

CDM VALIDATION REPORT

RENEWAL OF THE CREDITING PERIOD OF THE PROJECT ACTIVITY:

WEST NILE ELECTRIFICATION PROJECT (WNEP)

AENOR REFERENCE: 2011/018/CDM/38

VERSION: 02

VALIDATION REPORT

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Validation Report:	AENOR Reference n°:	Version of this report:	Date:
	2011/018/CDM/38	02	01/04/2014
PDD:	Title:	GSC publication date:	Comments received:
	West Nile Electrification Project (WNEP)	-	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No
Parties involved:	Host Party:	Other involved Parties:	
	Uganda	Sweden, France, Japan, The Netherlands, Norway, United Kingdom of Great Britain and Northern Island, Finland, Germany, Bilateral and Multilateral Funds.	
Project Participant(s):	In host Party:	In other involved Parties:	
	West Nile Rural Electrification Company Limited (WENRECo)	<p>Government of Sweden - Swedish Energy Agency</p> <p>GDF Suez</p> <p>Chubu Electric Power Co., Inc.</p> <p>Japan International Cooperation Agency (JICA)</p> <p>Kyushu Electric Power Co., Inc.</p> <p>Mitsubishi Corporation</p> <p>Shikoku Electric Power Co., Inc.</p> <p>Tohoku Electric Power Co. Inc.</p> <p>The Tokyo Electric Power Co., Inc.</p> <p>The Chugoku Electric Power Co., Inc.</p> <p>Mitsui & Co. Ltd.</p> <p>Electrabel S. A.</p> <p>Netherlands' Ministry of Infrastructure and the Environment (IenM)</p> <p>Netherlands' Ministry of Economic Affairs, Agriculture and Innovation (EL&I)</p> <p>Government of Norway - Ministry of Foreign Affairs</p> <p>Norsk Hydro ASA</p> <p>Statoil ASA</p> <p>BP Alternative Energy International Ltd.</p> <p>Deutsche Bank AG</p> <p>Government of Canada - Ministry of Foreign Affairs and International Trade</p> <p>Fortum Corporation</p> <p>Government of Finland - Ministry of Foreign Affairs</p> <p>RWE Power AG</p>	

* The comments are detailed in Section 4 of this Validation Report

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		International Bank for Reconstruction and Development (IBRD) as Trustee of the Prototype Carbon Fund (PCF)		
Size of the project activity:	<input checked="" type="checkbox"/> Small scale <input type="checkbox"/> Large scale			
Applied methodology/ies:	Title:	Code:	Nº version	Scope:
	"Electricity generation by the user"	AMS-IA	16.0	1
Applied tools:	Title:	Version:		
	"Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period"	03.0.1		
Emission reductions (ER):	PDD sent for notification of renewal the crediting period:		Final PDD:	
<input checked="" type="checkbox"/> Annual average of the ER (tCO ₂ e)	36,785		14,885	
<input type="checkbox"/> Total ER (tCO ₂ e)				
Previous versions of this document:		Version:	Date:	
		1	19/03/2014	
		2		
		3		
		4		
Report prepared by:	Climate Change Unit. AENOR			

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Abbreviations

AENOR	Spanish Association for Standardisation and Certification
AMS-IA	"Electricity generation by the user" version 16.0
CAR	Corrective action request
CDM	Clean development mechanism
CER	Certified emission reductions
CL	Clarification
CMP	Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol
CO ₂	Carbon dioxide
DNA	Designated operational entity
DOE	Designated Operational Entity
ER	Emissions reduction
FAR	Forward action request
GHG	Greenhouse gases
IBRD	International Bank for Reconstruction and Development
IPCC	Intergovernmental Panel on Climate Change
MoC	Modalities of communication
MP	Monitoring Plan
MR	Monitoring Report
PDD	Project design document
PP	Project participant
REA	Rural Electrification Agency
REFIT	Uganda Renewable Energy Feed-in Tariff
tCO _{2eq}	Carbon dioxide equivalent tonnes
UNFCCC	United Nations Framework Convention for Climate Change
VVS	Validation and Verification Standard version 05.0

Table 1: Abbreviations

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1 INTRODUCTION

This validation concerns a project implemented by West Nile Electrification Project (WNEP), in Uganda to reduce emissions of CO₂ by generating renewable energy coming from the installation and operation of a 3.5 MW (2 units of 1.75 MW) hydroelectric power plant. The objectives of the validation exercise are to confirm that the original baseline is still valid and has been updated taking into account the new applicable data, the project meets the necessary CDM criteria, the project follows the latest version of the approved methodology AMS-IA, and that the proposals presented in the PDD will lead to a realistic determination of the emissions reductions.

1.1 Objective

The International Bank for Reconstruction and Development (IBRD) as trustee of the Prototype Carbon Fund (PCF) has commissioned AENOR to perform a validation of the renewal of the crediting period of the project **"West Nile Electrification Project (WNEP)"**. The purpose of a revalidation is to have an independent third party assessment of the project in order to request the renewal of the project's crediting period. This validation opinion summarizes the findings of the revalidation of the project, performed on the basis of UNFCCC criteria for the CDM, as well as criteria given to provide for consistent operation, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM modalities and procedures and the subsequent decisions by the CDM Executive Board, in particular the CDM Project Cycle Procedure version 05.0, the CDM Project Standard version 05.0 and the tool "Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period" version 03.0.1.

"West Nile Electrification Project (WNEP)" was registered with reference number 0775 on 10/02/2007 as a CDM project with a renewable 7 years crediting period. The project's first crediting period was from 01/01/2005 to 31/12/2011. The second crediting period corresponds to the period from 01/01/2012 to 31/12/2018.

1.2 Scope

The scope of the validation is to assess all the aspects described in the CDM Project Standard version 05.0 related to the purpose of renewal of the crediting period project relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.

The following documents were reviewed as part of the scope of the activity:

- PDDs including baseline study and monitoring plan. /1//2/
- Approved Methodology: AMS-IA (Version. 16.0.)/3/
- CDM Project Cycle Procedure version 05.0. /4/

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- CDM Project Standard version 05.0. /5/
- Tool "Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period" version 03.0.1"./6/
- CDM Validation and Verification Standard (Version 05.0) /7/

The validation scope is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations. AENOR, based on the Specific Instruction for Validation, Verification and Certification of Clean Development Mechanism (CDM) Project Activities (IE/DTC/039), and the Validation and Verification Standard, has used a risk-based approach in the validation, focusing on the identification of significant risks for project implementation and the generation of CERs.

The validation is not meant to provide any consultancy services to the Client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the PDD.

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2 METHODOLOGY

The revalidation assessment aims at being a risk-based approach and is based on the methodology developed in the Validation and Verification Standard, an initiative of designated and applicant entities, which aims to harmonize the approach and quality of all such assessments.

The validation of the renewal of the crediting period began in June 2011 and was concluded in April 2014. The revalidation was performed in the manner of an audit, where, a desk review of the PDD was undertaken against the latest version of the approved methodology and CDM and other relevant criteria applying to the project.

In order to ensure transparency, a validation protocol was customized for the project, according to Specific Instruction (IE/DTC/039). The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from validating the identified criteria.

The sequence of the validation is given in the table below:

Topic	Date
Notification by the PPs of their intention to request a renewal of crediting period of the registered CDM project activity by submitting an updated PDD.	24/06/2011
Validation Protocol - Version 01.	21/09/2011
Final Validation Report.	01/04/2014

Table 2: Sequence of the main validation activities

2.1 Appointment of team members and technical reviewers

The list of involved personnel and the qualification status are summarized in the table below:

Name	Qualification	
	Position in the team	Technical areas
Alfonso Medrano Gutiérrez	Chief Validator	1.2
Luis Robles Olmos	Validator	1.1; 1.2
José Antonio Gesto Vilacoba	Validator	1.2
M ^a Carmen González Galán	Technical Reviewer	1.1; 1.2
M ^a Mercedes García Madero	Technical Reviewer	1.2

Table 3: List of the personnel involved.

Technical areas (TA) mentioned above correspond to the following:

TA code	Technical area
TA 1.1	Thermal energy generation from fossil fuels and biomass including thermal electricity from solar (COMPLEX);
TA 1.2	Energy generation from renewable energy sources.
TA 2.1	Electricity distribution;
TA 2.2	Heat distribution
TA 3.1	Energy demand
TA 4. 1	Cement sector (COMPLEX);
TA 4.2	Aluminum (COMPLEX);
TA 4.3	Iron and steel (COMPLEX);
TA 4.4	Refinery (COMPLEX)
TA 5.1	Chemical process industries (COMPLEX).
TA 6.1	Construction.
TA 7.1	Transport.
TA 8.1	Mining and mineral processes, excluding those included in TA 8.2 below;
TA 8.2	Oil and gas industry, coal mine methane recovery and use (COMPLEX).

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TA 9.1	Metal production.
TA 10.1	Mining and mineral processes, excluding those included in TA 10.2 below;
TA 10.2	Oil and gas industry, coal mine methane recovery and use (COMPLEX).
TA 11.1	Chemical process industries (COMPLEX);
TA 11.2	GHG capture and destruction.
TA 12.1	Chemical process industries (COMPLEX).
TA 13.1	Waste handling and disposal;
TA 13.2	Animal waste management.
TA 14.1	Forestry
TA 15.1	Agriculture
TA 15.2	Animal waste management.

Table 4: List of Technical Areas

2.2 Document review

The project design document submitted by the PP was reviewed against the approved methodology and against CDM and other relevant criteria. Additional background documents related to the project design and baseline were also requested. These documents were also reviewed.

To address the corrective actions and clarification requests that arose from the desk review, the PP revised the project design document several times before developing and submitting a final version.

The final validation findings are presented in this report related to the project as described in the project design document version 6.

The reviewed documents used during the entire validation process are detailed in the Chapter 6 of this report.

2.3 Follow-up actions

2.3.1 Site Visit

From 23/04/2013 to 25/04/2013, the validation team visited "West Nile Electrification Project (WNEP)" (Registration Ref. No. 0775). The on-site visit included visits to the facilities of the project, such as: Nyagak Hydro Power Plant, Nyagak Reservoir, and HFO Power Plant. Also, during the on-site visit the validation team was able to complete:

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- An assessment of the implementation and operation of the project activity as per the registered PDD.
- A review of information flows for generating, aggregating and reporting the monitoring parameters.
- A review of calculations and assumptions made in determining the GHG data and emission reductions.
- An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.
- Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the monitoring plan and the registered PDD.

The people interviewed are indicated below:

Interviewed organization Person/Position	Interview topics
International Bank for Reconstruction and Development (IBRD) as trustee of the Prototype Carbon Fund Zijun Li. Carbon Finance Specialist.	<ul style="list-style-type: none"> ✓ Updating Methodology issues. ✓ Baseline determination: electricity production, OM and BM, efficiencies, most recent data...). ✓ Updating monitoring plan
West Nile Rural Electrification Company Limited (WENRECo) Mr. Fabian Ahaisibwe. Regional Manager Mr. Adnan Khalid. Q/C Responsible. Mr. Paul Tumwine. HFO Plant Superintendent.	<ul style="list-style-type: none"> ✓ Flows for generating, aggregating and reporting the monitoring parameters. ✓ Review of operating and measurement records. ✓ Electrical energy generation reports. ✓ Check and calibration of metering equipment. ✓ Calibration of meters. ✓ Testing of monitoring equipment and observation of monitoring practices. ✓ Controls established to detect and correct any error or omission in monitoring parameters. ✓ Running of specific checks and trials on data sources and data management practices where risks are detected. ✓ Reliability of internal and external data. ✓ Internal data quality control.

Table 5. Interview topics

2.4 Findings

As an outcome of the validation process, the team can raise different types of findings according to the CDM Validation and Verification Standard.

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

Where a non-conformance arises the validation team shall raise a Corrective Action Request (CAR). A CAR is issued, where:

- a) The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions;
- b) The CDM requirements have not been met;
- c) There is a risk that emission reductions cannot be monitored or calculated.

Failure to address a CL may result in a CAR. Information or clarifications provided as a result of a CL may also lead to a CAR.

A Forward Action Request (FAR) is raised during validation to highlight issues related to project implementation that require review during the first verification of the project activity. FARs shall not relate to the CDM requirements for registration.

The project participants were requested to address all validation findings and finally provided the validation team with sufficient evidence to determine that the applicable CDM requirements have been met. The project participant modified the initial PDD to resolve the validation team concerns and resubmitted a final version of the PDD. AENOR has prepared this report based on the final PDD.

All the validation findings are summarized in section 3 below and documented in more detail in section 6 and in the validation protocol included in Annex 1.

2.5 Internal Quality Control

Following the completion of the assessment process by the validation team, all documentation undergoes an internal quality control through a technical review before submission to the CDM-EB. The Technical reviewer is a qualified member of AENOR, independent from the team that carried out the validation of the project activity. The technical reviewer, or the team appointed for the technical review, is qualified in the technical area(s) and sectoral scope(s) of the project activity.

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3 VALIDATION FINDINGS

3.1 Approval and Participation

In accordance with paragraph 247 of the CDM Project Cycle Procedure version 05.0, for the purpose of renewal of the crediting period no new Letters of Approval are required, and all the documents provided at the moment of requesting registration and during the first crediting period are still valid.

AENOR team has verified by consulting the UNFCCC website that all Project Participants obtained the corresponding Letter of Approval and the Authorization of all the parties involved.

3.2 Project Design Document

The PDD of "West Nile Electrification Project (WNEP)" has been prepared in accordance with latest template (version 04.1) and the Guidelines for completing the CDM- PDD (version 01.0).

