Aragvi Ltd. Gudauri HPP shutdown statistic for the period 2014.02.03 - 2015.11.12									
G1 was switched "ON" on 06.02.2014 at 13:45					G2 was switched "ON" on 03.02.2014 at 20:00				
Date	Switch off time	Switch on time	Reason Internal/ External	Note	Date	Switch off time	Switch on time	Reason Internal/Ex ternal	Note
					03.02.14	20:30	20:45	Internal	Comissionning
					03.02.14	21:30		Internal	Comissionning
					04.02.14		13:00	Internal	Comissionning
					04.02.14	13:15	14:15	Internal	Comissionning
					04.02.14	15:00	15:15	Internal	Comissionning
					04.02.14	15:30	15:45	Internal	Comissionning
					04.02.14	19:30	19:45	Internal	Comissionning
					05.02.14	03:30	07:30	Internal	Comissionning
					05.02.14	09:15	09:30	Internal	Comissionning
					05.02.14	10:00	10:45	Internal	Comissionning
					05.02.14	17:30	17:45	Internal	Comissionning
06.02.14	17:15	17:30	Internal	Comissionning	06.02.14	11:45	15:00	Internal	Comissionning
06.02.14	18:15	18:30	Internal	Comissionning	06.02.14	15:30	15:45	Internal	Comissionning
06.02.14	19:15	19:45	Internal	Comissionning	06.02.14	16:45	17:00	Internal	Comissionning
06.02.14	14:45	15:15	Internal	Comissionning	06.02.14	19:45	20:15	Internal	Comissionning
06.02.14	20:00	20:15	Internal	Comissionning	07.02.14	12:30	13:15	Internal	Comissionning
					07.02.14	13:45	14:00	Internal	Comissionning
					07.02.14	16:15	17:30	Internal	Comissionning
08.02.14	13:30	14:00	Internal	Comissionning	08.02.14	10:45	11:00	Internal	Comissionning
					08.02.14	12:30	13:45	Internal	Comissionning
					08.02.14	19:15	20:30	Internal	Comissionning
					08.02.14	21:15	22:30	Internal	Comissionning
					08.02.14	23:15	00:00	Internal	Comissionning
					09.02.14	00:00	01:00	Internal	Comissionning
					09.02.14	02:15	03:30	Internal	Comissionning

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10.02.14	10:30	14:45	Internal	Comissionning	10.02.14	04:30	10:30	Internal	Comissionning
10.02.14	18:30	18:45	Internal	Comissionning	10.02.14	14:45	16:00	Internal	Comissionning
10.02.14	19:00	00:00	Internal	Comissionning	10.02.14	16:45	18:30	Internal	Comissionning
11.02.14	00:00	12:45	Internal	Comissionning					
11.02.14	13:00	16:00	Internal	Comissionning					
11.02.14	17:45	18:00	Internal	Comissionning					
11.02.14	19:15	19:30	Internal	Comissionning	11.02.14	19:15	19:45	Internal	Comissionning
11.02.14	20:15	21:10	Internal	Comissionning	11.02.14	23:15	00:00	Internal	Comissionning
					12.02.14	00:00	01:45	Internal	Comissionning
					12.02.14	03:30	06:15	Internal	Comissionning
					12.02.14	07:45	09:45	Internal	Comissionning
					12.02.14	10:15	00:00	Internal	Comissionning
					13.02.14	00:00	12:45	Internal	Comissionning
13.02.14	12:30	13:15	Internal	Comissionning	13.02.14	13:15	15:15	Internal	Comissionning
13.02.14	15:45	00:00	Internal	Comissionning	13.02.14	16:15	16:30	Internal	Comissionning
14.02.14	00:00	23:59	Internal	Comissionning					
15.02.14	00:00	23:59	Internal	Comissionning					
16.02.14	00:00	23:59	Internal	Comissionning					
17.02.14	00:00	13:15	Internal	Comissionning	17.02.14	13:15	00:00	Internal	Comissionning
					18.02.14	00:00	23:59	Internal	Comissionning
					19.02.14	00:00	23:59	Internal	Comissionning
