

ASSESSMENT OPINION  
POST REGISTRATION CHANGES

WEST NILE RURAL ELECTRIFICATION COMPANY LIMITED  
(WENRECO)

THE WORLD BANK

**WEST NILE ELECTRIFICATION PROJECT (WNEP)**

UNFCCC REFERENCE NUMBER: 0775

AENOR Reference No: 2012/018/CDM/36

Assessment opinion on Post registration changes  
"West Nile Electrification Project (WNEP)"

<b>Validation opinion:</b>	AENOR Reference No.:		Version of this document:	Date of this rev.:
	2012/018/CDM/36		2	03/02/2014
<b>Project:</b>	Title:		Registration date:	UNFCCC Reference
	"West Nile Electrification Project (WNEP)"		10/02/2007	0775
<b>Project Participant(s):</b>	Host Party:		Other involved Parties:	
	Uganda		Sweden, France, Japan, The Netherlands, Norway, United Kingdom of Great Britain and Northern Island, Finland, Germany	
<b>Applied methodology/ies:</b>	Title:		Code:	No revision
	Grid Connected renewable electricity generation		AMS-I.D	9
	Supply side energy efficiency improvements generation		AMS-II.B	7
<b>PDD:</b>		Registered PDD	Revised PDD:	
	Version	2	3	
	Date	16/11/2006	10/09/2013	
	Estimated emission reductions	36,210 t <sub>CO2</sub> /year	36,210 t <sub>CO2</sub> /year	
<b>Previous versions of this document:</b>			Version:	Date:
			1	05/11/2013
<b>Validation of the changes was conducted</b>	<input type="checkbox"/> Prior to the commencement of a verification of the project activity <input checked="" type="checkbox"/> When performing a verification of the project activity			
<b>Summary of Post registration changes:</b>	<b>TYPE OF POST REGISTRATION CHANGE</b>		<b>Is prior approval by CDM EB required? (According to appendix 1 of PS)</b>	
	<b>Temporary deviations from the registered monitoring plan or applied methodology</b>		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not applicable	
	<b>Corrections</b>		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not applicable	
	<b>Changes to the start date of the crediting period</b>		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not applicable	
	<b>Permanent changes from the registered monitoring plan or applied methodology</b>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not applicable	
	- Description tables of parameters $FC_{ij}$ , $DEN_{prjct,fuel,j}$ and $NCV$ - Monitoring of Diesel Parameters - Correction of formula for Heat rate $HR_{prjct,fuel,j}$			
	<b>Changes to the project design of a registered project activity</b>		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not applicable	
AENOR was contracted to perform the verification of the CDM project activity: "West Nile Electrification Project (WNEP)" (Registration Ref. No. 0775). for the monitoring period from 01/11/2009 to 31/12/2011, and during the on site visit, some post-registration changes were				

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	<p>identified by the audit team.</p> <p>In accordance with paragraph 209 of the CDM Project Standard version 05.0, Project Participants shall identify and document any actual or proposed changes to the operation, implementation and/or monitoring of the registered CDM project activity taking into account the types of changes described in appendix 1, which describes the types of changes that do not require prior approval by the Board.</p> <p>The Spanish Association for Standardisation and Certification (AENOR) has performed the assessment opinion on the post registration changes identified for in the CDM project activity: "West Nile Electrification Project (WNEP)" (Registration Ref. No. 0775).</p> <p>According to paragraphs 4 and 5 of Appendix 1 of the CDM Project Standard version 05 changes detected and alternatives proposed for the project do not require Prior Approval because the monitoring procedures and equipment actually installed have a higher accuracy level than the one stipulated in the applied methodologies and in the registered monitoring plan, and the monitoring equipment is under the control of the project participants.</p> <p>AENOR, as it is demonstrated below, has verified through the on site visit and the evidence assessed that West Nile Electrification Project has correctly monitored all the parameters according to the new revised monitoring plan, applied methodologies and tools in a conservative and accurate way and the minor changes occurred do not have impact in the ER calculation. The new alternatives of monitoring proposed on the revised PDD are much more conservative and realistic than the ones included in the revised monitoring plan approved on 31/05/2011.</p> <p>It is AENOR opinion that no prior approval by the Board is necessary for this post registration changes and therefore, according to paragraph 136 of the CDM Project Cycle Procedure version 05.0 [13], AENOR is submitting the post registration changes for acceptance by the Board as part of the present request for issuance of CERs for the period 01/11/2009 – 31/12/2011.</p> <p>AENOR confirms that the transfer of information from the old form of the PDD registered (CDM-SSC-PDD version 02) to the new form under VVS track (F-CDM-SSC-PDD Version 04.1) is totally correct and materially the same as the information in the PDD registered on 10/02/2007.</p>
<b>Report prepared by:</b>	Climate Change Unit. AENOR