The initial version of the PDD for the renewal of the crediting period of the project was sent by the PPs, according to paragraph 244 of the CDM Project Cycle Procedure, to the UNFCCC Secretariat within the notification of the intention to request the renewal of crediting period of the project activity on 24/06/2011 /20/.

Due to the clarifications and corrective actions requested during the validation process, the Project Participant has made a final version of the PDD dated on 11/03/2014, which includes all issues raised to the PP either corrected or clarified.

The latest version of the PDD is in compliance with relevant forms and guidance stated by the CDM documentation.

3.3 Project description

Since the current validation process is for the renewal of the crediting period of a project already registered, the assessment did not focus on the project design. The project activity is already implemented and it is generating CERs.

However, it is important to mention that originally the project comprised of two components;

- 1) Project Component 1: Installation and operation of 3.5 MW (2 units of 1.75 MW) hydroelectric power plant.

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- 2) Project Component #2: Installation and operation of a HFO-fired 1.5 MW generator to serve as a base load plant during the construction phase of the Hydro plant and as a peaking plant once the Hydro is operational.

For the second crediting period, once component 1, the Hydro power plant, has become operational, the PPs have decided not to include component 2 as part of the CDM project activity since it will be used only as a back-up now that the hydroelectric plant is operational. Hence component 2, the HFO power plant has been excluded from the project for the current second crediting period.

AENOR verified during the on site visit carried out to the project activity in April 2013 that the Hydro power plant started its operations in September 2012 and the HFO plant was not operational.

During the on site visit, AENOR validated the accuracy and completeness of the project description stated in the final version of the PDD. Therefore, it is AENOR opinion that the project description included in the latest version of the PDD is accurate and complete.

3.4 Baseline methodology

The project was originally registered based on the following methodologies:

- 3) **Component 1:** AMS-I.D: "Grid connected renewable electricity generation. Version 9
4) **Component 2:** AMS-II.B: "Supply side energy efficiency improvements – generation". Version 7

For the current crediting period, since component 2 has been removed from the project, only the applicability conditions of the methodology applied to component 1 have been assessed.

In this case, according to paragraph 230 of the CDM Project Standard version 05.0 the latest version of methodology AMS-I.D shall be used for the new crediting period, whenever applicable. The latest version is AMS-I.D Version 17.

The applicability of the methodology was re-assessed based on the knowledge of the characteristics and operation of the project since its registration.

Methodology AMS-I.D version 17 comprises renewable energy generation units, such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass:

- a) Supplying electricity to a national or a regional grid; or
b) Supplying electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling.

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AENOR confirmed during the on site visit that the project comprises a hydro power plant which is not connected to a national or regional grid. Therefore, methodology AMS-I.D version 17 cannot be applicable to the project activity anymore.

Given that AMS-I.D Version 17 does not apply to the project, in line with paragraph 230(c) of the Clean Development Mechanism Project Standard version 05.0, another applicable approved methodology shall be selected.

In this case, paragraph 2 of methodology AMS-I.D version 17, in order to avoid this kind of problems of applicability, offers situations under which other methodologies such as: AMS-I.D, AMS-I.F and AMS-I.A could be applicable to different projects:

	Project type	AMS-I.A	AMS-I.D	AMS-I.F
1	Project supplies electricity to a national/regional grid		√	
2	Project displaces grid electricity consumption (e.g. grid import) and/or captive fossil fuel electricity generation at the user end (excess electricity may be supplied to a grid)			√
3	Project supplies electricity to an identified consumer facility via national/regional grid (through a contractual arrangement such as wheeling)		√	
4	Project supplies electricity to a mini grid ¹ system where in the baseline all generators use exclusively fuel oil and/or diesel fuel			√
5	Project supplies electricity to household users (included in the project boundary) located in off grid areas.	√		

Table 6. Applicability of AMS-I.D, AMS-I.F and AMS-I.A based on project types (source: Table 2 of the approved methodology AMS-I.D version 17)

Taking into account the information on the above table and that the project activity is an integrated power utility license concession granted to a private investor and includes the creation and operation of a mini-grid in the West Nile region which installed capacity is less than 15MW, not connected to the national grid

¹ The sum of installed capacities of all generators connected to the mini-grid is equal to or less than 15 MW.

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and supplying electricity to household users, included in the project boundary, located in off grid areas AMS-IA Version 16.0 has been selected to apply the project activity.

All the applicability conditions stated in the selected methodology has been properly explained and justified in section B.2 of the latest version of the PDD. The applicability conditions are the following ones:

- 1) This category comprises renewable electricity generation units that supply individual households/users or groups of households/users included in the project boundary. The applicability is limited to individual households and users that do not have a grid¹ connection. The renewable energy generation units include technologies such as solar, hydro, wind, biomass gasification and other technologies that produce electricity all of which is used on-site/locally by the user, e.g. solar home systems, wind battery chargers. The renewable generating units may be new installations (Greenfield) or replace existing onsite fossil-fuel-fired generation. To qualify as a small-scale project, the total output of the unit(s) shall not exceed the limit of 15 MW.
- 2) Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:
 - The project activity is implemented in an existing reservoir with no change in the volume of reservoir;
 - The project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than 4 W/m²;
 - The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the project emissions section, is greater than 4 W/m².
- 3) Combined heat and power (cogeneration) systems are not eligible under this category.
- 4) If the unit added has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. If the unit added co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW.
- 5) Project activities that involve retrofit or replacement of an existing facility for renewable energy generation are included in this category. To qualify as a small-scale project, the total output of the modified or retrofitted unit shall not exceed the limit of 15 MW.

¹ National/regional grid.

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- 6) In the case of project activities that involve the addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.

During the on site visit and after the documentary evidence, AENOR has validated that:

- 1) The households and users did not have a connection to the national grid; prior to the project their electricity came from isolated diesel stations operated by the Uganda Electricity Board (UEB) and private owned fossil fuel gen-sets or engines. The project supplies electricity to individual households/users through a new mini-grid, operated by a power utility license concession for generation and distribution of electricity. The renewable energy produced is used by the individual households/users, from a greenfield installation with an installed capacity lower than 15 MW (3.5 MW).
- 2) Component 1 is a hydro power plant with a new run-of-river reservoir with a power density of 59.2 W/m²
- 3) The project does not involve combined heat and power (cogeneration) systems.
- 4) The project does not have renewable and non-renewable components, the project consists only in a renewable component.
- 5) The Project does not involve a retrofit or replacement of an existing facility for renewable energy generation.
- 6) The Project is a greenfield, it does not involve the addition of renewable energy generation units at an existing renewable power generation facility.

Hence, AENOR confirms that the project applies the criteria stated in the selected methodology AMS-IA "Electricity generation by the user" Version 16.

3.5 Project boundary

The project boundary remains the same as the one described for the first crediting period and it is in accordance with the applied methodology: *"the physical, geographical site of the renewable energy generating unit and the equipment that uses the electricity produced delineates the project boundary"* in this case the hydro plant developed and operated by the proposed project and the individual households/users connected to the mini-grid supplied by the hydro plant which is not connected to the national or a regional grid.

All the emission sources and GHGs related included and excluded from the project boundary are clearly identified and described in a complete manner in the latest version of the PDD. It also includes a flow diagram of the project boundary presenting the equipment, systems and flows of mass and energy. In

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particular, it is indicated in the diagram the emission sources and GHGs included in the project boundary and the data and parameters to be monitored taking into account the project boundary as per the applied methodology.

The validation team states that the identified boundary and the selected sources and gases are correctly justified by the project proponent in the PDD, and they are in accordance with the methodology AMS-IA version 16.

The project activity is not expected to result in emissions other than those allowed by the methodology, and there are no greenhouse gas emissions occurring within the proposed CDM project activity boundary as a result of the implementation of the proposed CDM project activity which are expected to contribute more than 1% of the overall expected average annual emissions reductions, which are not addressed by the applied methodology.

3.6 Validity of the original baseline and its update at the renewal of the crediting period

3.6.1 Assessment of the validity of the current baseline for the next crediting period

The validity of the current baseline has been assessed using the following sub-steps in accordance with the tool:

- Step 1.1 – Assess compliance of the current baseline with relevant mandatory national and/or sectoral policies.

AENOR has validated that the only relevant policy in Uganda's energy sector, after registration of the project in 2006, is the introduction of the Renewable Energy Policy 2007 [9] which is the most recent policy enacted for the Ugandan electricity sector.

Besides, the Uganda Renewable Energy Feed-in Tariff (REFIT) [10] is one of the main components, established under the Renewable Energy Policy. The overall aim of the REFIT is to encourage and support greater private sector participation in power generation from renewable energy technologies. AENOR has validated that it covers small-scale renewable projects (0.5 to 20 MW), and applies in its current version to projects connected to the national grid only. Hence, stand-alone technologies and off-grid projects are not embedded under the REFIT. Therefore, AENOR confirms that the baseline is not affected at all for the project.

AENOR has validated that the baseline complies with the current regulations dealing with power generation. In particular, it has been verified that there are no new mandatory national and/or sectoral

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policies that could affect the baseline scenario during the renewal of the crediting period. The regulatory framework remains the same.

AENOR confirms that the current baseline complies with all relevant mandatory national and/or sectoral policies which have come into effect after the submission of the project activity for validation and are applicable at the time of requesting renewal of the crediting period.

- Step 1.2 - Assess the impact of circumstances.

AENOR has validated, through an assessment of the Rural Electrification Agency (REA), that there are not new grid-based (mini-grid or national grid) electricity projects implemented in the region than provided by the project activity available. AENOR has verified through evidence [12][13] that some solar PV systems were installed in the Arua district in the health and education sectors, and potentially very few in the residential sector. Therefore it has been confirmed that in the absence of the project activity, fossil fuel generators would still have been the main source of electricity in the project area.

AENOR confirms that the new market conditions, as well as the prevailing practice and the availability of alternative technologies to generate energy, continue to be the same as those that applied for the first crediting period. Therefore, there is not impact of existing circumstances, at the time of requesting the renewal of the crediting period, on the current baseline emissions.

- Step 1.3 - Assess whether the continuation of the use of current baseline equipment(s) or an investment is the most likely scenario for the crediting period for which renewal is requested.

Diesel generator lifetime is long and spreads beyond the first crediting period of the project activity. As it has been explained above, AENOR has validated the absence of regulation on diesel generators and the very low market penetration of solar PV, and under this situation diesel generator owners would have continued use of their current baseline equipment, or if having made an investment would still have bought a new diesel generator to replace their old unit if this were to break down. Furthermore investment by a private company in a regional power plant and mini-grid is no more likely than it was at the time of the original project validation, due to no change in the relevant policy for this type of context, as described in Step 1.1.

AENOR confirms that the continuation of use of baseline equipment is the most likely scenario for the second crediting period in the absence of the project activity.

- Step 1.4 – Assessment of the validity of the data and parameters

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As it has been explained in section 3.4 of this report, the project was originally registered based on methodologies AMS-I.D: "Grid connected renewable electricity generation. Version 9 and AMS-II.B: "Supply side energy efficiency improvements – generation". Version 7. None of them are anymore applicable to the project activity, and currently methodology AMS-I.A version 16 has been correctly selected to be applied.

Due to the new criteria stated in the new methodology applied and to the fact that component 2 has been removed from the project, some parameters used in ex-ante estimation of ERs are not valid anymore because the calculation method has changed. Therefore, AENOR confirms that the current baseline calculation needs to be updated for the subsequent crediting period.

3.6.2 Update the current baseline and the data and parameters

- Step 2.1 – Update the current baseline

The baseline emissions for the second crediting period have been updated, without reassessing the baseline scenario, based on the latest approved version of the methodology AMS-I.A. This update was applied in the context of the sectoral policies and circumstances that are applicable at the time of requesting for renewal of the crediting period.

- Step 2.2 – Update the data and parameters

As it has been explained above in step 1.4 and in section 3.4, the methodology used at the time of the project registration was replaced by the latest version of AMS-I.A, so there are some parameters determined in the beginning of the first crediting period that they are not valid anymore, and some new parameters to be monitored according to the new methodology applied.

AENOR confirms that all the parameters included in the latest version of the PDD and involved in the ERs calculations have been properly updated in accordance with the applied methodology AMS-I.A version 16.0. For further information on parameters involved in the project, please see section 3.10 of this report.

3.7 Additionality

According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology. AENOR confirms that in the updated PDD, section dedicated to Additionality remains the same as in the PDD registered for the first crediting period.

3.8 Algorithms and/or formulae used to determine emission reductions

AENOR confirms that all the formulae and algorithms used to determine the ERs have been applied according to the methodology AMS-IA version 16. Other inputs used for the emission reduction projection, as well as default values available in the methodology applied were verified to be correct.

AENOR has validated that all the data and parameters used for the ex ante calculation have been provided by truthful and appropriate sources. Data included in the latest version of the PDD and its annexed spreadsheet have been verified against the evidence provided to the DOE team and are deemed correct. The assessment of all data and parameters involved in the ERs determination is carried out in sections 3.10.1 and 3.10.2 of this report.

Baseline Emissions

The PDD clearly states all the equations used in calculating baseline emissions. According to the approved methodology AMS-IA, the energy baseline is the fuel consumption of the technology in use or that would have been used in the absence of the project activity to generate the equivalent quantity of energy.

Since it is possible to monitor annual electricity generation from project renewable energy technologies AENOR confirms that paragraph 8b) Option 2 has been correctly selected for baseline emissions calculation.