					20.02.14	00:00	23:59	Internal	Comissionning
21.02.14	11:30	14:30	Internal	Comissionning	21.02.14	00:00	13:00	Internal	Comissionning
21.02.14	15:30	16:15	Internal	Comissionning	21.02.14	14:00	14:30	Internal	Comissionning
21.02.14	17:00	00:00	Internal	Comissionning	21.02.14	15:45	16:00	Internal	Comissionning
22.02.14	00:00	23:59	Internal	Comissionning					
23.02.14	00:00	23:59	Internal	Comissionning					
24.02.14	00:00	23:59	Internal	Comissionning					
25.02.14	00:00	12:15	Internal	Comissionning	25.02.14	11:45	23:59	Internal	
					26.02.14	00:00	23:59	Internal	
					27.02.14	00:00	23:59	Internal	

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					28.02.14	00:00	23:59	Internal	
					1.03.14	00:00	23:59	Internal	
					2.03.14	00:00	23:59	Internal	
					3.03.14	00:00	23:59	Internal	
					4.03.14	00:00	23:59	Internal	
5.03.14	16:15	17:15	Internal		5.03.14	00:00	23:59	Internal	
					6.03.14	00:00	23:59	Internal	
					7.03.14	00:00	23:59	Internal	
8.03.14	10:15	11:45	Internal		08.03.14	00:00	08:45	Internal	
8.03.14	12:30	17:00	Internal		08.03.14	12:30	17:00	Internal	
8.03.14	17:15	00:00	Internal		08.03.14	17:15	00:00	Internal	
9.03.14	00:00	23:59	Internal		9.03.14	00:00	23:59	Internal	
10.03.14	00:00	15:15	Internal		10.03.14	00:00	15:15	Internal	
10.03.14	16:45		Internal		10.03.14	16:45	17:30	Internal	
					13.03.14	09:45	10:15	Internal	
					13.03.14	17:45	18:15	Internal	
					17.03.14	19:30		Internal	
18.03.14		11:45	Internal		18.03.14		10:30	Internal	
18.03.14	14:15		Internal		18.03.14	16:45	18:45	Internal	
23.03.14		18:00	Internal		23.03.14	19:15		Internal	
					24.03.14		16:45	Internal	
					24.03.14	22:00		Internal	
					25.03.14		20:15	Internal	
					25.03.14	21:45	23:00	Internal	
					26.03.14	01:45	16:00	Internal	
					27.03.14	01:15	14:45	Internal	
					28.03.14	02:00	15:00	Internal	
30.03.14	09:45	11:15	Internal		30.03.14	09:45	11:15	Internal	
30.03.14	17:00	18:15	Internal		30.03.14	17:00	18:15	Internal	
					30.03.14	23:00		Internal	
31.03.14	20:00		Internal		31.03.14		15:30	Internal	
1.04.14		10:00	Internal						
1.04.14	11:00		Internal	Damage of diodes of	01.04.14	11:30		Internal	Damage of diodes of

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7.04.14		22:45	Internal	Generator	08.04.14		13:15	Internal	Generator
8.04.14	12:00	15:15	Internal		08.04.14	14:15		Internal	
13.04.14	15:15	15:30	Internal						
16.04.14	15:00		Internal	Generator diodes repair	16.04.14		17:00	Internal	
18.04.14		17:15	Internal		23.04.14	13:45	14:45	Internal	
30.03.14	13:30	13:45	Internal						
01.05.14	20:00	20:30	External	Network shutdown	01.05.14	20:00	20:30	External	Network shutdown
4.05.14	15:30	15:45	External	Network shutdown	04.05.14	15:30	17:30	Internal	
4.05.14	17:30		Internal						
5.05.14		04:15	Internal						
					08.05.14	05:00	19:15	Internal	
09.05.14	20:00	20:45	External	Network shutdown	09.05.14	20:15	20:30	External	Network shutdown
					10.05.14	11:30	11:45	Internal	
11.05.14	05:45	06:30	External	Network shutdown	11.05.14	05:45	06:15	External	Network shutdown
13.05.14	15:45	16:30	External	Network shutdown	13.05.14	15:45	16:15	External	Network shutdown