## Abbreviations

AENOR	Spanish Association for Standardisation and Certification
AMS-I.D	Grid Connected renewable electricity generation
AMS-II.B	Supply side energy efficiency improvements generation
CAR	Corrective action request
CDM	Clean development mechanism
CDM-EB	CDM Executive Board
CER	Certified emission reduction
CL	Clarification request
CMP	Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	Carbon dioxide equivalent
DNA	Designated national authority
DOE	Designated operational entity
DNV	Det Norske Veritas
ER	Emission reduction
FAR	Forward action request
GHG	Greenhouse gas(es)
IEA	International Energy Agency
IPCC	Intergovernmental Panel on Climate Change
MoV	Means of verification
MP	Monitoring Plan
MR	Monitoring report
PCP	CDM Project Cycle Procedure version 05.0
PDD	Project Design Document
PP	Project Participant
PS	CDM Project Standard version 05.0
tC	Carbon tonnes
tCO <sub>2</sub> eq	Carbon dioxide equivalent tonnes
UNFCCC	United Nations Framework Convention on Climate Change
VVS	CDM Validation and Verification Standard version 05.0
WENRECO	West Nile Rural Electrification Company Limited

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## 1 INTRODUCTION

The World Bank commissioned AENOR to carry out the verification and certification of the emission reductions generated by "West Nile Electrification Project (WNEP)" in Uganda (the project) for the period 01/11/2009 – 31/12/2011. After the on site visit and the corresponding desk review, some inconsistencies were identified by the audit team and therefore post registration shall be requested by the Project Participants.

### 1.1 Objective

In accordance with paragraph 209 CDM Project Standard version 05.0, Project Participants shall identify and document any actual or proposed changes to the operation, implementation and/or monitoring of the registered CDM project activity taking into account the types of changes described in appendix 1, which describes the types of changes that do not require prior approval by the Board.

This assessment opinion contains the description of the post registration changes, including their nature, extent of the non-conforming monitoring and the proposed alternative monitoring of the project activity, as well as any other complementary information required by the PCP, PS and VVS.

### 1.2 Scope

The scope of the validation is to assess all changes from the project activity as described in the revised project design document, including their negative impact on the estimates of the emissions reductions, the level of accuracy of the monitoring activity, the additionality or scale of the project activity and the applicability and application of approved methodology.

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

- PDD and monitoring plan registered /1/.
- Revised monitoring plan /2/
- Methodology: AMS-I.D version 09 /3/
- Methodology: AMS-II.B version 07 /4/
- Decision 3/CMP.1 and relevant decision and guidelines from the EB
- CDM Validation and Verification Standard, version 05.0. /5/
- Clean Development Mechanism Project Cycle Procedure, version 05.0. /6/
- Clean Development Mechanism Project Standard, version 05.0. /7/
- Validation opinion on changes in the registered PDD and monitoring plan./8/
- Associated documentation (manufacturer documentation, design documentation, agreements, etc.)

The validation scope is defined as an independent and objective review of the post registration changes included in the revised project design document, including the revised 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 PCP, the PS and the VVS, has used a risk-based approach in the validation, focusing on the identification of significant risks for the project implementation and the generation of CERs.