Therefore, the energy baseline is calculated as follows:

$$E_{BL,y} = \sum_i EG_{i,y} / (1 - I)$$

Where:

$E_{BL,y}$ = Annual energy baseline; kWh

\sum_i = The sum over the group of i renewable energy technologies (e.g. renewable energy technologies for solar home systems, solar pumps) implemented as part of the project activity

$EG_{i,y}$ = Annual output of the renewable energy technologies of the group of i renewable energy technologies installed; kWh

I = Average technical distribution losses that would have been observed in diesel powered mini-grids installed by public programmes or distribution companies in isolated areas, expressed as a fraction

The emissions baseline is the energy baseline calculated in accordance with para. 8(b) times a default emission factor:

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$$BE_{CO_2,y} = E_{BL,y} * EF_{CO_2}$$

Where:

$BE_{CO_2,y}$ = Emissions in the baseline in year y; tCO₂

$E_{BL,y}$ = Annual energy baseline; kWh

EF_{CO_2} = CO₂ emission factor; tCO₂/kWh;

AENOR has validated through the evidence [8//14] that the annual estimate of energy production ($E_{BL,y}$) of this hydro power plant is based on the turbines capacity, the expected hours of operation and the estimation of the annual auxiliary electricity consumption of the project. AENOR has verified through evidence [14//15//22] that the amount of net energy that would be produced ($E_{BL,y} = 20,565$ MWh) included in the ex ante calculation is appropriate and conservative.

AENOR has also validated that the ex-ante emission factor (EF_{CO_2}) selected to be 0.8 kgCO₂/KWh has been correctly chosen as a default value stated in the applied methodology AMS-IA version 16.

Regarding the average technical distribution losses that would have been observed in diesel powered mini-grids installed by public programmes or distribution companies in isolated areas, AENOR verified during the on site visit that in the absence of the project activity, electricity supply would not have entailed distribution losses because the final users are in the same location as the generator they are using. Therefore a default value of 0 has been correctly selected according to the applied methodology. (Footnote 6; page 3).

$$BE_{CO_2,y} = E_{BL,y} * EF_{CO_2} = 20,565 \text{ Mwh} * 0.8 \text{ tCO}_2/\text{Mwh} = 14,885 \text{ tCO}_2/\text{year}$$

Project Emissions

Component #1 is a run-of-river hydropower plant. Hence, according to paragraph 13 of AMS-IA version 16, for the following categories of project activities, project emissions have to be considered following the procedure described in the most recent version of ACM0002:

- Emissions related to the operation of geothermal power plants (e.g. non- condensable gases, electricity/fossil fuel consumption);
- Emissions from water reservoirs of hydro power plants.

According to the methodology ACM0002 version 14.0.0, for hydro power project activities that result in new reservoirs, CH₄ and CO₂ emissions from the reservoir shall be accounted. The project emissions are related with power density (PD), calculated as follows:

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$$PD = \frac{Cap_{PJ} - Cap_{BL}}{A_{PJ} - A_{BL}}$$

Where:

- PD = Power density of the project activity (W/m²)
- Cap_{PJ} = Installed capacity of the hydro power plant after the implementation of the project activity (W)
- Cap_{BL} = Capacity of the hydro power plant before the implementation of the project activity (W). For new hydro power plants, this value is zero.
- A_{PJ} = Area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full (m²)
- A_{BL} = Area of the reservoir measured in the surface of the water, before the implementation of the project activity, when the reservoir is full (m²). For new reservoirs, this value is zero.

AENOR has validated the value of the parameter A_{PJ} included in the PDD for the calculation of the Power Density (PD) of the project activity, through the evidence [21] provided by the PP and the value of A_{PJ} = 59,104 m² is considered appropriate and conservative.

The installed capacity of the hydro power plant after the implementation of the project activity Cap_{PJ} = 3,500,000 W has been also validated through the evidence [8]/[14] and deemed as appropriate and conservative too.

AENOR confirms that the calculation of the Power Density (PD) of the project activity included in the PDD, PD = 59.2 W/m² is correct. Therefore, according to methodology, ACM0002 version 14.0.0, if the power density of the project activity (PD) is greater than 10W/m², then PE_{HP} = 0.

PD = 59.2 W/m² > 10W/m², so PE_{HP} = 0.

According to the applied methodology, the only project emissions to be considered in the project activity are emissions from water reservoirs:

PE = PE_{HP,y} = 0

AENOR confirms that the calculation of the Project Emissions included in the latest version of the PDD is correct according to the applied methodology and all the formulae have been correctly described and used.

Leakage

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Following methodology AMS-IA if the energy generation equipment is transferred from another activity, leakage has to be considered.

AENOR has validated through the evidence /17//18/ that all the equipment installed is new and was purchased to the company SKODAEXPORT A.S.

AENOR confirms that, since all the equipment installed is not transferred from another activity, leakage has been correctly considered to be zero.

LEy = 0

In summary, AENOR has validated that all the data and parameters used for the ex ante calculation have been provided by truthful and appropriate sources. Data included in the latest version of the PDD and its annexed spreadsheet /17/ have been validated against the evidence provided to the DOE team that are deemed as appropriate. The assessment of all data and parameters involved in the ERs determination is carried out in sections 3.10.1 and 3.10.2 of this report.

AENOR confirms that all the formulae and algorithms used to determine the ERs have been applied according to the methodology AMS-IA version 16.0. Other inputs used for the emission reduction projection, as well as default values available in the methodology applied were validated to be correct.

3.9 Calculation of GHG Emissions

The methodology for calculating emission reductions is transparently documented and it complies with existing good practice. The calculation methods applied to the determination of emission reductions are explained in detail in the latest version of the PDD and they follow the procedures laid down in the approved methodology AMS-IA version 16.

The PDD states clearly how each equation is applied and the actual calculations are clearly presented in the annexed spreadsheet. The selection of parameters and GHG calculations is complete and transparent. The accuracy of the calculations has been verified. The emissions estimated can be replicated using the data and parameter values provided in the PDD and supporting files submitted for revalidation. Data sources have been validated by AENOR.

AENOR confirms that the estimated amount of emission reductions for the second crediting period is 104,196 tCO₂e (14,885 tCO₂e/year). This estimation is in accordance with the documentation submitted and it has been validated by the validation team.

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3.10 Monitoring Plan

The project applies the approved monitoring methodology AMS-IA (version 16.0) – "Electricity generator by the user". The original monitoring plan was updated based on AMS-IA latest requirements.

Parameters and data available at validation were cross-checked with official sources and it was found consistent with the methodology. The monitoring plan proposed follows the same monitoring approach that in the first crediting period, and it was considered adequate. Authority and responsibilities are well defined in the CDM Operations Plan for the West Nile Electrification Project [19] and Quality Assurance and Quality Control procedures are managed in order to reduce the uncertainties of the emissions reduction monitored.

Provisions of calibration frequencies of all the equipment involved in the monitoring are included in the PDD and are deemed as appropriate by the DOE team because they are defined according to the specifications stated in the applied methodologies and tools.

The project monitoring plan is in compliance with the monitoring methodology AMS-IA (version 16.0) "Electricity generator by the user".

It is AENOR's opinion, that the project participants are able to implement the monitoring plan.

3.10.1 Parameters determined ex-ante

Parameter	Value applied	Validation remarks
EF_{CO2} CO ₂ emission factor	0.8 tCO ₂ e/MWh	Default value based on the applied methodology AMS-IA (version 16.0)
I : Average technical distribution losses that would have been observed in diesel powered mini-grids installed by public programmes or distribution companies in isolated areas	0	Default value based on the applied methodology AMS-IA (version 16.0) (page 3 footnote 6) In the absence of the project activity, electricity supply would not have entailed distribution losses e.g. users are in the same location as the generator
CAP_{BL} : Installed capacity of the hydro power plant before the implementation of the project activity (W)	0 W	Default value based on the applied methodology ACM0002 (version 14.0.0)

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Parameter	Value applied	Validation remarks
A_{BL} : Area of the single reservoir measured in the surface of the water, before the implementation of the project activity, when the reservoir is full (m ²).	0 m ²	Default value based on the applied methodology ACM0002 (version 14.0.0)

Therefore, according to the Tool "Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period" version 03.0.1", all the parameters have been correctly updated and the current baseline complies with all relevant mandatory national and sectorial policies which have come into effect after the submission of the project activity for validation and are applicable at the time of requesting renewal of crediting period.

3.10.2 Parameters monitored ex-post

Parameter	Monitoring frequency	Validation Remarks
EG_{i,y} Annual output of the renewable energy technologies of the group of <i>i</i> renewable energy technologies installed	Continuously	This parameter refers only to the electricity generated by the project and delivered to the grid. It will be calculated according to the formula: EG_{i,y} = EG_{GROSS,y} - EC_{AUX} AENOR has validated that the ex ante value for this parameter at the time of renewal 20,565 MWh/year. It has been validated through the evidence /14//15//22/. AENOR confirms that data used is real, conservative and appropriate.
EG_{GROSS,y} Gross energy generation of the project activity	Continuously	This parameter refers the gross electricity generated by the project before subtracting auxiliary electricity consumption. It will be measured continuously using an electricity meter during the second crediting period. AENOR has validated that the ex ante value for this parameter at the time of renewal 20,650 MWh/year. It has been validated through the evidence /14//15/. AENOR confirms that data used is real, conservative and appropriate.

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Parameter	Monitoring frequency	Validation Remarks
EC_{Aux} Auxiliary electricity consumption of the project activity	Continuously	This parameter refers the auxiliary electricity consumption of the project. It will be measured continuously using an electricity meter during the second crediting period. AENOR has validated that the ex ante value for this parameter at the time of renewal 85MWh/year. It has been validated through the evidence /22/ which shows the real electricity consumption of the plant for the whole year 2013. AENOR confirms that data used is real, conservative and appropriate.
CAP_{pj} Installed capacity of the hydro power plant after the implementation of the project activity	Yearly	This parameter refers the installed capacity of the project activity based on recognized standards and technical specifications. AENOR has validated that the value for this parameter at the time of renewal 3,500,000 W. It has been validated through the on site visit and also through the evidence /8//14//15/. AENOR confirms that data used is real, conservative and appropriate.
A_{pj} Area of the single or multiple reservoirs measured in the surface of the water, after the implementation of the project activity, when the reservoir is full	Yearly	This parameter refers the area of the reservoir of the project activity, when it is full. AENOR has validated that the value for this parameter at the time of renewal, 59,104 m ² . It has been validated through the on site visit and also through the evidence /21/. AENOR confirms that data used is real, conservative and appropriate.

Apart from the information stated in the table above, it is important to mention that provisions of calibration frequencies of all the equipment involved in the monitoring are included in the PDD and are deemed as appropriate by the DOE team because they are defined according to the specifications stated in the applied methodology.

3.11 Comments by Local Stakeholders

In accordance with the "CDM Project Cycle Procedure version 05.0", carrying out a local stakeholder consultation is not necessary for the renewal of the crediting period.

3.12 Environmental Impacts

According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring

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methodology. Therefore, in the updated PDD, section dedicated to the Environmental Impacts derived from the project remains the same as in the PDD registered for the first crediting period.

In any case, AENOR has validated that the project activity is still complying with the environmental legislation in Uganda as it was crosschecked against the relevant regulation in the scope.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

In accordance with the "CDM Project Cycle Procedure version 05.0", carrying out a consultation to parties and NGOs is not necessary for the renewal of the crediting period.

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5 VALIDATION OPINION

AENOR has performed the validation of the renewal of the crediting period of the project "West Nile Electrification Project (WNEP)". The revalidation was performed on the basis of UNFCCC criteria and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The review of the project design documentation, and the subsequent follow-up interviews have provided AENOR with enough evidence to determine the fulfillment of stated criteria. In AENOR's opinion, the project meets the UNFCCC requirements for the renewal of the crediting period. Hence, AENOR recommends the renewal of the crediting period of the project activity.

AENOR can confirm that the project is implemented and maintained as designed and in accordance with the applied methodology AMS-IA "Electricity generator by the user" version 16.0.

The estimated amount of emission reductions for the second crediting period 01/01/2012 to 31/12/2018 is **104,196 tCO₂e** (14,885 tCO₂e/year) in accordance with the documentation submitted and validated by the validation team.

In AENOR's opinion, the project correctly applies and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria.

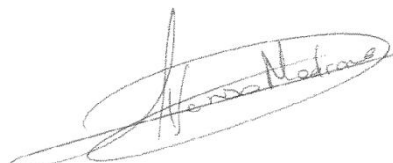
The validation has been performed using a risk based approach, as described above. The only purpose of this report is its use during the registration process as part of the CDM project cycle. Hence, AENOR cannot be held liable by any party for decisions made or not made based on the validation opinion, which goes beyond the purpose.