17.05.14	09:45	10:15	External	Network shutdown	17.05.14	09:45	10:15	External	Network shutdown
23.05.14	12:00	12:45	Internal		23.05.14	11:45	12:45	Internal	
24.05.14	18:30	19:30	External	Network shutdown	24.05.14	18:30	19:15	External	Network shutdown
29.05.14	12:30	13:30	External	Network shutdown	29.05.14	12:30	13:45	External	Network shutdown
30.05.14	13:15	14:00	External	Network shutdown	30.05.14	13:15	14:00	External	Network shutdown
2.06.14	03:30	13:15	Internal		02.06.14	13:15	21:45	Internal	
4.06.14	15:15	18:00	External	Scheduled N29080	04.06.14	15:30	18:00	External	Scheduled N29080
10.06.14	13:30	17:15	Internal		10.06.14	13:30	17:15	Internal	
19.06.14	12:30	14:15	External	Network shutdown	19.06.14	12:30	14:00	External	Network shutdown
19.06.14	16:00	16:15	Internal		19.06.14	16:00	16:15	External	Network shutdown
22.06.14	12:45	15:45	Internal						
23.06.14	10:15	19:15	Internal						
24.06.14	11:00	11:45	External	Network shutdown	24.06.14	11:00	11:30	External	Network shutdown
24.06.14	15:30	15:45	Internal						
26.06.14	07:00	07:45	External	Network shutdown	26.04.14	07:00	07:45	External	Network shutdown
27.06.14	18:30	18:45	External	Network shutdown	27.06.14	18:30	18:45	External	Network shutdown

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30.06.14	05:30	06:45	Internal		30.06.14	05:30	06:30	External	Network shutdown
30.06.14	07:45		Internal		30.06.14	07:45	08:00	Internal	
3.07.14		19:45	Internal		02.07.14	16:00	17:45	External	Network shutdown
4.07.14	10:00	20:30	Internal						
5.07.14	12:15	17:30	Internal						
6.07.14	13:15	15:45	Internal						
07.07.14	12:15	12:45	External	Network shutdown	07.07.14	12:15	12:45	External	Network shutdown
9.07.14	15:45	16:30	Internal		09.07.14	15:45	16:00	Internal	
10.07.14	03:30	06:30	Internal						
11.07.14	09:45	10:30	External	Network shutdown	11.07.14	09:45	10:30	External	Network shutdown
11.07.14	13:45	18:15	Internal		11.07.14	13:45	18:15	Internal	
16.07.14	22:00	23:30	Internal		16.07.14	22:00	23:30	Internal	
24.07.14	10:45	11:00	External	Network shutdown	24.07.14	10:45	11:00	External	Network shutdown
27.07.14	21:15	22:00	Internal						
27.07.14	22:45		External	Entire Georgia was switched off	27.07.14	22:45		External	Entire Georgia was switched off
28.07.14		03:15	External		28.07.14		03:15	External	
28.07.14	05:30	08:15	Internal						
28.07.14	11:30		Internal						
29.07.14		12:45	Internal		29.07.14	07:00	08:00	Internal	
					30.07.14	14:15	14:45	Internal	
01.08.14	05:30	08:15	External	Network shutdown	01.08.14	05:30	08:15	External	Network shutdown
02.08.14	05:45	07:00	External	Network shutdown	02.08.14	05:45	07:00	External	Network shutdown
04.08.14	03:15	06:15	External	Network shutdown	04.08.14	03:15	06:15	External	Network shutdown
04.08.14	11:15	18:45	External	Network shutdown	04.08.14	11:15	18:45	External	Network shutdown
8.08.14	10:00	14:30	Internal						
9.08.14	06:00	09:15	External	Network shutdown					
11.08.14	11:00	11:30	Internal		11.08.14	11:00	11:30	Internal	
11.08.14	17:45	18:00	External	Network shutdown	11.08.14	17:45	18:00	External	Network shutdown

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12.08.14	20:30		External	Network shutdown	12.08.14	23:00		Internal	