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

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## 1.3 Description of the Project Activity

Host Country:	Uganda
Title of project activity:	West Nile Electrification Project (WNEP)
UNFCCC registration No:	0775
Project Participants:	<ul style="list-style-type: none"><li>- Uganda: West Nile Rural Electrification Company Limited (WENRECo)</li><li>- Sweden: Government of Sweden – Swedish Energy Agency</li><li>- France: GDF Suez</li><li>- Japan: Chubu Electric Power Co., Inc; Japan International Cooperation Agency; Kyushu Electric Power Co., Inc; Mitsubishi Corporation; Shikoku Electric Power Co., Inc; Tohoku Electric Power Co., Inc; The Tokyo Electric Power Co., Inc; The Chugoku Electric Power Co., Inc; Mitsui &amp; Co.Ltd</li><li>- Netherlands: Electrabel S.A ;Netherlands’ Ministry of Infrastructure and the Environment (IenM); Netherlands’ Ministry of Economic Affairs, Agriculture and Innovation (EL&amp;I)</li><li>- Norway: Government of Norway – Ministry of Foreign Affairs; Norsk Hydro ASA; Statoil ASA</li><li>- United Kingdom of Great Britain and Northern Ireland: BP Alternative Energy International Ltd.; Deutsche Bank AG</li><li>- Finland: Fortum Corporation; Government of Finland – Ministry of Foreign Affairs and International Trade</li><li>- Germany: RWE Power AG</li></ul>
Location of the project activity:	The coordinates of the powerhouse are +2.429053, +30.975695.
Project crediting period:	01/01/2005 to 31/12/2011 (first renewable period)
Verification period:	01/11/2009 to 31/12/2011
Project starting date:	01/04/2003

The validation and previous verifications are summarised below:

Process	DOE	Crediting/Monitoring Period	Date	Amount of CERs
Validation	SGS	01/01/2005 to 31/12/2011	10/02/2007	-
Revision of the Monitoring Plan	DNV	01/01/2005 to 31/10/2009	31/05/2011	-
1 <sup>st</sup> Verification	DNV	01/01/2005 to 31/10/2009	04/07/2012	20,095

The overall objectives of the West Nile Electrification Project (WNEP) are to promote socio-economic development in rural Uganda and to reduce energy-related CO<sub>2</sub> emissions causing global climate change.

The main project components of the WNEP are:

- Project Component #1: Installation and operation of a 3.5 MW (2 units of 1.75 MW) hydroelectric power plant; and
- Project Component #2: Installation and operation of a HFO-fired 1.5 MW generator. The generator will serve as a base-load plant during the construction phase of the hydropower plant.

## 2 METHODOLOGY

### 2.1 Appointment of team members and technical reviewers

The list of involved personnel and the qualification status are summarised in the table below. The appointment certificates are included in Annex 1.

Name	Qualification	
	Position on the team	Technical areas
Alfonso Medrano Gutierrez	Chief Verifier	TA 1.2
José Antonio Gesto Vilacoba	Verifier	TA 1.2
Luis Robles Olmos	Verifier	TA 1.1; TA 1.2
M <sup>a</sup> Carmen Gonzalez Galán	Technical Reviewer	TA 1.1; TA 1.2
Jose Luis Fuentes Pérez	Technical Reviewer	TA 1.2

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	Aluminium (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)
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)



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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

## 2.2 Review of Documentation

The desk review involved the assessment of the following documents:

- Project documentation: PDD registered, Validation Report, Validation opinion on changes in the Monitoring Plan accepted on 31/05/2011.
- Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board.
- The revised monitoring plan and the applied monitoring methodology, paying close attention to the frequency of measurements, the quality of metering equipment and the quality assurance and quality control procedures.
- The data and information presented to verify their completeness, including the monitoring report and the measuring records of the different monitored parameters.
- The influence of data management and the quality assurance and quality control system on the generation and reporting of emission reductions.

A complete list of all documents reviewed is attached in section 5 of this report.

## 2.3 Site Visits

As part of the verification process of the second monitoring period, from 23/04/2013 to 25/04/2013, the verification 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 verification team was able to complete:

- 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 cross-check between information provided in the monitoring report and data from other sources such as plant logbooks, inventories, purchase records or similar data sources.
- A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the PDD and the selected methodology.
- 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 revised monitoring plan and the registered PDD.

## 2.4 Internal Quality Control

Following the completion of the assessment process by the verification 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 verification of the project activity. The technical reviewer or the team appointed for the technical review are qualified in the technical area(s) and sectoral scope(s) of the project activity.