01/04/2014



Luis Robles Olmos
Authorized person

01/04/2014



Alfonso Medrano Gutiérrez
Validation Team Leader

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6 CORRECTIVE ACTION REQUESTS, CLARIFICATIONS AND FORWARD ACTION REQUESTS

TITLE	"West Nile Electrification Project (WNEP)"		
FINDING	Nº 1		
Classification	CAR <input checked="" type="checkbox"/>	CL <input type="checkbox"/>	FAR <input type="checkbox"/>
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>The PDD has been prepared using the latest template approved by the EB (F-CDM-PDD version 04.1) however there are some sections that do not follow the instructions stated in the "Guidelines for Completing the Project Design Document Form version 01.0":</p> <ul style="list-style-type: none"> - Section A.3 shall be completed including technical characteristics as per the Guideline- - Section B.1 does not refer to the UNFCCC CDM website for the exact reference of approved baseline and monitoring methodologies and tools. - Section B.3 shall be updated including a flow diagram of the project boundary based on the description of section A.3. A table indicating the emissions sources and GHGs included in the project boundary shall be also presented. - Information included in Appendix 3-4 shall be properly organized as per the criteria stated in the guideline. 		
PP RESPONSE #1	<i>This section shall be filled by the PP.</i>		
<i>It shall address the corrective action taken in details</i>	<ul style="list-style-type: none"> • Section A.3 has been completed in line with the Guideline • Section B.1 has been updated and the UNFCCC CDM website is referenced. • Section B.3 has been updated to include a table showing emissions sources included in the project boundary and a flow diagram of the project boundary • Organization of appendices 3 and 4 was updated as per the guideline 		
<i>It shall provide and indentified the evidences proposed (if applicable)</i>	N/A		
DOE Assessment #1 <i>The assessment shall encompass all open issues. In case of non-closure additional corrective action and DOE assessments (#2, #3, etc.) shall be added</i>	Information included in section B.1 is not complete. The reference to the applied Tool has not been included.		
PP RESPONSE #2	<i>This section shall be filled by the PP.</i>		
<i>Corrective action</i>	Section B.1 has been updated and the UNFCCC CDM website is referenced for the one applied Tool, <i>Assessment of the validity of the</i>		

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	<i>original/current baseline and update of the baseline at the renewal of the crediting period. Version 3.0.1</i>	
<i>Evidence proposed</i>	N/A	
DOE Assessment #2	The PDD has been correctly completed according to the "Guidelines for Completing the Project Design Document Form version 01.0"	
Conclusion <i>Tick the appropriate checkbox</i>	CAR/CL CLOSED <input checked="" type="checkbox"/>	To be checked during the first periodic verification <input type="checkbox"/>

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TITLE	"West Nile Electrification Project (WNEP)"		
FINDING	Nº 2		
Classification	CAR <input checked="" type="checkbox"/>	CL <input type="checkbox"/>	FAR <input type="checkbox"/>
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Information provided on the location of the project activity does not allow for a clear identification of the site. Latitude and longitude coordinates are not indicated in the PDD.		
PP RESPONSE #1 <i>It shall address the corrective action taken in details</i>	<i>This section shall be filled by the PP.</i>		
<i>It shall provide and indentified the evidences proposed (if applicable)</i>	The geographical coordinates have been added to section A.4.2		
	N/A		
DOE Assessment #1 <i>The assessment shall encompass all open issues. In case of non-closure additional corrective action and DOE assessments (#2, #3, etc.) shall be added</i>	Coordinates have been correctly added to the latest version of the PDD.		
PP RESPONSE #2 <i>Corrective action</i>	<i>This section shall be filled by the PP.</i>		
<i>Evidence proposed</i>			
DOE Assessment #2			
Conclusion <i>Tick the appropriate checkbox</i>	CAR/CL CLOSED <input checked="" type="checkbox"/>	To be checked during the first periodic verification <input type="checkbox"/>	

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TITLE	"West Nile Electrification Project (WNEP)"		
FINDING	Nº 3		
Classification	CAR <input checked="" type="checkbox"/>	CL <input type="checkbox"/>	FAR <input type="checkbox"/>
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The PDD mentions that the project activity does not have a reservoir; however during the on site visit AENOR visited the reservoir of the project. The PDD shall be updated including this condition and how it has to be taken into account in order to calculate Project Emissions according to the latest version of the methodology ACM0002.		
PP RESPONSE #1	<i>This section shall be filled by the PP.</i>		
<i>It shall address the corrective action taken in details</i>	<p>The project is a run-of-river hydroelectric plant, which includes a diversion weir and a run-of-river reservoir that is operated on a run-of-river basis, with only 7.5 hours of storage capacity. ACM0002 defines a reservoir as "a water body created in valleys to store water generally made by the construction of a dam" and notes in the applicability conditions that a newly installed project activity may be "hydro power plant/unit (either with a run-of-river reservoir or an accumulation reservoir)." The project includes what has been classified by an independent firm, Fichtner GmbH, as a run-of-river reservoir, which does not store water, like an accumulation reservoir, since its inflow and outflow are the same. The characteristics of the reservoir included in this hydro power plant are not of the type where CH₄ emissions are a concern. This is also supported by the Environmental Impact Statement for the project. For this reason, project emissions from this source are not included in the project boundary.</p> <p>The PDD has been updated to address and describe the run-of-river reservoir.</p>		
<i>It shall provide and indentified the evidences proposed (if applicable)</i>	<u>Nyagak Hydropower Project Review Report – Task 1</u> : Fichtner GmbH & Co. KG, March 2010		
DOE Assessment #1 <i>The assessment shall encompass all open issues. In case of non-closure additional corrective action and DOE assessments (#2, #3, etc.) shall be added</i>	<p>Methodologies AMS I.A version 16 and ACM0002 version 14 clearly state that Project Emissions from water reservoirs of hydropower plants shall be accounted.</p> <p>None of those methodologies make a difference between a run of river reservoir and an accumulation reservoir in order to calculate Project Emissions. The methodologies do not state in any paragraph</p>		

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	<p>that Project Emissions for hydropower plants with run of river reservoirs are equal to zero. (If they do, please let us know where).</p> <p>They only talk about "reservoir", and the definition provided in the methodology ACM0002 meets perfectly the characteristics of the Nyagak Hydropower Plant's reservoir.</p> <p>Therefore, according to paragraph 13 of methodology AMS I.A version 16 and paragraph 36 of methodology ACM0002 version 14, "for hydro power project activities that result in new single or multiple reservoirs and hydro power project activities that result in the increase of single or multiple existing reservoirs, project proponents shall account for CH4 and CO2 emissions from the reservoirs".</p> <p>Furthermore, applicability conditions from both methodologies classify two different kinds of reservoir, existing reservoirs and new reservoirs, and in both cases power density shall be calculated as per the definitions given in Project Emissions section.</p> <p>The project shall satisfy one of the three conditions stated in the applied methodology. Please update the PDD indicating which condition is satisfied by the project.</p>	
PP RESPONSE #2	<i>This section shall be filled by the PP.</i>	
<i>Corrective action</i>	The PDD was updated to take into account the project reservoir.	
<i>Evidence proposed</i>	N/A	
DOE Assessment #2	All the conditions stated in the applied methodology are discussed in the PDD. The applicability of the methodology is demonstrated properly.	
Conclusion <i>Tick the appropriate checkbox</i>	CAR/CL CLOSED <input checked="" type="checkbox"/>	To be checked during the first periodic verification <input type="checkbox"/>

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TITLE	"West Nile Electrification Project (WNEP)"		
FINDING	Nº 4		
Classification	CAR <input checked="" type="checkbox"/>	CL <input type="checkbox"/>	FAR <input type="checkbox"/>
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The list of parameters in chapter B.6.2 is not complete with regard to the requirements of the applied methodology. Parameters related to PE calculations from the reservoir of the hydropower plant have not been included.		
PP RESPONSE #1			
<i>It shall address the corrective action taken in details</i>	The PE calculations are not necessary for the hydropower plant since it is a run-of-river project with only a run-of-river reservoir (also called a head pond). This is further explained in the response to CAR 3.No changes were made to section B.6.2.		
<i>It shall provide and indentified the evidences proposed (if applicable)</i>	N/A		
DOE Assessment #1 <i>The assessment shall encompass all open issues. In case of non-closure additional corrective action and DOE assessments (#2, #3, etc.) shall be added</i>	As it has been explained in the response to CAR3 PE shall be calculated, and therefore, parameters involved in that calculation shall be listed in the PDD.		
PP RESPONSE #2	<i>This section shall be filled by the PP.</i>		
<i>Corrective action</i>	Section B.6.2 has been updated to include two parameters related to the project emissions calculation for the reservoir.		
<i>Evidence proposed</i>	N/A		
DOE Assessment #2	The list of parameters is complete with regard to the requirements of the applied methodology. Parameters related to PE calculations from the reservoir of the hydropower plant have been included.		
Conclusion <i>Tick the appropriate checkbox</i>	CAR/CL CLOSED <input checked="" type="checkbox"/>	To be checked during the first periodic verification <input type="checkbox"/>	

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TITLE	"West Nile Electrification Project (WNEP)"		
FINDING	Nº 5		
Classification	CAR <input checked="" type="checkbox"/>	CL <input type="checkbox"/>	FAR <input type="checkbox"/>
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The list of parameters in chapter B.7.1 is not complete with regard to the requirements of the applied methodologies. Parameters related to the PE calculations from the reservoir of the hydropower plant have not been included. According to the "Guidelines for Completing the Project Design Document Form version 01.0", the PDD shall be updated including a description table for each parameter to be monitored		
PP RESPONSE #1			
<i>It shall address the corrective action taken in details</i>	The PE calculations are not necessary for the hydropower plant since it is a run-of-river project with only a run-of-river reservoir (also called a head pond). This is further explained in the response to CAR 3. The rest of the finding has been addressed in the PDD. <ul style="list-style-type: none"> B.7.1 was not changed with respect to parameters related to the PE calculations from the reservoir. 		
<i>It shall provide and indentified the evidences proposed (if applicable)</i>	N/A		
DOE Assessment #1 <i>The assessment shall encompass all open issues. In case of non-closure additional corrective action and DOE assessments (#2, #3, etc.) shall be added</i>	As it has been explained in the response to CAR3 PE shall be calculated, and therefore, parameters involved in that calculation shall be listed in the PDD.		
PP RESPONSE #2	<i>This section shall be filled by the PP.</i>		
<i>Corrective action</i>	Section B.7.1 has been updated to include two parameters related to the project emissions calculation for the reservoir.		
<i>Evidence proposed</i>	WNEP power density calculation.		
DOE Assessment #2	The list of parameters is complete with regard to the requirements of the applied methodology. Parameters related to PE calculations from the reservoir of the hydropower plant have been included.		
Conclusion <i>Tick the appropriate checkbox</i>	CAR/CL CLOSED <input checked="" type="checkbox"/>	To be checked during the first periodic verification <input type="checkbox"/>	

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"West Nile Electrification Project (WNEP)"

TITLE	"West Nile Electrification Project (WNEP)"		
FINDING	Nº 6		
Classification	CAR <input checked="" type="checkbox"/>	CL <input type="checkbox"/>	FAR <input type="checkbox"/>
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Provisions regarding calibration frequencies for all the equipment involved in the project shall be included in the monitoring plan.		
PP RESPONSE #1	<i>This section shall be filled by the PP.</i>		
<i>It shall address the corrective action taken in details</i>	This finding has been addressed in the PDD. The minimum calibration frequency of the electricity meters at the hydro power plant has been specified in the monitoring plan.		
<i>It shall provide and indentified the evidences proposed (if applicable)</i>			
DOE Assessment #1 <i>The assessment shall encompass all open issues. In case of non-closure additional corrective action and DOE assessments (#2, #3, etc.) shall be added</i>	Calibration frequencies of the equipment are correctly indicated in the PDD.		
PP RESPONSE #2	<i>This section shall be filled by the PP.</i>		
<i>Corrective action</i>			
<i>Evidence proposed</i>			
DOE Assessment #2			
Conclusion <i>Tick the appropriate checkbox</i>	CAR/CL CLOSED <input checked="" type="checkbox"/>	To be checked during the first periodic verification <input type="checkbox"/>	

VALIDATION REPORT

"West Nile Electrification Project (WNEP)"

TITLE	"West Nile Electrification Project (WNEP)"		
FINDING	Nº 1		
Classification	CAR <input type="checkbox"/>	CL <input checked="" type="checkbox"/>	FAR <input type="checkbox"/>
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Evidence supporting that the equipment installed in component 1 is not transferred from another activity shall be provided to the DOE team.		
PP RESPONSE #1	<i>This section shall be filled by the PP.</i>		
<i>It shall address the corrective action taken in details</i>	Evidence from the turbine manufacturer demonstrates that the equipment is new. Two 1.75 MW Francis turbines manufactured by Mavel and supplied by Skoda were selected through a competitive bidding process.		
<i>It shall provide and indentified the evidences proposed (if applicable)</i>	<u>HPP NYAGAK, NEAR PAIDHA TOWN – UGANDA, DETAIL DESIGN;</u> Mavel a.s., October 2006		
DOE Assessment #1 <i>The assessment shall encompass all open issues. In case of non-closure additional corrective action and DOE assessments (#2, #3, etc.) shall be added</i>	Evidence provided does not demonstrate that the equipment installed is new. Evidence such as purchasing invoices or evidence of the bidding process shall be provided to the DOE team.		
PP RESPONSE #2	<i>This section shall be filled by the PP.</i>		
<i>Corrective action</i>	The commercial invoice, Test inspection certificate, and packing list of equipments are provided.		
<i>Evidence proposed</i>	LC 2007 21 2nd Instalment 29-2-08 Packing lists - EM equipment		
DOE Assessment #2	Evidence has been provided and deemed as appropriate.		
Conclusion <i>Tick the appropriate checkbox</i>	CAR/CL CLOSED <input checked="" type="checkbox"/>	To be checked during the first periodic verification <input type="checkbox"/>	

VALIDATION REPORT

"West Nile Electrification Project (WNEP)"