13.08.14		12:45	Internal		13.08.14		01:00	Internal	
13.08.14	23:45		Internal						
14.08.14		05:45	Internal						
14.08.14	10:15	10:45	External	Network shutdown	14.08.14	10:15	10:45	External	Network shutdown
14.08.14	14:30	15:15	External	Network shutdown	14.08.14	14:30	15:15	Internal	
17.08.14	01:00	01:15	External	Network shutdown	17.08.14	01:00	01:15	External	Network shutdown
18.08.14	02:30	13:30	External	Network shutdown	18.08.14	02:30	12:45	External	Network shutdown
20.08.14	22:45	23:00	External	Network shutdown	20.08.14	22:45	23:00	External	Network shutdown
21.08.14	16:15	16:30	External	Network shutdown	21.08.14	16:15	16:30	External	Network shutdown
25.08.14	18:00	18:30	External	Network shutdown	25.08.14	18:00	18:30	External	Network shutdown
28.08.14	16:15	16:30	External	Network shutdown	28.08.14	20:15	20:30	External	Network shutdown
15.09.14	13:45	14:15	External	Network shutdown	15.09.14	13:45	14:15	External	Network shutdown
15.09.14	16:45	17:00	External	Network shutdown	15.09.14	16:45	17:00	External	Network shutdown
17.09.14	10:00	10:30	External	Network shutdown	17.09.14	10:00	10:30	External	Network shutdown
18.09.14	13:45	16:45	External	Network shutdown	18.09.14	13:45	16:45	External	Network shutdown
					24.09.14	07:15	07:30	External	Network shutdown
3.10.14	13:15	14:15	Internal	Checking of metering	03.10.14	14:15	16:15	Internal	Checking of metering
3.10.14	17:45	19:00	Internal						
8.10.14	13:45	18:15	Internal		08.10.14	13:45	18:00	Internal	
10.10.14	07:30	08:00	External	Network shutdown	10.10.14	07:30	08:00	External	Network shutdown
27.10.14	11:30	18:15	Internal		27.10.14	11:30	18:00	Internal	
29.10.14	10:45	11:30	External	Network shutdown	29.10.16	10:45	11:15	External	Network shutdown
30.10.14	07:30	08:00	External	Network shutdown	30.04.14	07:30	07:45	External	Network shutdown
4.11.14	06:30	07:15	External	Network shutdown	04.11.14	06:30	07:00	External	Network shutdown
05.11.14	07:15	07:45	External	Network shutdown	05.11.14	07:15	07:45	External	Network shutdown
7.11.14	07:15	07:45	Internal		7.11.14	07:15	07:45	Internal	
13.11.14	13:30	14:15	External	Network shutdown	13.11.14	13:30	14:00	External	Network shutdown
13.11.14	17:00	17:45	External	Network shutdown	13.11.14	17:00	17:45	External	Network shutdown
27.11.14	11:45	12:30	Internal		27.11.14	11:45	12:15	Internal	

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27.11.14	16:45	17:15	Internal		27.11.14	16:45	17:15	Internal	
3.12.14	12:30	17:30	Internal		3.12.14	12:30	17:30	Internal	
10.12.14	11:30	13:15	Internal		10.12.14	11:30	13:15	Internal	
15.12.14	13:15	13:45	External	Network shutdown	15.12.14	13:15	13:45	External	Network shutdown
15.12.14	17:30	18:15	External	Network shutdown	15.12.14	17:30	18:15	External	Network shutdown
16.12.14	10:00	10:30	External	Network shutdown	16.12.14	10:00	10:30	External	Network shutdown
16.12.14	16:00	16:30	External	Network shutdown	16.12.14	16:00	16:30	External	Network shutdown
19.12.14	09:45	10:00	External	Network shutdown	19.12.14	09:45	10:00	External	Network shutdown
19.12.14	15:15	15:45	External	Network shutdown	19.12.14	15:15	15:45	External	Network shutdown
