



# VALIDATION OPINION HIDROENERGIA DEL GENERAL S.R.L.

## VALIDATION OF POST REGISTRATION CHANGES OF THE EL GENERAL HYDROELECTRIC PROJECT

REPORT NO.BRAZIL-PRC/1059325/2013

REVISION No.1.1

BUREAU VERITAS CERTIFICATION

62/71 Boulevard du Château  
92571 Neuilly Sur Seine Cdx - France



## VALIDATION OPINION

Date of first issue: 13/08/2013		Organizational unit: Bureau Veritas Certification Holding SAS	
Client: Hidroenergia Del General S.R.L		Client ref.: Mr. Maynor Bermúdez	
Project reference No.: 4988	Date of registration: 27/03/2012	Registered PDD version and date Version 09.2, 26/03/2012	Revised PDD version and date Version 09.3, 08/08/2013
Monitoring period to which the request applies.: From 27/03/2012 onwards		PRC tracks <input type="checkbox"/> Prior approval track <input checked="" type="checkbox"/> Issuance track	
The DOE conducted validation of the changes: <input type="checkbox"/> Prior to commencement of a verification for the project activity or PoA. <input checked="" type="checkbox"/> When performing a verification for the project activity or PoA.			
Types of Changes <input type="checkbox"/> A. Temporary deviations from the monitoring plan as described in the registered PDD, PoA-DD or generic CPA-DD, or the monitoring methodology <input checked="" type="checkbox"/> B. Corrections that do not affect project/ programme design <input type="checkbox"/> C. Change to the start date of the crediting period <input checked="" type="checkbox"/> D. Permanent changes from the monitoring plan as described in the registered PDD or the monitoring methodology <input type="checkbox"/> E. Changes to the project or programme design of a registered project activity or PoA <input type="checkbox"/> F. Changes specific to afforestation or reforestation project activities			

Report No.: BVC/Brazil-PRC/1059325	Subject Group: CDM
Project title: El General Hydroelectric Project	
Work carried out by: Mr. Marco F. Prauchner - Team Leader Mr. Guilherme Lefèvre	
Internal Technical Review carried out by: Ms. Cláudia Freitas	
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## Indexing terms

Work approved by:

Mr. Matthieu Martini

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## Abbreviations

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reductions
CL	Clarification Request
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
DOE	Designated Operational Entity
FAR	Forward Action Request
GHG	Green House Gas(es)
MoV	Means of Verification
MP	Monitoring Plan
PDD	Project Design Document
PLF	Plant Load Factor
PP	Project Participant
PPA	Power Purchase Agreement
PRC	Post-Registration Changes
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard



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## 1. INTRODUCTION

Hidroenergia Del General S.R.L has commissioned Bureau Veritas Certification to validate the post-registration changes of CDM project El General Hydroelectric Project (hereafter called “the Project”) in the provinces of Heredia and Limón, Costa Rica.

This report summarizes the findings of the validation of the post-registration changes, performed on the basis of UNFCCC criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

### 1.1. Objective

The objective of a validation is to provide a thorough and independent third party assessment of the post-registration changes. In particular, the changes’ compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the changes meet the applicable CDM requirements and the identified criteria.

### 1.2. Scope

The validation scope is defined as an independent and objective review of the revised project design document and other relevant documents. The information in these documents is reviewed against the requirements of paragraph 37 of the CDM M&Ps, the applicability conditions of the selected methodology and guidance issued by the Board.

The validation is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

### 1.3. Validation Team

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

FUNCTION	NAME	TA 1.2	TA X.X	TASK PERFORMED*
Team Leader	Mr. Marco F. Prauchner	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> DR <input type="checkbox"/> SV <input checked="" type="checkbox"/> RI <input type="checkbox"/> TR
Team Member	Mr. Guilherme Lefèvre	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> DR <input checked="" type="checkbox"/> SV <input type="checkbox"/> RI <input type="checkbox"/> TR
Technical Specialist	N.A.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI <input type="checkbox"/> TR
Internal Technical Reviewer (ITR)	Ms. Cláudia Freitas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI <input checked="" type="checkbox"/> TR
Specialist supporting ITR	N.A.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> DR <input type="checkbox"/> SV <input type="checkbox"/> RI <input type="checkbox"/> TR

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



## 2. METHODOLOGY

The overall validation, from Contract Review to Validation Opinion, was conducted using Bureau Veritas Certification internal procedures.