TITLE	"West Nile Electrification Project (WNEP)"		
FINDING	Nº 2		
Classification	CAR <input type="checkbox"/>	CL <input checked="" type="checkbox"/>	FAR <input type="checkbox"/>
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Evidence supporting the value for parameter $EG_{i,y}$ shall be provided to the DOE team. The procedure to obtain this value shall be clarified in the PDD.		
PP RESPONSE #1	<i>This section shall be filled by the PP.</i>		
<i>It shall address the corrective action taken in details</i>	The updated value of 20,650 MWh /year is applied instead, from a recent study by Fichtner GmbH using updated hydrological data and final equipment characteristics.		
<i>It shall provide and indentified the evidences proposed (if applicable)</i>	This finding has been addressed in the PDD and ER calculation spreadsheet by updating the ex-ante estimate of the generation by the hydro plant.		
DOE Assessment #1 <i>The assessment shall encompass all open issues. In case of non-closure additional corrective action and DOE assessments (#2, #3, etc.) shall be added</i>	Nyagak Hydropower Project Review Report – Task 1; Fichtner GmbH & Co. KG, March 2010		
PP RESPONSE #2	<i>This section shall be filled by the PP.</i>		
<i>Corrective action</i>			
<i>Evidence proposed</i>			
DOE Assessment #2			
Conclusion <i>Tick the appropriate checkbox</i>	CAR/CL CLOSED <input checked="" type="checkbox"/>	To be checked during the first periodic verification <input type="checkbox"/>	

VALIDATION REPORT

"West Nile Electrification Project (WNEP)"

TITLE	"West Nile Electrification Project (WNEP)"		
FINDING	Nº 3		
Classification	CAR <input type="checkbox"/>	CL <input checked="" type="checkbox"/>	FAR <input type="checkbox"/>
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The separate MP created for this project (CDM Operations Plan for the West Nile Electrification Project) shall be provided to the DOE team.		
PP RESPONSE #1 <i>It shall address the corrective action taken in details</i>	<i>This section shall be filled by the PP.</i>		
<i>It shall provide and indentified the evidences proposed (if applicable)</i>	OMP of the project is provided to DOE.		
	CDM Operations Plan for the West Nile Electrification Project		
DOE Assessment #1 <i>The assessment shall encompass all open issues. In case of non-closure additional corrective action and DOE assessments (#2, #3, etc.) shall be added</i>	Evidence is provided and deemed as appropriate.		
PP RESPONSE #2 <i>Corrective action</i>	<i>This section shall be filled by the PP.</i>		
<i>Evidence proposed</i>			
DOE Assessment #2			
Conclusion <i>Tick the appropriate checkbox</i>	CAR/CL CLOSED <input checked="" type="checkbox"/>	To be checked during the first periodic verification. <input type="checkbox"/>	

VALIDATION REPORT

"West Nile Electrification Project (WNEP)"

7 REFERENCES

Reference	Document Name	Author/Competent Authority
1	PDD version 1	Project Proponent
2	PDD version 6	Project Proponent
3	Approved Methodology: AMS-IA (Version. 16.0)	CDM - EXECUTIVE BOARD
4	CDM Project Cycle Procedure version 05.0	CDM - EXECUTIVE BOARD
5	CDM Project Standard version 05.0.	CDM - EXECUTIVE BOARD
6	Tool "Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period" version 03.0.1".	CDM - EXECUTIVE BOARD
7	CDM Validation and Verification Standard. Version 05.0.	CDM - EXECUTIVE BOARD
8	151-02R4 Technical specification	MAVEL A.S
9	RENEWABLE ENERGY POLICY 2007	Government of Uganda
10	Approved_Uganda Renewable Energy Feed-in Tariff Guidelines 2011-12	Electricity Regulatory Agency. Uganda
11	Bank Project Appraisal Document	The World Bank
12	MoE Annual Report 2008	Ministry of Energy and Mineral Development, UGANDA
13	Solar PV target market approach 2007	Rural Electrification Agency Ministry of Energy and Mineral Development, UGANDA
14	Nyagak Hydropower Project Review Report – Task 1; Fichtner GmbH & Co. KG, March 2010	Fichtner
15	Provisional_Taking_Over_Certificate_VS Hydro_06.10.2012	Fichtner
16	Uganda WNEP ssc ER calculation	Project Proponent
17	Invoice LC 2007 21 2nd Instalment	SkodaExport A.S
18	Packing lists - EM equipment	SkodaExport A.S
19	OMP WNEP_final	The World Bank
20	Notification of the intention to request the renewal of crediting period of the project activity	The World Bank
21	WNEP power density calculation.xls	Project Proponent

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"West Nile Electrification Project (WNEP)"

Reference	Document Name	Author/Competent Authority
22	WNEP CDM DATA Hydro-2013.xls	Project Proponent

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ANNEX 1: CDM VALIDATION PROTOCOL

VALIDATION PROTOCOL

RENEWAL OF THE CREDITING PERIOD OF THE PROJECT:

"West Nile Electrification Project (WNEP)"

PROJECTS PARTICIPANTS:

WEST NILE RURAL ELECTRIFICATION COMPANY LIMITED
(WENRECO).

INTERNATIONAL BANK FOR RECONSTRUCTION AND
DEVELOPMENT ACTING AS TRUSTEE FOR THE PROTOTYPE CARBON
FUND

Validation Type	
<input checked="" type="checkbox"/> Validation of a Project Activity	
Validation Team: Alfonso MEDRANO GUTIERREZ. Chief Validator Luis ROBLES OLMOS. Validator José Antonio GESTO VILACOBÁ. Validator	
Version of this Validation Protocol: 04	Date: 01/04/2014

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CHECKLIST TOPIC / QUESTION	MoV/Ref*	COMMENTS	Draft Conclusion	Final Conclusion
A. GENERAL DESCRIPTION OF PROJECT ACTIVITY				
A.1. Approval				
A.1.1 Have all the Parties involved in the project activity provided a written Letter of Approval of the project activity? Are they valid for the project activity?	DR	N/A. According to paragraph 247 of the CDM Project Cycle Procedure version 05.0, for the purpose of renewal of the crediting period it is not necessary to obtain a new letter of approval from Parties involved.	N/A	N/A
A.1.2 Do the Letters of Approval confirm that: <ul style="list-style-type: none"> The Party is a Party to the Kyoto Protocol The participation is voluntary The CDM project activity contributes to the sustainable development (host Party) The title of the project activity is precise and coincides with the title included in the PDD 	DR	N/A. According to paragraph 247 of the CDM Project Cycle Procedure version 05.0, for the purpose of renewal of the crediting period it is not necessary to obtain a new letter of approval from Parties involved.	N/A	N/A
A.1.3 Has the Letter of Approval been obtained from the project participants or directly from the DNA? In case that it has been obtained from the project participant, how has its authenticity been assessed?	DR	N/A. According to paragraph 247 of the CDM Project Cycle Procedure version 05.0, for the purpose of renewal of the crediting period it is not necessary to obtain a new letter of approval from Parties involved.	N/A	N/A
A.1.4. If LoA contains either additional specification or conditions of the project activity, then has the request for registration been based on the documents specified in the LoA?	DR	N/A. According to paragraph 247 of the CDM Project Cycle Procedure version 05.0, for the purpose of renewal of the crediting period it is not necessary to obtain a new letter of approval from Parties involved.	N/A	N/A
A.1.5. If the LoA references a specific version of the Validation Report or PDD and this version cannot be submitted, then has either of the following been submitted? a) a statement indicating final LoA has not been	DR	N/A. According to paragraph 247 of the CDM Project Cycle Procedure version 05.0, for the purpose of renewal of the crediting period it is not necessary to obtain a new letter of approval from Parties involved.	N/A	N/A

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received, or b) an updated Validation Report/ PDD				
A.2. Authorization of Project participants				
A.2.1. Is the form required for the indication of project participants correctly applied in the PDD?	DR	Yes, the form required for the indication of project participants is correctly applied in the PDD.	OK	OK
A.2.2. Has each project participant been authorized in a letter of approval by at least one Party involved?	DR	Yes, each project participant has been authorized in a letter of approval by at least one Party involved	OK	OK
A.2.3. Is all information on participants / Parties provided in consistency with details provided by further chapters of the PDD (in particular Appendix 1)?	DR	Yes, all information on participants is consistent in the PDD.	OK	OK
A.2.4. Are any other project participants approved but not listed in the PDD?	DR	No, all the PPs approved are listed in the PDD.	OK	OK
A. 3. Modalities of communication				
<p>A.3.1. Has the corporate and personal identity of all project participants and focal points included in the MoC statement been validated? Have the signatures and employment status been checked?</p> <p>This has been validated through:</p> <p>(a) Directly checking evidence for corporate, personal identity and other relevant documentation;</p> <p>(b) Notarized documentation; or</p>	DR	N/A	N/A	N/A

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(c) Written confirmation from the project participant or the coordinating/managing entity that submits to it the MoC statement that all corporate and personal details, including specimen signatures, are valid and accurate. In this case, the official who signed the written confirmation (if a different person than the signatory in the MoC) is duly authorized to do so.				
A.3.2. Has the MoC statement been received from the PP with whom the DOE has a contractual relationship?	DR	N/A	N/A	N/A
A.3.3. In the case of a CDM PoA, has the MoC statement been received from the coordinating/managing entity?	DR	N/A	N/A	N/A
<p>A.3.4 Has the MoC statement been correctly completed and duly authorized?</p> <p>(a) The latest version of the form "Modalities of Communication statement" (F CDM MOC) has been used;</p> <p>(b) The information required as per the F-CDM-MOC, including its annex 1, is correctly completed;</p> <p>(c) The project participant's authorized signatories signing the F-CDM-MOC correspond to the project participant's authorized signatories included in F-CDM-MOC, annex 1.</p>	DR	N/A	N/A	N/A
A.4. Project Design Document				

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A.4.1. Does the used project title clearly enable to identify the unique CDM project activity? Is it consistent in all section of the PDD and in all documents?	DR	Yes, the used project title identifies clearly the unique CDM project activity	OK	OK
A.4.2. Is there any indication concerning the version number and the date of the version?	DR	Yes there is an indication of the date and the version number of the PDD.	OK	OK
A.4.3. Is this consistent with the time line of the project's history?	DR	Yes, it is in line with the time line of the project's history	OK	OK
A.4.4. Is the PDD prepared in accordance with the latest template and requirements from the CDM Executive Board?	DR	<p>CAR1: The PDD has been prepared using the latest template approved by the EB (F-CDM-PDD version 04.1) however there are some sections that do not follow the instructions stated in the "Guidelines for Completing the Project Design Document Form version 01.0":</p> <ul style="list-style-type: none"> - Section A.3 shall be completed including technical characteristics as per the Guideline- - Section B.1 does not refer to the UNFCCC CDM website for the exact reference of approved baseline and monitoring methodologies and tools. - Section B.3 shall be updated including a flow diagram of the project boundary based on the description of section A.3. A table indicating the emissions sources and GHGs included in the project boundary shall be also presented. - Information included in Appendix 3-4 shall be properly organized as per the criteria stated in the guideline. <p>The PDD has been correctly completed according to the "Guidelines for Completing the Project Design Document Form version 01.0"</p> <p>CAR1 is closed.</p>	CAR1	OK
A.4.5. Has the PDD been published for Global Stakeholder Consultation (GSC) in UNFCCC website?	DR	N/A. According to the CDM Project Cycle Procedure version 05.0, for the purpose of renewal of the crediting period it is not necessary to publish the PDD for Global Stakeholder Consultation (GSC) in UNFCCC website.	N/A	N/A

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A.4.6. Have there been any comments during the GSC process?	DR	N/A. According to the CDM Project Cycle Procedure version 05.0, for the purpose of renewal of the crediting period it is not necessary to publish the PDD for Global Stakeholder Consultation (GSC) in UNFCCC website.	N/A	N/A
A.4.7. Have they been correctly addressed by the validation team?	DR	N/A. According to the CDM Project Cycle Procedure version 05.0, for the purpose of renewal of the crediting period it is not necessary to publish the PDD for Global Stakeholder Consultation (GSC) in UNFCCC website.	N/A	N/A
A.5. Description of the project activity The PDD (section A.1) shall contain a clear description of the project activity that provides the reader with a clear understanding of the precise nature of the project activity.				
A.5.1. Is the description delivering a transparent overview of the project activities? Does the description of the proposed CDM project activity as contained in the PDD sufficiently cover all relevant elements? Is it accurate and does it provide the reader with a clear understanding of the nature of the proposed CDM project activity?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
A.5.2. What proofs are available for demonstrating that the project description is in compliance with the actual situation or planning?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
A.5.3. Is the information provided by these proofs consistent with the information provided by the PDD?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
A.5.4. Has the validation team conducted a physical site inspection to confirm the description of the PDD? If not, justify.	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan	N/A	N/A

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		using an approved baseline and monitoring methodology.		
A.5.5. If the proposed CDM project activity involves the alteration of an existing installation or process, does the project description clearly state the differences resulting from the project activity compared to the pre-project situation?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
A.5.6. In the case of greenfield project activity, is the project design described sufficiently by means of specifications, drawings and manuals?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
A.5.7. Does the PDD explain how the proposed project activity reduces greenhouse gas emissions (i.e. what type of technology is being employed, what measures are undertaken as part of the project activity, etc)?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
A.6. Technical description of the project activity				
The PDD (section A.2 and A.3) shall contain a clear description of the project activity that provides the reader a clear understanding of the technical aspects of its implementation.				
<i>A.6.1. Location of the project activity</i>				
A.6.1.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)? Are the latitude and longitude coordinates on the site indicated (decimal points)?	DR	<p>CAR2: Information provided on the location of the project activity does not allow for a clear identification of the site. Latitude and longitude coordinates are not indicated in the PDD.</p> <p>Coordinates have been correctly included in the latest version of the PDD.</p> <p>CAR2 is closed.</p> <p>The information provided on the location of the project activity</p>	CAR2	OK