## 3 POST REGISTRATION CHANGES

### 3.1 Temporary deviations from the registered monitoring plan and/or applied methodology

#### 3.1.1 Description.

No temporary deviations from the registered monitoring plan and/or the applied methodology are requested.

#### 3.1.2 Assessment

Not applicable.

### 3.2 Corrections

#### 3.2.1 Description

No corrections to the project information or parameters fixed at validation as it is described in the revised PDD are requested.

#### 3.2.2 Assessment

Not applicable.

### 3.3 Permanent Changes from the registered monitoring plan or applied methodology

For the monitoring period (01/11/2009 – 31/12/2011) AENOR detected that some monitoring procedures carried out by the PP are not in line with the procedures stated in the revised monitoring plan approved by the EB on 31/05/2011.

Therefore, since the PP is unable to implement the revised monitoring plan approved, according to paragraphs 221, 222 and 223 of the CDM Project Standard version 05.0, the PP has described in a revised PDD, which is attached within the current request for issuance, the nature of the non conforming monitoring, and also has proposed alternative monitoring procedures, in accordance with the applied methodologies and tools.

According to paragraphs 4 and 5 of Appendix 1 of the CDM Project Standard version 05 changes detected and alternatives proposed for the project do not require Prior Approval because the monitoring procedures and equipment actually installed have a higher accuracy level than the one stipulated in the applied methodologies and in the registered monitoring plan, and the monitoring equipment is under the control of the project participants.

AENOR, as it is demonstrated below, has verified through the on site visit and the evidence assessed that West Nile Electrification Project has correctly monitored all the parameters according to the new revised monitoring plan, applied methodologies and tools in a conservative and accurate way and the minor changes occurred do not have impact in the ER calculation. The new alternatives of monitoring proposed on the revised PDD are much more conservative and realistic than the ones included in the registered monitoring plan.

### 3.3.1 Description.

#### **Change nº1: Description tables of parameters $FC_j$ , $DEN_{prjct, fuel\ j}$ and $NCV$**

AENOR detected that, in the previous revised monitoring plan approved on 31/05/2011, monitoring procedures for parameters  $FC_j$ ,  $DEN_{prjct, fuel\ j}$  and  $NCV$  were not properly described according to the monitoring actually carried out in the project:

- **Parameter  $FC_j$** , included the procedures to monitor the amount of two different fuels (HFO and Diesel) consumed by the project. Those fuels have a different emission factor and both are used to calculate baseline and project emissions of the project activity. In order to avoid confusions and to ensure the monitoring and the ERs calculation is carried out in a conservative and accurate way, the PP has decided to substitute this single parameter representing two fuels by including two different parameters in a new version of the monitoring plan to differentiate two fuels named as  $FC_{Diesel}$  and  $FC_{HFO}$ . The new proposal of monitoring plan includes one description table for each new parameter included.
- **Parameter  $DEN_{prjct, fuel\ j}$**  included only one procedure to monitor the density of two different fuels (HFO and Diesel) consumed by the project. During the on-site visit AENOR verified that there are two different procedures used to monitor the density of HFO and Diesel and therefore the monitoring description in the revised monitoring plan was not accurate. In order to solve this issue and to ensure the correct description of the monitoring procedures carried out, the PP has decided to substitute this parameter by including in a new version of the monitoring plan two new parameters called  $DEN_{Diesel}$  and  $DEN_{HFO}$ . The new proposal of monitoring plan includes one description table for each new parameter included.
- **Parameter  $NCV$**  included only one procedure to monitor the NCV of two different fuels (HFO and Diesel) consumed by the project. During the on-site visit AENOR verified that there are two different procedures used to monitor the NCV of HFO and Diesel and therefore the monitoring description in the revised monitoring plan was not accurate. In order to solve this issue and to ensure the correct description of the monitoring procedures carried out, the PP has decided to substitute this parameter by including two new parameters called  $NCV_{Diesel}$  and  $NCV_{HFO}$ . The new proposal of monitoring plan includes one description table for each new parameter included.