In order to ensure transparency, a validation protocol was customized for the project, according to the version 04.0 of the Clean Development Mechanism Validation and Verification Standard, dated 29/07/2013 (/8/). The protocol shows, in a transparent manner, criteria (requirements), means of validation and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organizes, details and clarifies the requirements the post-registration changes are expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

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

### 2.1. Review of Documents

The Revised Project Design Document (PDD) submitted by Hidroenergia Del General S.R.L and additional background documents related to the project design and monitoring plan were reviewed.

Furthermore, cross checks were made between information provided in the revised PDD and information from sources other than those used, and DOE's sectoral expertise and independent background investigations.

To address Bureau Veritas Certification corrective action and clarification requests, Hidroenergia Del General S.R.L revised the PDD and resubmitted it on 08/08/2013.

The validation conclusions presented in this report relate to the project as described in the revised PDD version 09.3 /7/.

### 2.2. Follow-up Interviews

On 19/03/2013, Bureau Veritas Certification performed a site visit and interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of Hidroenergia Del General S.R.L and Tractebel Engineering were interviewed (see References).

### 2.3. Resolution of Clarification, Corrective and Forward Action Requests

The objective of this phase of the validation is to resolve issues that require further elaboration, research or expansion prior to Bureau Veritas Certification's positive conclusion on the post-registration changes.



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

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

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

A Forward Action Request (FAR) may also be raised during validation, to identify issues related to project implementation that require review during the first verification of the project activity.

To guarantee the transparency of the validation process, the issues raised, the responses provided by the project participants, the means of validation of such responses and references to any resulting changes in the PDD or supporting annexes are documented in the Validation Protocol in Appendix A.

## 2.4. Internal Technical Review

The validation opinion underwent an Internal Technical Review (ITR) before requesting approval of the post-registration changes.

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

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

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

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

The reviewer may raise Clarification Requests to the validation team and will discuss these matters with the Team Leader.

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



### 3. VALIDATION CONCLUSIONS

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

The findings from the desk review of the revised project design documents and the findings from interviews during the follow up visit are described in the Validation Protocol in Appendix A.

The Clarification, Corrective and Forward Action Requests are stated, where applicable, in the following sections and are further documented in the Validation Protocol in Appendix A. The validation of the Project resulted in 02 CAR(s), 00 CL(s) and 00 FAR(s).

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

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

#### 3.1. Temporary deviations from the registered monitoring plan and/or monitoring methodology (255-256)

##### Description of the deviations

No temporary deviations from registered monitoring plan or applied methodology for this monitoring period.

##### Assessment on the deviations

No temporary deviations from registered monitoring plan or applied methodology for this monitoring period.

##### Impact of the deviation on emissions reductions

No temporary deviations from registered monitoring plan or applied methodology for this monitoring period.

#### 3.2. Corrections (259)

During the first verification of the project activity, comprising the period from 27/03/2012 to 31/12/2012, the UNFCCC Secretariat raised a "Request for Issuance Incomplete", on 22/07/2013, with 2 issues, being the first one related to the implementation of the project as per the PDD description.

The registered PDD version 09.2 /1/, informed that the transmission line is 220 kV and 21 km long, while the MR described this transmission line as being 230 kV and 21.5 km long.

To solve this question, the DOE raised the CAR 01 (refer to Appendix A) regarding this inconsistency. The PP answered this CAR, informing that the values reported in the MR for interconnection line distance as well as line voltage are different to the ones reported in the PDD, due to fact that at the time of writing the PDD, design values where used. The project as implemented has a transmission line of 21.5 km and 230 kV.