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		allows for a clear identification of the site.		
A.6.1.2. How is it ensured and/or demonstrated that the project proponents can implement the project at this site (ownership, licenses, contracts etc.)?	DR	N/A. The project is already implemented. The PP is requesting the renewal of the crediting period.	N/A	N/A
<i>A.6.2. Category of the project activity</i>				
A.6.2.1. Does the project qualify as a small scale CDM project activity as defined in paragraph 6 (c) of decision 3/CMP.1 on the modalities and procedures for the CDM?	DR	Yes, the project qualified as a SSC CDM project activity.	OK	OK
A.6.2.2. To which category(ies) does the project activity belong to? Is this category correctly identified and indicated?	DR	Project belongs to categories I and II. Categories are correctly identified in the PDD.	OK	OK
A.6.2.3. Does proposed project activity confirm to one of the project categories defined for small scale CDM project activities?	DR	Yes it does.	OK	OK
A.6.2.4. In the case of a small scale project activity, is it justified that it is not a debundled component of a larger project activity?	DR	Yes, it is correctly justified.	OK	OK
A.6.2.5. In case of small scale project activities, is the estimate of emissions reductions increasing during the crediting period? In affirmative case, have project participants	DR	No, the estimate of emissions reductions is not increasing during the crediting period	OK	OK

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demonstrated in the CDM-SSC-PDD that the project activity characteristics are defined in a way that precludes project activities to go beyond the limits for SSC Project activities (as stipulated in paragraph 3 of the General Guidelines to SSC CDM methodologies)?				
<i>A.6.3. Technology to be employed by the project activity</i>				
A.6.3.1. Does the description of the technology to be applied provide sufficient and transparent input/information to evaluate its impact on the greenhouse gas balance? And, is the explanation how the project will reduce greenhouse gas emission transparent and suitable?	DR	The description of the technology to be applied provides sufficient information to evaluate its impact on the greenhouse gas balance.	CAR1	OK
A.6.3.2. Does the project require extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period? If so, does the project make provisions for meeting training and maintenance needs?	DR	Yes, the project makes provisions for training and maintenance needs.	OK	OK
A.6.3.3. Is a schedule available for the implementation of the project and are there any risks for delays? Is the schedule consistent with the starting date of the crediting period?	DR	The project is already implemented. The PP is requesting the renewal of the crediting period.	OK	OK
<i>A.6.4. Estimated amount of emission reductions over the chosen crediting period</i>				

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A.6.4.1. Is the form required for the indication of projected emission reductions correctly applied?	DR	Yes, the form required for the indication of projected emission reductions is correctly applied.	OK	OK
A.6.4.2. Are the figures provided consistent with other data presented in the PDD?	DR	Figures provided are consistent with other data presented in the PDD.	OK	OK
A.6.5. Public funding of the project activity				
A.6.5.1. In case of public funding from Annex I Parties, is it confirmed that such funding does not result in a diversion of official development assistance?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
A.6.5.2. Is all information provided consistent with the details given in remaining chapters of the PDD (in particular annex 2)?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B. BASELINE AND MONITORING METHODOLOGY				
B.1. Title and reference of the approved baseline and monitoring methodology				
B.1.1. Are reference number, version number, and title of the approved baseline and monitoring methodology clearly indicated?	DR	According to the CDM Project Standard version 05.0 if the registered Project activity does not meet the applicability criteria of the latest approved version of the methodology applied in the original PDD, due to a revision or due to the update of the baseline project participants shall select another applicable methodology. The latest version of the methodology used for the project activity registration, AMS I.D, is not applicable to the project and therefore methodology AMS I.A version 16.0 is applied to component 1 of the project activity. Component 2 is not included for the second crediting period.	OK	OK

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B.1.2. Is the applied version the most recent one and / or is this version still applicable?	DR	The updating related to baseline, estimated emission reductions and monitoring plan has been carried out according to the applied methodology AMS I.A.	OK	OK
B.1.3. Does the PDD refer to the corresponding tools with their latest approved versions?	DR	Yes the PDD refers to the applied tools applied.	CAR1	OK
B.1.4. Have any sources of greenhouse gas emissions been identified by the DOE, within the project boundary following project implementation, which are expected to contribute more than 1% of the overall expected average annual emissions reductions, and which are not addressed by the applied methodology?	DR	No, they are not identified.	OK	OK
B.2. Applicability of the selected methodology to the project activity				
B.2.1. Are the chosen tools considered applicable in accordance with the design of the project and the provisions of the applied methodology?	DR	Yes, the chosen tool is considered applicable in accordance with the design of the project and the provisions of the applied methodology.	OK	OK
B.2.2. Is the choice of the methodology correctly justified by the PDD and is the project in conformance with all applicability criteria of the applied methodology and tools?	DR	Yes, the choice of methodology is correctly justified by the PDD and the project is in conformance with all applicability criteria of the applied methodology and tools	OK	OK
B.2.3 Has been applied the specific guidance provided by the CDM Executive Board in respect to the approved methodology?	DR	Yes, it has been applied.	OK	OK

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B.2.4. Is the evidence provided to the validation team enough to prove that all applicability criteria are completely met?	DR	Yes, evidence has been provided	OK	OK								
B.2.5. In the case of project activities consisting in different sites or implementation phases, are all applicability criteria met for all the sites and phases?	DR	N/A	N/A	N/A								
Fill in the required amount of sub checklists for applicability criteria as given by the methodology applied and comment at least every line answered with “No”												
<p>B.2.6. Criterion 1 - This category comprises renewable electricity generation units that supply individual households/users or groups of households/users included in the project boundary. The applicability is limited to individual households and users that do not have a grid connection except when:</p> <p>a) A group of households or users are supplied electricity through a standalone mini- grid powered by renewable energy generation unit(s) where the capacity of the generating units does not exceed 15 MW (i.e. the sum of installed capacities of all renewable energy generators connected to the mini-grid is less than 15 MW) e.g. a community based stand-alone off-the-grid renewable electricity</p> <p>b) The emissions reduction per renewable energy based lighting system is less than 5 tonnes of CO2e a year and where it can be shown that fossil fuel would have been used in the absence of the project activity by:</p> <p>i. A representative sample survey /90%</p>	DR	<table><tr><th>Applicability checklist</th><th>Yes/No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Evidence provided?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table>	Applicability checklist	Yes/No	Criterion discussed in the PDD?	Yes	Evidence provided?	Yes	Compliance verified?	Yes	OK	OK
Applicability checklist	Yes/No											
Criterion discussed in the PDD?	Yes											
Evidence provided?	Yes											
Compliance verified?	Yes											

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<p>confidence interval, $\pm 10\%$ error margin) of target households; or</p> <p>ii. Official statistics from the host country government agencies;</p> <p>c) A group of households or users are connected to a grid prior to the start date of the project activity (or the start date of validation with due justification), however the electricity from the grid is available for the households and users for less than 36 hours in any given calendar month during the crediting period. If based on actual monitoring it can be demonstrated that during a specific month the power supply from the grid to the households and users is for less than 36 hours, emission reductions can be calculated for that specific month. The methodology is not applicable in cases where, the project activity plant, which supplies electricity to this category of users, is connected to the grid at any time during the crediting period.</p> <p>The renewable energy generation units include technologies such as solar, hydro, wind, biomass gasification and other technologies that produce electricity all of which is used on-site/locally by the user, e.g. solar home systems, wind battery chargers. The renewable generating units may be new installations (Greenfield) or replace existing onsite fossil-fuel-fired generation. To qualify as a small-scale project, the total output of the unit(s) shall not exceed the limit of 15 MW.</p>								
<p>B.2.7. Criterion 2 - Hydro power plants with reservoirs that satisfy at least one of the following conditions are eligible to apply this methodology:</p> <p>a) The project activity is implemented in an existing reservoir with no change in the volume of reservoir;</p>	DR	<table><tr><th>Applicability checklist</th><th>Yes/No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr></table>	Applicability checklist	Yes/No	Criterion discussed in the PDD?	Yes	CAR3	OK
Applicability checklist	Yes/No							
Criterion discussed in the PDD?	Yes							

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<p>b) The project activity is implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per definitions given in the project emissions section, is greater than 4 W/m2;</p> <p>c) The project activity results in new reservoirs and the power density of the power plant, as per definitions given in the project emissions section, is greater than 4W/m².</p>		<table><tr><td>Evidence provided?</td><td>No</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table> <p>CAR3: The PDD mentions that the project activity does not have a reservoir; however during the on site visit AENOR visited the reservoir of the project. The PDD shall be updated including this condition. Besides, this condition shall be taken into account in order to calculate Project Emissions according to the latest version of methodology ACM0002.</p> <p>All the conditions stated in the applied methodology are discussed in the PDD. The applicability of the methodology is demonstrated properly.</p> <p>CAR3 is closed.</p>	Evidence provided?	No	Compliance verified?	Yes						
Evidence provided?	No											
Compliance verified?	Yes											
B.2.8. Criterion 3 - Combined heat and power (cogeneration) systems are not eligible under this category gas distribution network.	DR	<table><tr><th>Applicability checklist</th><th>Yes/No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Evidence provided?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table>	Applicability checklist	Yes/No	Criterion discussed in the PDD?	Yes	Evidence provided?	Yes	Compliance verified?	Yes	OK	OK
Applicability checklist	Yes/No											
Criterion discussed in the PDD?	Yes											
Evidence provided?	Yes											
Compliance verified?	Yes											
B.2.9. Criterion 4 – If the unit added has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15 MW for a small-scale CDM project activity applies only to the renewable component. If the unit added co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15 MW.	DR	<table><tr><th>Applicability checklist</th><th>Yes/No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Evidence provided?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table>	Applicability checklist	Yes/No	Criterion discussed in the PDD?	Yes	Evidence provided?	Yes	Compliance verified?	Yes	OK	OK
Applicability checklist	Yes/No											
Criterion discussed in the PDD?	Yes											
Evidence provided?	Yes											
Compliance verified?	Yes											

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B.2.10. Criterion 5 - Project activities that involve retrofit or replacement of an existing facility for renewable energy generation are included in this category. To qualify as a small-scale project, the total output of the modified or retrofitted unit shall not exceed the limit of 15 MW.	DR	<table><tr><th>Applicability checklist</th><th>Yes/No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Evidence provided?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table>	Applicability checklist	Yes/No	Criterion discussed in the PDD?	Yes	Evidence provided?	Yes	Compliance verified?	Yes	OK	OK
Applicability checklist	Yes/No											
Criterion discussed in the PDD?	Yes											
Evidence provided?	Yes											
Compliance verified?	Yes											
B.2.11. Criterion 6 - In the case of project activities that involve the addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.	DR	<table><tr><th>Applicability checklist</th><th>Yes/No</th></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Evidence provided?</td><td>Yes</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table>	Applicability checklist	Yes/No	Criterion discussed in the PDD?	Yes	Evidence provided?	Yes	Compliance verified?	Yes	OK	OK
Applicability checklist	Yes/No											
Criterion discussed in the PDD?	Yes											
Evidence provided?	Yes											
Compliance verified?	Yes											
B.3. Description of the Project Boundary												
B.3.1 Are all the sources and gases included in the project boundary of the project activity (baseline scenario, project scenario and leakage) in accordance with the applied methodology?	DR	Yes, all the sources and gases included in the project boundary of the project activity (baseline scenario, project scenario and leakage) are in accordance with the applied methodology	CAR1	OK								
B.3.2. Are the inclusion or exclusion of the sources of gases correctly justified?	DR	Yes, inclusion or exclusion of the sources of gases is correctly justified in the PDD.	CAR1	OK								

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B.3.3. Do the spatial and technological boundaries as verified on-site comply with the discussion provided by the PDD?	DR	Yes, the spatial and technological boundaries as verified on-site comply with the discussion provided by the PDD	CAR1	OK
B.3.4. In case of grid connected electricity projects, is the relevant grid correctly identified in accordance with EB guidance and the underlying methodology?	DR	N/A	N/A	N/A
B.4. Description of the baseline scenario identification				
B.4.1. Is the baseline scenario clearly described?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.4.2. Have there been other alternative scenarios considered? Is it justified the selected scenario as the most likely one?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.4.3. Does the PDD follow the steps to determine the baseline scenario required by the methodology?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.4.4. Has the baseline scenario been determined using conservative assumptions where possible?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A

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B.4.5. Does the baseline scenario sufficiently take into account relevant national and/or sectoral policies? (<i>Note: refer Annex 3 EB 22</i>). Are they listed in the PDD?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.4.6 If alternatives are excluded: a.- Is sufficient evidence/ justification provided to support every exclusion of alternatives? Is it reasonable? b.- Is it shown that at least one credible and feasible alternative does not face a barrier? Is this reasonable?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.4.7 Is the baseline scenario determination compatible with the available data and is all literature and sources clearly referenced?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered CDM project activity (assessment and demonstration of additionality):				
B.5.1 Is the start date defined in accordance with the "Glossary of CDM terms"? What evidence is provided to verify that this was the official start date? Is this considered reliable and reasonable?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.2 Is it a new project activity (start date on or after August 2008) or an existing project?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A