#### **Change nº 2: Monitoring of Diesel Parameters**

- **$NCV_{Diesel}$** : According to the revised monitoring plan approved on 31/05/2011, during the first crediting period, net calorific values of both HFO ( $NCV_{HFO}$ ) and Diesel ( $NCV_{Diesel}$ ) are required to be monitored by sampling carried out by an independent laboratory accredited in ISO/IEC 17025:2005.

However, during the on site visit AENOR verified that net calorific value of Diesel ( $NCV_{Diesel}$ ) is not been monitored as per the procedure stated in the revised monitoring plan.

While the PP has regularly monitored the net calorific value of HFO ( $NCV_{HFO}$ ) by sampling through an ISO/IEC 17025:2005 accredited Laboratory as it is stated in the revised monitoring plan, the same has not been done for the net calorific value of diesel ( $NCV_{Diesel}$ ).

The cost associated to each individual sampling of  $NCV_{Diesel}$  is really high and the percentage of consumed diesel in the total fuel inputs to the plant is really small, so the PP has decided to monitor this parameter in accordance with the procedures stated in the "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion".

Therefore, parameter  $NCV_{diesel}$  will be monitored as per option d) of the mentioned Tool, by using IPCC default values at upper limit of the uncertainty at a 95% confidence interval as it is provided in Table 1.2 of Chapter 1 of Vol.2 (Energy) of the 2006 IPCC Guidelines on National GHG Inventories.

Taking into account the small amount of Diesel consumed by the project and the high cost associated to the monitoring by sampling, it is AENOR opinion that the alternative proposal to monitor parameter  $NCV_{Diesel}$  according to option d) of the "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion" is appropriate and conservative. AENOR confirms also that this change has no impact in the ERs calculation because IPCC default values at upper limit of the

uncertainty at a 95% confidence interval as it is provided in Table 1.2 of Chapter 1 of Vol.2 (Energy) of the 2006 IPCC Guidelines on National GHG Inventories are usually the most conservative option available.

- **DEN<sub>Diesel</sub>**: According to the revised monitoring plan approved on 31/05/2011, during the first crediting period, density of both HFO (DEN<sub>HFO</sub>) and Diesel (DEN<sub>Diesel</sub>) are required to be monitored by sampling carried out by an independent laboratory accredited in ISO/IEC 17025:2005

However, during the on site visit AENOR verified that Density of Diesel (DEN<sub>Diesel</sub>) was not monitored as per the procedure stated in the revised monitoring plan.

While the PP has regularly monitored the Density of HFO (DEN<sub>HFO</sub>) during the monitoring period by sampling through an ISO/IEC 17025:2005 accredited Laboratory as it is stated in the revised monitoring plan, the same has not been done for the density of diesel (DEN<sub>Diesel</sub>).

The cost associated to each individual sampling of Density of Diesel is really high and the percentage of consumed diesel in the total fuel inputs to the plant is really small, so the PP decided to monitor this parameter in accordance with the procedures stated in the "Tool to calculate project or leakage CO<sub>2</sub> emissions from fossil fuel combustion" version 02 /11/.

In addition, AENOR has verified that the PP is unable to monitor this parameter according to the options offered in the tool because:

- Density of Diesel is not provided by the supplier in invoices.
- The PP does not have the equipment necessary to monitor this parameter by itself.
- In Uganda there are not default values of Density of Diesel published by a Regional or National Authorities.

Taking into account the small amount of Diesel consumed by the project and the difficulties explained above, the PP, as an alternative proposal, will monitor this parameter by selecting the most conservative value for the density of diesel extracted from the International Energy Agency (IEA) reports /9/ and the IPCC Guidelines/10/.

### **Change nº 3: Correction of formula for Heat rate HR<sub>prjct,fuel i</sub>**

AENOR detected that, in the previous revised monitoring plan, the formula included to calculate the parameter Heat Rate,  $HR_{prjct,fuel i} = (\sum FCI) / GEN_{TH,gross}$ , was not correct because the density and net calorific values of the two different kind of fuels used in the plant was not taken into account in the formula.

Therefore, the PP was requested to correct this formula in the new proposal of revised monitoring plan. The correct formula included is:

$$HR_{prjct,fuel i} = (\sum FCI * DEN_i * NCV_i) / GEN_{TH,gross}$$

### **3.3.2 Assessment**

Regarding the **first change proposed**, AENOR has verified that the new parameters and their corresponding description tables included in the revision monitoring plan allow for a better understanding of the monitoring procedures carried out in the project activity. Furthermore, the new description included is more complete and accurate and will help to avoid troubles in the monitoring process. Therefore it is deemed as appropriate.