PP provided the following evidences:

1. "Informe de Finalización de Obra" (Report of Completion of Work /6/), provided by "ICE UEN Proyectos y Servicios Asociados" from September 2007, on the construction of the transmission line from El General to Leesville 230 kV line. The document states in section I page 4 that as constructed the line has a length of 21.5 km and a voltage of 230 kV.
2. Unifilar diagram for the El General-Leesville line stating that the distance is 21.5 km and a voltage of 230 kV /5/.

Two corrections in the PDD, that do not affect the project design of registered project activity, are made by the PPs. In PDD section A.4.3., the transmission line length has been corrected from "21km" (which was a pre-registration design value) to "21.5km" and the transmission line voltage level has been corrected from "220kV" (which was a pre-registration design value) to "230kV". Evidence for the implemented transmission line length and voltage level has been provided to the DOE. The revised PDD version number 9.3 was completed on 08/08/2013 and is submitted for DOE for this Validation Opinion.

### 3.3. Changes to the start date of the crediting period (261)

There are no changes to the start date of the crediting period.

### 3.4. Permanent changes from the registered monitoring plan or monitoring methodology (267-268)

#### Reason of the changes

The registered PDD version 09.2 states, under section B.7.1., Parameter  $EG_{facility,y}$ , that the "meter will be calibrated on a yearly basis". This is not in accordance with the current practice, with calibration on a 6 months interval, as required by the applicable PPA /3/. The reason of the changes is to update the meter calibration frequency as per the current practice, more conservative (refer to CAR 02 in Appendix A).

#### Summary of the changes

##### Section B.7.1.

(1) Change 1

Calibration frequency from the meters changed from "on a yearly basis" to "every six months".

#### Assessment on the changes

(a) The proposed revisions ensure that the level of accuracy and completeness in the monitoring and verification process is not reduced as a result of the revision.



The DOE assessed the currently monitoring practice, which is more conservative as the one presented in the registered PDD.

In the registered PDD version 09.2, it is defined under Section B.7.1., that the calibration is to be conducted on a “yearly basis”. The PP’s currently practice is to calibrate the power meters every six months, as per section 7.3 and annex B.3.2. of the PPA.

The revised PDD version 09.3 reflects this practice.

The validation team used objective evidence, assessed the accuracy and completeness of each proposed revision to the monitoring plan, including the frequency of measurements, the quality of monitoring equipment (e.g. calibration requirements, and the quality assurance and quality control procedures).

(b) The proposed revisions are in accordance with the monitoring methodology.

The project is registered under ACM0002 version 12.1.0. This methodology requires, under Section III. MONITORING METHODOLOGY, that “All measurements should be conducted with calibrated measurement equipment according to relevant industry standards.”

The DOE assessed the PPA, on which under section 7.3 and annex B.3.2., is established that the calibration shall be done every six months.

The DOE hereby confirms that this calibration procedure is in accordance with relevant industry standards.

(c) The findings of previous verification reports, if any, have been taken into account.

Not applicable. This is the first verification of the project activity.

### **3.5. Changes to the project design of a registered project activity (277-282)**

#### **Description of the changes**

No changes to project design of registered project activity for this monitoring period.

#### **Assessment on the changes**

(a) When the changes occurred

No changes to project design of registered project activity for this monitoring period.

(b) Reasons for these changes taking place

No changes to project design of registered project activity for this monitoring period.

(c) Whether the changes would have been known prior to registration of the project activity



No changes to project design of registered project activity for this monitoring period.

(d) How the changes would impact the overall operation/ability of the project activity to deliver emission reductions as stated in the PDD

No changes to project design of registered project activity for this monitoring period.

**Impact to the validation conclusions in the registered PDD**

(a) Additionality of the project activity

No changes to project design of registered project activity for this monitoring period.

(b) Scale of the project activity

No changes to project design of registered project activity for this monitoring period.

(c) Applicability and application of approved baseline methodology

No changes to project design of registered project activity for this monitoring period.

(d) Compliance of the monitoring plan with applied monitoring methodology

No changes to project design of registered project activity for this monitoring period.