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<p>B.5.3 For a new project which does not require a new methodology and has not published its PDD for stakeholder comments prior to the start date, then:</p> <p>a. Have the project proponents informed the DNA and/or UNFCCC secretariat in writing? How has this notification been verified? (i.e. confirmation from the DNA or UNFCCC)</p> <p>b. Was the notification made within 6 months of the project activity start date?</p> <p>c. Does the letter/ notification indicate the precise geographic location and provide a brief description of the proposed project?</p> <p>d. Have the project proponents informed the DNA and/or UNFCCC secretariat of the progress of the project activity every subsequent two years after the initial notification?</p>	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
<p>B.5.4 For an existing project which has a start date prior to the publication of the PDD for global stakeholder comments, has the project proponent provided the following:</p> <p>a. Evidence of awareness of the CDM prior to the project activity start date and that the benefits of the CDM were a decisive factor in the decision to proceed with the</p>	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A

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project? (e.g. Board minutes, notes etc) Is this sufficient? b. Reliable evidence that demonstrates real actions were taken to secure CDM status in parallel with the project's implementation? (e.g. contracts with consultants for CDM/PDD/methodology services, ERPA's, correspondence with CER buyers, DOEs, DNAs or the UNFCCC). Is this sufficient?				
B.5.5. Is the project additionality assessed according to the applicable methodology? Detail the Tool used to demonstrate the Additionality of the project activity.	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.6. In the case of a small scale project activity, is the additionality justified according to the applicable CDM requirements specific for small scale project activities?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.7 Have realistic and credible alternatives been identified providing comparable outputs or services?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.8. Is the project activity without CDM included in these alternatives?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.9. Is a discussion provided for all identified alternatives concerning the compliance with applicable	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the	N/A	N/A

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laws and regulations?		baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.		
B.5.10. In case of using a FSR as a basis of the decision, is this analysis made in accordance with the EB Guidance?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.11. In case the PDD argues that specific laws are not enforced in the country or region: Is evidence available concerning that statement?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.12. In case of applying step 2 / investment analysis of the additionality tool: Is the analysis method identified appropriately?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.13. In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than CDM income? a. Are the assumptions for all alternatives compared consistent (including discount rates if applicable)?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.14. In case of Option II (investment comparison analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)? a. Are the assumptions for all alternatives compared	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A

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consistent (including discount rates if applicable)?				
<p>B.5.15. In case of Option III (benchmark analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?</p> <p>a. If an IRR indicator is used, is the choice of benchmark appropriate to the type of IRR calculated? b. Is the choice of benchmark or discount rate justified with supporting evidence for its appropriateness?</p>	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.16 If risk premiums are applied in the development of the benchmark, are they reasonable and justified?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.17 Do the project participants justify the period of assessment in the context of the underlying project activity?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
<p>B.5.18 Regarding the assessment:</p> <p>a. Complete the following time periods (years):</p> <ul style="list-style-type: none"> - Period of assessment: - Crediting period: - Technical lifetime of the project activity: <p>b. Are these periods consistent with paragraph 3 of the "Guidelines on the assessment of investment analysis</p>	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A

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(version 05)".				
c. Is the period of assessment appropriate?				
B.5.19 Is any residual value of the project activity assets included in the analysis? Are residual value calculations reasonable and justified and consistent with local accounting rules or international best practice?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.20 Are depreciation and other non-cash items related to the project activity deducted from net profits used for calculating the financial indicator (e.g. IRR, NPV)?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.21 Is the treatment of taxation consistent with the chosen benchmark? (i.e. taxation should only be treated as an expense in the IRR/NPV calculation if the chosen benchmark is intended for post-tax calculations?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.22 Recommended project: If the implementation of the project ceased and then recommenced due to consideration of the CDM, then: a. Are input values valid and applicable at the time of making the decision to recommence the project? b. Are capital costs incurred prior to the revised project activity start date input as the recoverable value of the assets (limited to the potential reuse/ resale of tangible	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A

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assets)? c. How has the fair market value of the capital expenditures been calculated and validated? (e.g. by chartered specialists). Is this fair market value reasonable and justified? d.- Is the book value as well as the expectation of the potential profit or loss included in the fair value calculation?				
B.5.23 Has the project participant supplied unprotected and traceable spreadsheet versions of all investment analysis?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.24 From the investment analysis provided, is it possible to reproduce the results?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.25 Costs of financing expenditures (i.e. loan repayments and interest) should only be included in the cashflow as costs if an equity IRR is used, not if a project IRR is used. Are interest payments taken into account in the calculation of tax, if the benchmark is for after-tax comparison?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A

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B.5.26 If an Equity IRR has been used, is the debt portion of the investment cost included as a cash outflow? (i.e. as well as interest costs and principle repayments – double counting)	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.27 Sensitivity analysis: a. Are all variable and critical costs and revenues in the analysis included in the sensitivity analysis? b. Is the assessed range of variations reasonable in light of the reliability of the estimated input values and the likely range? c. Is the sensitivity analysis possible to reproduce?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.28 Are input values used in all the investment analysis valid and applicable at the time of the investment decision taken by the project participant? Is the time of investment decision appropriately justified by evidences?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.29 Does the PDD present the investment analysis in a transparent manner and provide all the relevant assumptions (preferably in the CDM-PDD form, or in separate appendices to the CDM-PDD)?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A

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B.5.30 Have the listed input values been consistently applied in all calculations?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.31 Are all references made in the investment analysis correctly referenced/ sourced? Have these sources been verified?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.32 Have financial calculations been verified by: assessing all parameters and assumptions against the available evidence and expertise; crosschecking the parameters against 3rd party or publicly available sources; reviewing feasibility reports, public announcements and annual financial reports; assessing the correctness of computations and the sensitivity analysis?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.33 Have values from a feasibility study report (FSR) approved by national authorities been used? If so: a. Has the FSR been the basis of the decision to proceed with the investment in the project? How has this been verified? b. Are the values used in the PDD and associated annexes valid and consistent with the FSR? c. At the time of the investment decision, are the input	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A

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values from the FSR valid and applicable (based on specific local and sectoral expertise and knowledge)?				
B.5.34. In case of applying step 3 (barrier analysis) of the additionality tool: Is a complete list of barriers developed that prevent the different alternatives to occur?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.35. Do any such identified barriers have a clear and direct impact on the financial returns of the project activity? (these are not barriers and should be assessed in the investment analysis)	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.36 Are the identified barriers real and substantiated by independent sources of data such as relevant national legislation, surveys of local conditions and national or international statistics?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.37. Is it clearly explained how approval of the project in the CDM would enable the proposed project activity to surmount the barrier? Is the rationale reasonable and justified with evidence?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.38. Does the review of relevant background information on the nature of the company(ies) and entity(ies) involved in the financing and implementation of the project sufficiently justify that the barriers related to the lack of access to capital,	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A

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technologies and skilled labour are real?				
B.5.39 Has common practice analysis been undertaken? Mention the tool or guidelines applied for this analysis.	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.40 Is the geographical and temporal scope of the common practice analysis appropriate for the assessment related to the project activity's technology or industry type? Which is the relevant geographical area assessed for the common practice analysis?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.41 Have all similar projects regarding the same technology and industrial sector been included in the common practice analysis? Which are these projects? What sources of information have been used to assess the existence of similar projects? (official sources, local and industry expertise). If some projects have been excluded as non comparable or not similar, is the exclusion reasonable and justified?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.42 Have similar and operational projects other than CDM project activities been undertaken in the region?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A

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<p>B.5.43 Are these widely observed and commonly carried out?</p> <p>If so:</p> <p>a. How have the essential distinctions with the proposed CDM project activity been assessed?</p> <p>b. Are such distinctions justified with sufficient evidence?</p> <p>c. If inaccessibility of data is the reason why some projects have not been included in the analysis, is justification of this claim provided?</p>	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.44 Overall, is the proposed CDM project activity considered common practice?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.5.45. Is it demonstrated/justified that the project activity is not a likely baseline scenario?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
B.6. Emission reductions				
<i>B.6.1. Explanation of methodological choices</i>				
B.6.1.1. Is it explained how the procedures provided in the methodology are applied by the proposed project activity?	DR	Yes, it is explained how the procedures provided in the methodology are applied by the proposed project activity.	OK	OK

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B.6.1.2. Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?	DR	Yes, every selection of options offered by the methodology are correctly justified and is this justification in line with the situation verified on-site	CAR3	OK
B.6.1.3. Are the formulae required for the determination of emissions reductions correctly presented and used? <i>(Open excel, traceability of data, etc)</i>	DR	Yes, formulae are correctly presented and used.	OK	OK
B.6.1.4 Are all the data and assumptions listed in the PDD? Are they appropriate and do calculations result in a conservative estimate of emission reductions?	DR	All the data and assumptions are listed in the PDD. They are appropriate and result in a conservative estimate of emission reductions.	CAR3	OK
<i>B.6.2. Data and parameters that are available at validation</i>				
B.6.2.1. Is the list of parameters presented in chapter B.6.2 considered to be complete with regard to the requirements of the applied methodology? Is all the information required for each parameter included?	DR	CAR4: The list of parameters in chapter B.6.2 is not complete with regard to the requirements of the applied methodology. Parameters related to PE calculations from the reservoir of the hydropower plant have not been included. The list of parameters is complete with regard to the requirements of the applied methodology. Parameters related to PE calculations from the reservoir of the hydropower plant have been included. CAR4 is solved.	CAR4	OK
B.6.2.2. Are all the data derived from official data sources or replicable records and have they been correctly quoted?	DR	All data are derived from official data sources.	CAR4	OK
B.6.2.3. For each parameter: a. Title in line with Methodology?	DR	All fixed parameters have been correctly defined in the PDD	CAR4	OK

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b. Data unit correctly expressed? c. Appropriate description? d. Source clearly referenced? (and appropriate?) e. Correct value provided? f. Has this value been verified? g. Choice of data correctly justified? h. Measurement method correctly described? i. Purpose of data indicated?				
B.6.2.4. Will the data and parameters result in a conservative estimate of emissions reductions?	DR	Yes, data and parameters result in a conservative estimate of emissions reductions.	CAR4	OK
<i>B.6.3 Calculation of GHG Emission Reductions – Baseline Emissions</i> <i>It is assessed whether the baseline emissions are stated according to the methodology and whether the argumentation for the choice of default factors and values – where applicable – is justified.</i>				
B.6.3.1 Are the calculations documented according to the approved methodology and in a complete and transparent manner?	DR	Baseline calculations are documented according to the approved methodology in a complete and transparent manner.	OK	OK
B.6.3.2. Have conservative assumptions been used when calculating the baseline emissions?	DR	Yes, conservative assumptions have been used when calculating the baseline emissions.	OK	OK
B.6.3.3 Are uncertainties in the baseline emission	DR	No uncertainties have been detected.	OK	OK

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estimates properly addressed?				
B.6.3.4. Is additional background information on baseline data provided in Appendix 4 of the PDD? Is this information consistent with data presented by other sections of the PDD?	DR	No additional information on baseline is provided in Appendix 4.	OK	OK
<i>B.6.4 Calculation of GHG Emission Reductions – Project Emissions</i> <i>It is assessed whether the project emissions are stated according to the methodology and whether the argumentation for the choice of default factors and values – where applicable – is justified.</i>				
B.6.4.1 Are the calculations documented according to the approved methodology and in a complete and transparent manner?	DR	Yes, calculations are documented according to the approved methodology and in a complete and transparent manner	CAR3	OK
B.6.4.2. Have conservative assumptions been used when calculating the project emissions?	DR	Yes, conservative assumptions have been used when calculating the project emissions.	CAR3	OK
B.6.4.3 Are uncertainties in the project emission estimates properly addressed?	DR	Yes, uncertainties in the project emission estimates are properly addressed.	CAR3	OK
<i>B.6.5. Calculation of GHG Emission Reductions – Leakage</i> <i>It is assessed whether leakage emissions are stated according to the methodology and whether the argumentation for the choice of default factors and values – where applicable – is justified.</i>				
B.6.5.1 Are the leakage calculations documented according to the approved methodology and in a complete and transparent manner?	DR	CL1: Evidence supporting that the equipment installed in component 1 is not transferred from another activity shall be provided to the DOE team. Evidence has been provided and deemed as appropriate. Leakage calculations are documented according to the approved methodology and in a complete and transparent manner.	CL1	OK

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		CL1 is closed		
B.6.5.2. Have conservative assumptions been used when calculating the leakage emissions?	DR	Conservative assumptions have been used when calculating the leakage emissions.	CL1	OK
B.6.5.3. Are uncertainties in the leakage emission estimates properly addressed?	DR	Uncertainties in the leakage emission estimates are properly addressed.	CL1	OK
<i>B.6.6. Ex-ante calculation of emission reductions</i>				
B.6.6.1. Are the GHG calculations documented in a complete and transparent manner? Are all the calculations correct?	DR	GHG calculations are correct and documented in a complete and transparent manner.	CL1, CAR3	OK
B.6.6.2. Is the data provided in this section consistent with data as presented in other chapters of the PDD?	DR	Yes, data provided in this section are consistent with data as presented in other chapters of the PDD	CL1, CAR3	OK
<i>B.6.7. Summary of the ex-ante estimation of emission reductions</i>				
B.6.7.1. Will the project results in fewer GHG emissions than the baseline scenario?	DR	Yes, the project results in fewer GHG emissions than the baseline scenario.	CL1, CAR3	OK
B.6.7.2. Are the emissions reductions projected in line with the envisioned time schedule for the project' implementation and the indicated crediting period?	DR	Yes the emissions reductions projected are in line with the envisioned time schedule for the project' implementation and the indicated crediting period	CL1, CAR3	OK
B.7. Application of the monitoring methodology and description of the monitoring plan				
<i>B.7.1. Description of the monitoring plan</i>				