31.12.14	00:30	01:00	External	Network shutdown	31.12.14	00:30	01:00	External	Network shutdown
2015									
					05.01.15	21:00		Internal	Heavy snow
6.01.15	10:30		Internal	Heavy snow					
7.01.15		05:15			07.01.15		11:45		
03.02.15	07:45	09:00	External	Network shutdown	03.02.15	07:45	09:00	External	Network shutdown
06.02.15	18:30	19:00	External	Network shutdown	06.02.15	18:30	18:45	External	Network shutdown
07.02.15	19:00	19:30	External	Network shutdown	07.02.15	19:00	19:30	External	Network shutdown
03.03.15	19:45	21:00	External	Network shutdown	03.03.15	19:45	21:00	External	Network shutdown
					04.03.15	07:30	08:30	External	Network shutdown
05.03.15	16:30	17:00	External	Network shutdown	05.03.15	16:30	17:00	External	Network shutdown
11.03.15	15:15		Internal	Maintenance (Insta)	11.03.15	15:15		Internal	Maintenance (Insta)
12.03.15		00:45			12.03.15		01:00		
					24.03.15	12:45	13:15	Internal	Maintenance
26.03.14	12:00	12:15	External	Network shutdown	26.03.14	12:00	12:15	External	Network shutdown
26.03.14	13:30	13:45	External	Network shutdown	26.03.14	13:30	13:45	External	Network shutdown
27.03.15	07:30	08:00	External	Network shutdown	27.03.15	07:30	08:00	External	Network shutdown
04.04.15	09:15	09:45	External	Network shutdown	04.04.15	09:15	09:45	External	Network shutdown
06.04.15	11:30	12:15	Internal	Maintenance	06.04.15	11:30	12:15	Internal	Maintenance
08.04.15	19:15	00:00	Internal	Generator checking	08.04.15	14:30	19:00	Internal	Generator checking
11.04.15	17:15	18:00	External	Network shutdown	11.04.15	17:15	18:00	External	Network shutdown
19.04.15	21:15	22:15	External	Network shutdown	19.04.15	21:15	21:45	External	Network shutdown

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19.04.15	22:30	23:00	External	Network shutdown	19.04.15	22:00	22:15	External	Network shutdown
					19.04.15	22:30	23:00	Internal	Maintenance
20.04.15	23:45	00:15	External	Network shutdown	20.04.15	23:45	00:15	External	Network shutdown
21.04.15	12:30	13:00	Internal						
21.04.15	15:45	16:00	Internal						
27.04.15	05:00	06:45	External	Network shutdown	27.04.15	05:00	06:45	External	Network shutdown
28.04.15	11:45	12:45	Internal	Turbine checking	28.04.15	11:45	12:15	Internal	Turbine checking
29.04.15	08:30	08:45	External	Network shutdown	29.04.15	08:30	08:45	External	Network shutdown
29.04.15	16:15	16:30	External	Network shutdown	29.04.15	16:15	16:30	External	Network shutdown
29.04.15	18:30	19:00	External	Network shutdown	29.04.15	18:30	19:00	External	Network shutdown
30.04.15	20:45	21:00	Internal		30.04.15	20:45	21:00		
1.05.15	09:45	10:00	Internal						
21.05.15	09:00	18:15	External	Network shutdown	21.05.15	09:00	18:15		Network shutdown
30.05.15	02:30	03:30	External	Network shutdown	30.05.15	02:30	03:30		Network shutdown
30.05.15	20:00	20:30	External	Network shutdown	30.05.15	20:00	20:30	External	Network shutdown
31.05.15	12:45	14:15	External	Network shutdown	31.05.15	12:45	14:15	External	Network shutdown
9.06.15	12:45	15:15	External	Network shutdown	9.06.15	12:45	15:15	External	Network shutdown
11.06.15	14:00	14:30	External	Network shutdown	11.06.15	14:00	14:30	External	Network shutdown