(e) Level of accuracy of the monitoring compared with the requirements contained in the registered monitoring plan.

No changes to project design of registered project activity for this monitoring period.



#### 4. VALIDATION OPINION

Bureau Veritas Certification has performed a validation of post-registration changes of the El General Hydroelectric Project, which is located in Costa Rica, in the provinces of Heredia and Limón. The validation was performed on the basis of UNFCCC criteria for the CDM, and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The validation consisted of the following three phases: i) desk review of the project design document and additional background documents; ii) follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final validation report and opinion.

The review of the revised project design document, relevant additional information and the subsequent follow-up interviews have provided Bureau Veritas Certification with sufficient evidence to determine the fulfillment of stated criteria. In our opinion, the post-registration changes meet all relevant UNFCCC requirements for the CDM and the relevant host country criteria. Bureau Veritas Certification thus requests the approval of post-registration changes of the project activity.

Ms. Cláudia Freitas  
Internal Technical Reviewer  
13/08/2013

Mr. Marco F. Prauchner  
Team Leader  
13/08/2013



## 5. REFERENCES

### Category 1 Documents:

Documents provided by project participants that relate directly to the GHG components of the project.

- /1/ Registered PDD version 09.2 dated 26/03/2012, UNFCCC ref 4988
- /2/ Validation Report revision from 27/03/2012
- /3/ Signed Power Purchase Agreement (PPA) dated April 2003.
- /4/ Calibration Records/Certificates: Report no.: CENCE-PST-P-20111129-GEN, Report no.: R03-IME-01-01 and Report no.: R03-IME-01-01
- /5/ Unifilar Diagram of the Transmission Line
- /6/ Report of Completion of Work (Reporte Finalizacion de Obra)
- /7/ Post Registration Changes PDD version 09.3 dated 08/08/2013

### Category 2 Documents:

Background documents related to the design and/or methodologies employed in the design or other reference documents used for cross-check.

- /8/ CDM Validation and Verification Standard Version 04.0 (EB74)
- /9/ CDM Validation Project Standard Version 04.0 (EB74)
- /10/ CDM Project Cycle Procedure Version 04.0 (EB74)
- /11/ ACM0002 – version 12.1

### Persons interviewed:

Persons interviewed during the validation or persons that contributed with other information that are not included in the documents listed above.

#### **Hidroenergia Del General S.R.L.**

- /1/ Maynor Bermudez Monitoring Administrator
- /2/ Mauricio Azevedas Technical Assistant

#### **Tractebel Engineering**

- /3/ Guy Vancraybex Monitoring & Reporting Expert Carbon Services



## 6. CURRICULA VITAE OF THE DOE'S VALIDATION TEAM MEMBERS

Mr. Marco F. Prauchner	Bureau Veritas Certification, Brazil	Team Leader, Climate Change Lead Verifier,  Graduated in Mechanical Engineering with experience in Quality and Environmental management in mechanical, plastic and chemical industries. He is ISO 9001:2008, ISO 14001:2004 and ISO 50001:2011 Lead Auditor and has also experience in the implementation of Environmental Management Systems. Qualified as lead verifier GHG – Greenhouse Gases. He has validated/verified and conducted technical revisions in several CDM projects in Latin America, Africa and Asia.
Mr. Guilherme Lefèvre	Bureau Veritas Certification, Brazil	Team member, Climate Change Lead Verifier,  Graduated in Law with experience in GHG Programs, both compulsory and voluntary. Guilherme has vast experience in the development and analysis of CDM, VCS, Social Carbon and CCBS projects. He has an MSc in Environmental Science – São Paulo University. Guilherme trained as a lead auditor in the fields of environment (ISO 14001) and GHG – Greenhouse Gas.
Ms. Cláudia Freitas	Bureau Veritas Certification, Brazil	Technical Reviewer, Climate Change Lead Verifier.  Graduated in Chemical Engineering and post graduate in Environmental Management System and in MBA Management with experience in environmental management, energy and Clean Development Mechanism projects. She is ISO 14001:2004 Lead Auditor and qualified as lead verifier GHG – Greenhouse Gases. She has validated/verified several CDM projects in Latin America and Asia. She also has worked as external expert for Brazilian DNA and UNFCCC.