Regarding the **second change proposed**, taking into account the small amount of Diesel consumed by the project and the high cost associated to the monitoring by sampling, it is AENOR opinion that the alternative proposal to monitor parameter NCV<sub>Diesel</sub> according to option d) of the "Tool to calculate project or leakage CO<sub>2</sub> emissions from fossil fuel combustion" is appropriate and conservative.

AENOR has verified also that the alternative proposed to monitor parameter DEN<sub>Diesel</sub> using the most conservative value for the density of diesel extracted from the International Energy Agency reports and the

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IPCC Guidelines, not only is the most appropriate and conservative option but also is the only real option the PP has to monitor this parameter taking into account the circumstances of this project activity.

AENOR confirms also that these changes have no impact in the ERs calculation because IPCC Guidelines /9/ and IEA statistics reports are usually offering the most conservative options available for those parameters.

Regarding the **third change proposed**, AENOR confirms that the correct formula has been included and has also applied in the ERs calculations.

AENOR confirms that the permanent changes proposed by the PP in the new revised monitoring plan are necessary to ensure a conservative monitoring according to the applied methodologies and tools, and also to adapt the current monitoring plan to the real circumstances of the project activity and the country where it is located. AENOR confirms also that the most conservative options of monitoring available have been included in this revision of monitoring plan.

Furthermore, AENOR confirms that the changes proposed do not lead to a reduction in the accuracy of the Emission Reduction calculation, and all the energy, fuel consumption measurements and calculation are appropriate and conservative according to the applied methodology.

For all the reasons stated above, it is AENOR opinion that no prior approval by the Board is necessary for this post registration changes and therefore, according to paragraph 136 of the CDM Project Cycle Procedure version 05.0 /13/, AENOR is submitting the post registration changes for acceptance by the Board as part of the present request for issuance of CERs for the period 01/11/2009 – 31/12/2011.

## 3.4 Changes to project design of registered project activity

### 3.4.1 Description

No changes to project design of registered project activity have been detected.

### 3.4.2 Assessment

Not applicable.

## 3.5 Changes to start date of crediting period

### 3.5.1 Description

No changes to the start date of the crediting period stated in the registered PDD are requested.

### 3.5.2 Assessment

Not applicable.

## 4 VALIDATION OPINION

AENOR was contracted to perform the verification of the CDM project activity: "West Nile Electrification Project (WNEP)" (Registration Ref. No. 0775) for the monitoring period from 01/11/2009 to 31/12/2011, and during the on site visit, some post-registration changes were identified by the audit team.

AENOR has performed the validation of the proposed changes according to the approved methodologies AMS-I.D version 9, AMS-II.B version 7, VVS (Version 05.0), PS (version 05.0) and PCP (Version 05.0).

AENOR planned and performed its work to obtain the information and explanations considered necessary to provide sufficient evidence to give reasonable assurance that the level of accuracy of GHG emission reductions, prepared on the basis of the monitoring plan included in the revised PDD compared with registered monitoring plan of the project activity is not adversely affect. This assessment included:

- Collection of evidence supporting the reported data
- Checking whether the provisions of the revised monitoring plan, were consistently and appropriately applied.

This revision improves the accuracy of information provided and consistency in the revised PDD and the monitoring plan.

Furthermore, AENOR confirms that:

The transfer of information from the old form of the PDD registered (CDM-SSC-PDD version 02) to the new form under VVS track (F-CDM-SSC-PDD Version 04.1) is totally correct and materially the same as the information in the PDD registered on 10/02/2007.

The proposed revision points have been described, and an assessment has been provided to substantiate the reason for each of the proposed revision points of the revised PDD and monitoring plan, using objective evidences.

The permanent changes proposed do not affect in any case to the correct fulfilment of the monitoring plan. Those changes are necessary to ensure a conservative monitoring according to the applied methodologies and tools, and also to adapt the current monitoring plan to the real circumstances of the project activity and the country where it is located. Furthermore, the emission reduction calculation is neither affected, and all the energy measurements and calculations are appropriate and conservative according to the revised monitoring plan and the applied methodologies.