16.06.15	08:00	08:30	External	Network shutdown	16.06.15	08:00	08:30	External	Network shutdown
16.06.15	18:15	18:30	External	Network shutdown	16.06.15	18:15	18:30	External	Network shutdown
19.06.15	20:30	21:00	External	Network shutdown	19.06.15	20:30	21:00	External	Network shutdown
25.06.15	12:45	13:15	External	Network shutdown	25.06.15	12:45	13:15	External	Network shutdown
25.06.15	15:00	15:15	External	Network shutdown	25.06.15	15:00	15:15	External	Network shutdown
30.06.15	09:00	11:00	External	Network shutdown	30.06.15	09:00	11:00	External	Network shutdown
8.07.2015	05:00	05:30	External	Network shutdown	8.07.2015	05:00	05:30	External	Network shutdown
8.07.2015	07:00		Internal	Flooding event	8.07.2015	07:00		Internal	Flooding event
5.08.15		21:15			5.08.15		21:15		
28.08.15	00:45	01:15	External	Network shutdown	28.08.15	00:45	01:15	External	Network shutdown

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10.09.15	11:30	18:15	Internal	Main trafo checking	10.09.15	11:30	18:15	Internal	Main trafo checking
25.09.15	16:00	17:00	External	Network shutdown	25.09.15	16:00	17:00	External	Network shutdown
29.09.15	14:00	14:45	Internal		29.09.15	13:15	14:00	Internal	
5.10.15	10:45	15:45	Internal	Turbine checking					
					6.10.15	10:45	15:45	Internal	Turbine checking
16.10.15	12:00	14:45	External	Network shutdown	16.10.15	12:00	14:45	External	Network shutdown
21.10.15	12:15	17:45	Internal		21.10.15	12:15	17:45	Internal	
12.11.15	15:30	15:45	External	Network shutdown	12.11.15	15:30	15:45	External	Network shutdown

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Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
05.1	4 May 2015	Editorial revision to correct version numbering.
05.0	1 April 2015	Revisions to: <ul style="list-style-type: none"> • Include provisions related to delayed submission of a monitoring plan; • Provisions related to the Host Party; • Remove reference to programme of activities; • Overall editorial improvement.
04.0	25 June 2014	Revisions to: <ul style="list-style-type: none"> • Include the Attachment: Instructions for filling out the monitoring report form (these instructions supersede the "Guideline: Completing the monitoring report form" (Version 04.0)); • Include provisions related to standardized baselines; • Add contact information on a responsible person(s)/ entity(ies) for completing the CDM-MR-FORM in A.6 and Appendix 1; • Change the reference number from <i>F-CDM-MR</i> to <i>CDM-MR-FORM</i>; • Editorial improvement.
03.2	5 November 2013	Editorial revision to correct table in page 1.
03.1	2 January 2013	Editorial revision to correct table in section E.5.
03.0	3 December 2012	Revision required to introduce a provision on reporting actual emission reductions or net GHG removals by sinks for the period up to 31 December 2012 and the period from 1 January 2013 onwards (EB70, Annex 11).
02.0	13 March 2012	Revision required to ensure consistency with the "Guidelines for completing the monitoring report form" (EB 66, Annex 20).
01	28 May 2010	EB 54, Annex 34. Initial adoption.
Decision Class: Regulatory Document Type: Form Business Function: Issuance Keywords: monitoring report		