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B.7.1.1 Is the monitoring plan documented according to the approved methodology and relevant tools and in a complete and transparent manner?	DR	Yes, the monitoring plan is documented according to the approved methodology and relevant tools and in a complete and transparent manner.	OK	OK
B.7.1.2. Does the monitoring methodology provide a consistent approach in the context of all parameters to be monitored and further information provided in the PDD?	DR	Yes, the monitoring methodology provides a consistent approach in the context of all parameters to be monitored.	OK	OK
B.7.1.3. Does the monitoring plan provide a clear description of the organization structure involved in monitoring activities and their responsibilities?	DR	Yes, the monitoring plan provides a clear description of the organization structure involved in monitoring activities and their responsibilities.	OK	OK
B.7.1.4. If applicable: Does appendix 5 provide useful information enabling a better understanding of the envisioned monitoring provisions?	DR	All the information about the monitoring plan is included in section B.7.	OK	OK
B.7.1.5. Is the registration, monitoring, measurement and reporting procedure defined?	DR	Yes, the registration, monitoring, measurement and reporting procedure is defined.	OK	OK
<i>B.7.2 Compliance of the monitoring plan with the approved methodology</i>				
B.7.2.1 Is the list of parameters considered to be complete with regard to the requirements of the applied methodology? Are all of them clearly described in the monitoring plan and in accordance with the methodology and tools?	DR	<p>CAR5: The list of parameters in section B.7.1 is not complete with regard to the requirements of the applied methodologies. Parameters related to the PE calculations from the reservoir of the hydropower plant have not been included. Furthermore, some different parameters are sharing the same description table when they have different procedures to be monitored. According to the "Guidelines for Completing the Project Design Document Form version 01.0", the PDD shall be updated including a description table for each parameter to be monitored</p> <p>The list of parameters is complete with regard to the requirements of the applied methodology. Parameters related to PE calculations from the reservoir of the hydropower plant have been included.</p>	CAR5	OK

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		CAR5 is closed. All the parameters are clearly described in the monitoring plan and in accordance with the methodology and tools.		
B.7.2.2. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring the emission reductions within the project boundary during the crediting period?	DR	Yes, the monitoring plan provides for the collection and archiving of all relevant data necessary for estimation or measuring the emission reductions within the project boundary during the crediting period	OK	OK
B.7.2.3. Parameter EG_{i,y} a. Title in line with methodology? b. Data unit correctly expressed? c. Parameter appropriately described? d. Source clearly referenced? e. Correct value provided for the purpose of PDD estimations? f. Has this value been verified? g. Measurement methods correctly described and in line with the methodology/tools? h. Correct reference to standards (i.e. for calibration and maintenance)? i. Indication of accuracy provided? j. QA/QC procedures appropriate and described?	DR	a. OK b. OK c. OK d. OK e. CL2: Evidence supporting the value for parameter EG_{i,y} shall be provided to the DOE team. The procedure to obtain this value shall be clarified in the PDD. Evidence is provided and deemed as appropriate. CL2 is closed. f. OK g. OK h. OK i. OK	CL2	OK

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k. Purpose of data indicated?		j. OK k. OK		
B.7.2.3. Parameter EG_{GROSS,y} a. Title in line with methodology? b. Data unit correctly expressed? c. Parameter appropriately described? d. Source clearly referenced? e. Correct value provided for the purpose of PDD estimations? f. Has this value been verified? g. Measurement methods correctly described and in line with the methodology/tools? h. Correct reference to standards (i.e. for calibration and maintenance)? i. Indication of accuracy provided? j. QA/QC procedures appropriate and described? k. Purpose of data indicated?	DR	a. OK b. OK c. OK d. OK e. OK f. OK g. OK h. OK i. OK j. OK k. OK	CAR5	OK
B.7.2.3. Parameter EC_{Aux} a. Title in line with methodology? b. Data unit correctly expressed?	DR	a. OK b. OK c. OK	CAR5	OK

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c. Parameter appropriately described? d. Source clearly referenced? e. Correct value provided for the purpose of PDD estimations? f. Has this value been verified? g. Measurement methods correctly described and in line with the methodology/tools? h. Correct reference to standards (i.e. for calibration and maintenance)? i. Indication of accuracy provided? j. QA/QC procedures appropriate and described? k. Purpose of data indicated?		d. OK e. OK f. OK g. OK h. OK i. OK j. OK k. OK		
B.7.2.3. Parameter Cap_{p1} a. Title in line with methodology? b. Data unit correctly expressed? c. Parameter appropriately described? d. Source clearly referenced? e. Correct value provided for the purpose of PDD estimations? f. Has this value been verified?	DR	a. OK b. OK c. OK d. OK e. OK f. OK g. OK h. OK	CAR5	OK

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g. Measurement methods correctly described and in line with the methodology/tools? h. Correct reference to standards (i.e. for calibration and maintenance)? i. Indication of accuracy provided? j. QA/QC procedures appropriate and described? k. Purpose of data indicated?		i. OK j. OK k. OK		
B.7.2.3. Parameter App₁ a. Title in line with methodology? b. Data unit correctly expressed? c. Parameter appropriately described? d. Source clearly referenced? e. Correct value provided for the purpose of PDD estimations? f. Has this value been verified? g. Measurement methods correctly described and in line with the methodology/tools? h. Correct reference to standards (i.e. for calibration and maintenance)? i. Indication of accuracy provided?	DR	a. OK b. OK c. OK d. OK e. OK f. OK g. OK h. OK i. OK j. OK k. OK	CAR5	OK

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j. QA/QC procedures appropriate and described?				
k. Purpose of data indicated?				
<i>B.7.3 Implementation of the Monitoring Plan</i>				
B.7.3.1 Do the means of monitoring of each parameter included in the plan comply with the requirements of the methodology?	DR	Yes, the means of monitoring of each parameter included in the plan comply with the requirements of the methodology.	CAR5, CL2	OK
B.7.3.2. Is the measurement equipment described and deemed appropriate?	DR	Yes, the measurement equipment is described and deemed appropriate	OK	OK
B.7.3.3. Are procedures identified for maintenance of monitoring equipment and installations? Are provisions regarding the calibration intervals included in the monitoring plan?	DR	<p>CAR6: Provisions regarding calibration frequencies for all the equipment involved in the project shall be included in the monitoring plan.</p> <p>Calibration frequencies if the equipment are correctly indicated in the PDD.</p> <p>CAR6 is closed.</p> <p>There are procedures for maintenance of monitoring equipment and installations.</p>	CAR6	OK
B.7.3.4. Is the measurement accuracy addressed and deemed appropriate? Are procedures in place on how to deal with erroneous measurements or lack of data?	DR	<p>CL3: The separate MP created for this project (CDM Operations Plan for the West Nile Electrification Project) shall be provided to the DOE team.</p> <p>Evidence has been provided and deemed as appropriate</p> <p>CL3 is closed.</p> <p>The measurement accuracy is addressed and deemed as appropriate. There are procedures in place on how to deal with erroneous measurements or lack of data.</p>	CL3	OK
B.7.3.5. Is the monitoring Plan sufficient to ensure the	DR	Yes, the monitoring Plan is sufficient to ensure the verification of a	CL3	OK

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verification of a proper implementation of the monitoring plan?		proper implementation of the monitoring plan		
C. DURATION OF THE PROJECT ACTIVITY / CREDITING PERIOD				
C.1. Duration of the project activity				
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	DR	Yes, project's starting date and operational lifetime is clearly defined and reasonable	OK	OK
C.2. Choice of the crediting period and related information				
C.2.1. Is the assumed crediting period clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)? And, is the starting date of the crediting period corrected considered?	DR	Yes, the assumed crediting period is clearly defined and reasonable. The starting date of the second crediting period is correctly considered (01/01/2012).	OK	OK
D. ENVIRONMENTAL IMPACTS				
D.1. Documentation on the analysis of the environmental impacts, including transboundary impacts				
D.1.1. Has the analysis of the environmental impacts of the project activity been sufficiently described in the PDD?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
D.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if so, has	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the	N/A	N/A

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an EIA been approved?		baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.		
D.1.3. Will the project create any adverse environmental effects? Has any environmental impact identified as significant?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
D.1.4. Are transboundary environmental impacts identified in the analysis?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
D.1.5. Does the project comply with any other environmental legislation in the host country?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
D.2. If environmental impacts are considered significant by the project participants or the host Party, please provide conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party.				
D.2.1. Have the identified environmental impacts been sufficiently addressed in the PDD?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
E. STAKEHOLDERS' COMMENTS				
E.1. Brief description how comments by local stakeholders have been invited and compiled				
E.1.1. Have relevant local stakeholders been consulted prior to the publication of the PDD? Is the exact date of	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan	N/A	N/A

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the consultation process included in the PDD?		using an approved baseline and monitoring methodology.		
E.1.2. Have appropriate media been used to invite comments by local stakeholders?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
E.1.3. If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
E.1.4. Is the undertaken stakeholder process that was carried out described in a complete and transparent manner?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
E.2. Summary of the comments received				
E.2.1. Is a summary of the stakeholder comments received provided?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A
E.3. Report on how due account was taken of any comments received				
E.3.1. Has due account been taken of any stakeholder comments received?	DR	N/A. According to paragraph 230 the CDM Project Standard version 05.0, for the purpose of renewal of the crediting period project participants shall update those sections of the PDD relating to the baseline, estimated emissions reductions and the monitoring plan using an approved baseline and monitoring methodology.	N/A	N/A

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E.4. Sampling				
E.4.1. Has sampling been applied as part of the validation activities? Explain where it has been applied.	DR	Sampling is not applicable to this project activity	N/A	N/A
E.4.2. Has the standard for sampling currently in force been applied?	DR	Sampling is not applicable to this project activity	N/A	N/A

*MoV/Ref: Means of Validation and references of background documents.

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ANNEX 2: CERTIFICATES OF QUALIFICATION

CERTIFICATE OF QUALIFICATION

Subject: Validation and Technical Review Team for "West Nile electrification Project (WNEP)"

Madrid, 19th March 2014

Hereby I confirm the following records of qualification, according with AENOR internal instruction "Validation, Verification and Certification of Clean Development Mechanism (CDM) project activities" IE-DTC-039, and in relation with the validation process of the above mentioned project activity:

Name: **Alfonso Medrano Gutiérrez**

CDM Chief Validator: Yes

CDM Validator: Yes

CDM Chief Verifier: N/A

CDM Verifier: N/A

External Technical Expert: No

Technical areas related with the project activity:

T.A 1.2 Energy generation from renewable energy sources.



Luis Robles Olmos
Climate Change Manager

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CERTIFICATE OF QUALIFICATION

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Madrid, 19th March 2014

Hereby I confirm the following records of qualification, according with AENOR internal instruction "Validation, Verification and Certification of Clean Development Mechanism (CDM) project activities" IE-DTC-039, and in relation with the validation process of the above mentioned project activity:

Name: **José Antonio Gesto Vilacoba**

CDM Chief Validator: Yes

CDM Validator: Yes

CDM Chief Verifier: N/A

CDM Verifier: N/A

External Technical Expert: No

Technical areas related with the project activity:

T.A 1.2 Energy generation from renewable energy sources.



Luis Robles Olmos
Climate Change Manager

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Subject: Validation and Technical Review Team for ""West Nile electrification Project (WNEP)""

Madrid, 19th March 2014

Hereby I confirm the following records of qualification, according with AENOR internal instruction "Validation, Verification and Certification of Clean Development Mechanism (CDM) project activities" IE-DTC-039, and in relation with the validation process of the above mentioned project activity:

Name: **Luis Robles Olmos**

CDM Chief Validator: Yes

CDM Validator: Yes

CDM Chief Verifier: N/A

CDM Verifier: N/A

External Technical Expert: No

Technical areas related with the project activity:

T.A 1.1 Thermal energy generation from fossil fuels and biomass including thermal electricity from solar

T.A 1.2 Energy generation from renewable energy sources.



Mª Carmen Gonzalez Galán

Authorised Person

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Subject: Validation and Technical Review Team for ""West Nile electrification Project (WNEP)""

Madrid, 19th March 2014

Hereby I confirm the following records of qualification, according with AENOR internal instruction "Validation, Verification and Certification of Clean Development Mechanism (CDM) project activities" IE-DTC-039, and in relation with the validation process of the above mentioned project activity:

Name: **M^a Carmen Gonzalez Galán**

CDM Chief Validator: Yes

CDM Validator: Yes

CDM Chief Verifier: N/A

CDM Verifier: N/A

External Technical Expert: No

Technical areas related with the project activity:

T.A 1.1 Thermal energy generation from fossil fuels and biomass including thermal electricity from solar

T.A 1.2 Energy generation from renewable energy sources.



Luis Robles Olmos
Climate Change Manager

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Subject: Validation and Technical Review Team for ""West Nile electrification Project (WNEP)""

Madrid, 19th March 2014

Hereby I confirm the following records of qualification, according with AENOR internal instruction "Validation, Verification and Certification of Clean Development Mechanism (CDM) project activities" IE-DTC-039, and in relation with the validation process of the above mentioned project activity:

Name: **María Mercedes García Madero**

CDM Chief Validator: Yes

CDM Validator: Yes

CDM Chief Verifier: N/A

CDM Verifier: N/A

External Technical Expert: No

Technical areas related with the project activity:

T.A 1.2 Energy generation from renewable energy sources.



Luis Robles Olmos
Climate Change Manager