## APPENDIX A: VALIDATION PROTOCOL FOR POST REGISTRATION CHANGES

Table 1 Validation requirements based on VVS and PS

CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
<b>1. Temporary deviations from the registered monitoring plan or applied methodology</b>					
a. Are there deviations from the registered monitoring plan or methodology?	VVS	251	There are no deviations from the registered monitoring plan or methodology.	OK	OK
b. Do the provisions of appendix 1 of the Project standard apply to the identified deviations?	VVS	252	Not applicable. Refer to 1.a.	OK	OK
c. If the provisions of appendix 1 of the Project standard do not apply, is prior approval from the Board with respect to the acceptability of the deviations sought?	VVS	252	Not applicable. Refer to 1.a.	OK	OK
d. If the deviation will lead to a reduction in the accuracy of the calculation of ERs, are conservative assumptions or discount factors applied to the calculations to the extent required to ensure that ERs	VVS	253	Not applicable. Refer to 1.a.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
will not be over-estimated as a result of the deviation?					
e. For cases where a deviation from the monitoring plan may be applicable to the monitoring period under verification, and part of the subsequent monitoring period, is the exact period to which the deviation applies verified?	VVS	254	Not applicable. Refer to 1.a.	OK	OK
<b>2. Corrections</b>					
a. Are the corrections to project information or parameters fixed at validation, as described in the registered PDD, made by PPs in a revised PDD comply with the requirements of the Project standard?	VVS	257	<b>CAR 01:</b> The implementation status of the project is not in accordance with the description in the registered PDD. Transmission line is informed in the MR as being 21.5 km long and 230 kV, as PDD refers to 21 km long and 220 kV.	CAR 01	OK
b. Is the corrected information an accurate reflection of actual project information?	VVS	258 (a)	Yes. PDD V 09.3 is a reflection of actual project information.	OK	OK
c. Are the corrected parameters in accordance with the applied methodology and/or selected monitoring plan?	VVS	258 (b)	No parameters are to be corrected.	OK	OK





CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
<b>3. Changes to the start date of the crediting period</b>					
a. Is it ensured that the start date of the crediting period in the registered PDD was not prior to the date of registration?	PS	211	Yes. As per registered PDD, Section C.2.1.1. <i>Starting date of the first crediting period:</i> 01/08/2011 or the date of registration, whichever is later. Project is registered on 27/03/2012.  No changes to the start date of the crediting period are being requested.	OK	OK
b. Is it ensured that PPs do not request any changes to the start date of the crediting period of more than two years - not more than four years for project activities hosted by a Least Developed Country?	PS	212	No changes to the start date of the crediting period are being requested.	OK	OK
c. If the change of the start date of the crediting period constitutes a difference of more than one year but less than two years - more than two years but less than four years for project activities hosted by a Least Developed Country, do PPs demonstrate that no changes have occurred to the project activity that would result in a less conservative baseline, and that substantive	PS	214	No changes to the start date of the crediting period are being requested.	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
progress has been made by the PPs to start the project activity?					
<b>4. Permanent changes from the registered monitoring plan or monitoring methodology</b>					
a. Is it ensured that the changes to the monitoring plan contained in the registered PDD are in compliance with the applied methodology and do not reduce the level of accuracy of the monitoring compared with the requirements contained in the registered monitoring plan?	VVS	263	<b>CAR 02:</b> The correction applied in the period related to the delayed calibration is not conservative, as it shall consider both, delivered import and exported energy, separately, as presented in VVS V 04.0, Appendix 1. Calibration. Moreover, the frequency calibration in the PDD is described as being in a yearly basis, and current practice is to calibrate the meters every 06 months.	CAR 02	OK
b. If the proposed changes refer to a later version of the applied methodology in the registered PDD, does the application of any later version of the applied methodology and tools impact the conservativeness of the monitoring and verification process, including the related emission reduction calculation?	VVS	264	Changes don't refer to a later version of the methodology.	OK	OK
c. If the PPs are unable to implement the registered monitoring plan and it	VVS	265	PPs are able to implement the monitoring plan.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
will not be possible to monitor the registered CDM project activity in accordance with a monitoring plan that would comply with the applied methodology and any applicable tools or the relevant provisions of appendix 1 of the Project standard, is any guidance (prior approval) requested from the Board concerning the acceptability of the permanent changes?					
d. If the permanent changes will lead to a reduction in the accuracy of the calculation of ERs, are conservative assumptions or discount factors to the calculations applied to the extent required to ensure that ERs will not be over-estimated as a result of the permanent change?	VVS	266	Changes will not lead to a reduction in the accuracy of the calculation of ERs.	OK	OK
<b>5. Changes to the project design of a registered project activity</b>					
a. If the project design in the implementation or operation of the project activity does not conform with the description contained in the registered PDD or the relevant	VVS	270	There are no changes to the project design.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
provisions of appendix 1 of the Project standard, is any guidance (prior approval) requested from the Board concerning the acceptability of the proposed or actual changes?					
b. Was an on-site visit conducted in case of actual changes?	VVS	271	A site visit is conducted in order to Verify the project activity. There are no changes to the project design.	OK	OK
c. Does the revised PDD describe the nature and extent of the proposed or actual changes, including	PS	218			
i. Changes in the effective output capacity due to increased installed capacity or increased number of units, or installation of units with lower capacity or units with a technology which is less advanced than that described in the PDD?	PS	218 (a)	There are no changes to the project design.	OK	OK
ii. Addition of component or extension of technology?	PS	218 (b)	There are no changes to the project design.	OK	OK
iii. Removal or addition of one site (or more) of a project activity registered with multiple-sites?	PS	218 (c)	There are no changes to the project design.	OK	OK
iv. Actual operational parameters which	PS	218 (d)	There are no changes to the project design.	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
are within the control of PPs differing from the expected parameters?					
v. Any consequential changes to the baseline methodology, including changing or adding another baseline methodology or applying a baseline scenario that is more appropriate as a result of the proposed or actual modifications to the project activity?	PS	218 (e)	There are no changes to the project design.	OK	OK
d. Are the impacts of the proposed or actual changes to the registered CDM project activity reported in the revised PDD, including	PS	219			
i. The applicability and application of the applied methodology under which the project activity has been registered?	PS	219 (a)	There are no changes to the project design.	OK	OK
ii. Compliance of the monitoring plan with the applied methodology?	PS	219 (b)	There are no changes to the project design.	OK	OK
iii. The level of accuracy and completeness in the monitoring of the project activity?	PS	219 (c)	There are no changes to the project design.	OK	OK

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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
iv. The additionality of the project activity?	PS	219 (d)	There are no changes to the project design.	OK	OK
v. The scale of the project activity?	PS	219 (e)	There are no changes to the project design.	OK	OK
e. Are the proposed or actual changes would adversely affect the conclusions of the validation report of the registered PDD with regard to:	VVS	273			
i. Additionality of the project activity?	VVS	273 (a)	There are no changes to the project design.	OK	OK
ii. Scale of the project activity?	VVS	273 (b)	There are no changes to the project design.	OK	OK
iii. Applicability and application of approved baseline methodology under which the project activity has been registered?	VVS	273 (c)	There are no changes to the project design.	OK	OK
iv. The compliance of the monitoring plan with the applied monitoring methodology?	VVS	273 (d)	There are no changes to the project design.	OK	OK
f. If the proposed or actual changes affect the additionality of the project activity:	VVS	274			
i. In the case of investment analysis, have PPs only modified the key	VVS	274 (a)	There are no changes to the project design.	OK	OK