For all the reasons stated above, it is AENOR opinion that no prior approval by the Board is necessary for these post registration changes and therefore, according to paragraph 136 of the CDM Project Cycle Procedure version 05.0, AENOR is submitting the post registration changes for acceptance by the Board as part of the present request for issuance of CERs for the period 01/11/2009 – 31/12/2011.

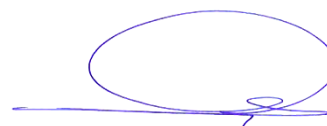
The proposed changes from the registered monitoring plan are in accordance with the approved methodologies applicable to the project activity and ensuring the conservativeness of the emission reductions calculation.

Madrid, 03<sup>rd</sup> February 2014



Alfonso Medrano Gutierrez

Chief Validator



Luis Robles Olmos

Authorised person

Assessment opinion on Post Registration Changes

“West Nile Electrification Project (WNEP)”

## 5 REFERENCES

1	PDD registered
2	Revised monitoring plan
3	Methodology: AMS-I.D version 09
4	Methodology: AMS-II.B version 07
5	CDM Validation and Verification Standard, version 05.0.
6	Clean Development Mechanism Project Cycle Procedure, version 05.0.
7	Clean Development Mechanism Project Standard, version 05.0
8	Validation opinion on changes in the monitoring plan.
9	2006 IPCC Guidelines
10	IEA Statics Report
11	“Tool to calculate project or leakage CO2 emissions from fossil fuel combustion” version 02



## ANNEX 1. APPOINTMENT CERTIFICATES

### CERTIFICATE OF QUALIFICATION

Subject: Verification and Technical Review Team for "West Nile Electrification Project (WNEP)"

Madrid, 12<sup>th</sup> December 2013

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: N/A

CDM Validator: N/A

CDM Chief Verifier: Yes

CDM Verifier: Yes

Technical Expert: Yes

Technical areas related with the project activity:

T.A 1.2 Energy generation from renewable energy sources.



José Luis TEJERA OLIVER  
CDM Operational Director

Assessment opinion on Post Registration Changes  
"West Nile Electrification Project (WNEP)"

## CERTIFICATE OF QUALIFICATION

Subject: Verification and Technical Review Team for "West Nile Electrification Project (WNEP)"

Madrid, 12<sup>th</sup> December 2013

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: N/A

CDM Validator: N/A

CDM Chief Verifier: Yes

CDM Verifier: Yes

Technical Expert: Yes

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.



José Luis TEJERA OLIVER  
CDM Operational Director

## CERTIFICATE OF QUALIFICATION

Subject: Verification and Technical Review Team for "West Nile Electrification Project (WNEP)"

Madrid, 12<sup>th</sup> December 2013

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: N/A

CDM Validator: N/A

CDM Chief Verifier: Yes

CDM Verifier: Yes

Technical Expert: Yes

Technical areas related with the project activity:

T.A 1.2 Energy generation from renewable energy sources.



José Luis TEJERA OLIVER  
CDM Operational Director

## CERTIFICATE OF QUALIFICATION

Subject: Verification and Technical Review Team for "West Nile Electrification Project (WNEP)"

Madrid, 12<sup>th</sup> December 2013

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<sup>a</sup> Carmen Gonzalez Galán**

CDM Chief Validator: N/A

CDM Validator: N/A

CDM Chief Verifier: Yes

CDM Verifier: Yes

Technical Expert: Yes

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.



José Luis TEJERA OLIVER  
CDM Operational Director

## CERTIFICATE OF QUALIFICATION

Subject: Verification and Technical Review Team for "West Nile Electrification Project (WNEP)"

Madrid, 12<sup>th</sup> December 2013

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 Luis Fuentes Pérez**

CDM Chief Validator: N/A

CDM Validator: N/A

CDM Chief Verifier: Yes

CDM Verifier: Yes

Technical Expert: Yes

Technical areas related with the project activity:

T.A 1.2 Energy generation from renewable energy sources.



José Luis TEJERA OLIVER  
CDM Operational Director