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CHECKLIST QUESTION	Ref.	§	COMMENTS	Draft Concl	Final Concl
parameters in the original spreadsheet calculations affected by the proposed or actual changes to the project activity?					
ii. In the case where only barriers have been claimed to demonstrate additionality, have PPs demonstrated that the barriers are still valid under the new circumstances?	VVS	274 (b)	There are no changes to the project design.	OK	OK
g. If the PP applies a later version of the methodology or another methodology that is applicable to the project activity, is it confirmed that the applied methodology and tools do not impact the conservativeness of the monitoring and verification process and the related emission reduction calculations?	VVS	275	There are no changes to the project design.	OK	OK
h. Does the revised PDD comply with the applied monitoring methodology and tools or any later version of the methodology or the requirements of another methodology that is applicable to the project activity?	VVS	276	There are no changes to the project design.	OK	OK

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

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
Issues raised after receiving of the “Request for Issuance Incomplete” on 22/07/2013.			
<b>CAR 01:</b> The implementation status of the project is not in accordance with the description in the registered PDD. Transmission line is informed in the MR as being 21.5 km long and 230 kV, as PDD refers to 21 km long and 220 kV.	VVS Para 228	<p>The values reported in the MR for interconnection line distance as well as line voltage are different to the ones reported in the PDD, due to fact that at the time of writing the PDD, design values where used.</p> <p>The project as implemented has a transmission line of 21.5 km and a voltage of 230 kV.</p> <p>Evidence has been provided to the DOE referring to:</p> <ul style="list-style-type: none"> <li>• “Informe de Finalización de Obra” provided by “ICE UEN Proyectos y ServiciosAsociados” from September 2007, on the construction of the transmission line from El General to Leesville 230 kV line. The document states in section I page 4 that as constructed the line has a length of 21.5 km and a voltage of 230 kV.</li> <li>• Single line diagram for the El General-Leesville line stating that the distance is</li> </ul>	<p>The DOE assessed the evidences provided and the updated PDD.</p> <p>MR is consistent with project implementation and updated PDD.</p> <p>CAR 01 is closed.</p>



Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
		<p>21.5 km and a voltage of 230 kV.</p> <p>The information provided in the MR reflects the actual operation of the project as implemented.</p> <p>Therefore the MR as presented is in compliance with Para 228 of VVS, and supporting information has been provided to the DOE.</p> <p>A new version of the PDD version 9.3 has been submitted to the DOE including the appropriate modification of line distance to 21.5 km and 230 kV line voltage.</p>	
<p><b>CAR 02:</b> The correction applied in the period related to the delayed calibration is not conservative, as it shall consider both, delivered import and exported energy, separately, as presented in VVS V 04.0, Appendix 1. Calibration. Moreover, the frequency calibration in the PDD is described as being in a yearly basis, and current practice is to calibrate the meters every 06 months.</p>	<p>VVS Para238</p>	<p>The correction applied in the period related to the delayed calibration is now conservative, considering separately the imported and exported energy, as presented in VVS V 04.0 Appendix 1. Calibration.</p> <p>A new version of the calculation sheet and MR have been submitted together with the project participant response.</p> <p>After having perform the conservative correction due to the metering calibration issue, the result emission reduction calculation render value of 51,304.44 tCO<sub>2</sub> which compare to the previous values of 51304.46 tCO<sub>2</sub>. The new value of emission reduction estimation that no vary</p>	<p>The PP provided an updated spreadsheet, on which the imported and exported energy are separately and conservative corrected.</p> <p>Updated PDD present calibration frequency as 06 months.</p> <p>Note that as DOE decided to revise the PDD in this stage, DOE didn't raised a FAR as mentioned in the issue 2 of the "Request for Issuance Incomplete".</p>

Draft report clarifications and corrective action requests by verification team	Ref. to checklist question in table 1	Summary of project participant response	Verification team conclusion
		<p>significantly, but it's now correctly reported in the MR.</p> <p>The spread sheet for emission reduction calculation has been updated to reflect the changed, and has been submitted to the DOE together the new version of the MR.</p> <p>A new version of the PDD version 9.3 has been submitted to the DOE including consistency of the calibration being performed every six months in order to have consistency with actual practice.</p>	CAR 02 is closed.