



VALIDATION REPORT

for the CDM Programme of Activities

**“Guacamaya Small Scale Hydropower
Programme of Activities”
Managed by Anaconda Carbon S.A.**

in

Republic of Honduras
Republic of Costa Rica
Republic of Nicaragua

Report No. 01 997 9105064224

Version No.03, 2012-12-18

TÜV Rheinland ChinaLtd.

I. Programme of Activities (PoA) Description:

PoA title:	GUACAMAYA SMALL SCALE HYDROPOWER PROGRAMME OF ACTIVITIES		
Host Countries:	Republic of Honduras, Republic of Costa Rica, and Republic of Nicaragua		
Methodology:	AMS-I.D version 17	<input type="checkbox"/> Large Scale	<input checked="" type="checkbox"/> Small Scale

GHG reducing measure/technology of the CPAs of the PoA: Hydropower electricity generation

Party	Project Participants/CME	Party considered a project participant
Honduras (Host) Costa Rica (Host) Nicaragua (Host)	CME: Anaconda Carbon S.A.	No
The Netherlands	PP: B.V. Mabanaf	No

Real-case CPA title:	San Alejo Hydroelectric Project
Host Country:	Republic of Honduras
CPA Implementer:	Aquafutura S.A. de C.V.
Annual average emission reductions (estimate):	5,762 tCO ₂

II. Validation:

Contract party: Anaconda Carbon S.A.

Validation Team			Role									
Full name	Affiliation TÜV Rheinland	Appointed for Sectoral Scopes (Technical Areas)	Team leader	Acting Team Leader	Local Expert	Team Member (Auditor)	Technical Expert	Acting Tech. Expert	Trainee Auditor	Technical Reviewer	Expert to TR	Trainee TR
Ms. Guadalupe Avendaño	Mexico	1, 13	x				x					
Mr. Lixin Li	China	1, 2, 3, 4								x		

Validation Phases:

- ☒ Desk Review
☒ Follow up interviews
☒ Resolution of outstanding issues

Validation Status:

- ☐ Corrective Actions / Clarifications Requested
☒ Full Approval and Submission for Registration
☐ Rejected

III. Validation Report:

Report No.: 01 997 9105064224	Current revision No.: 03	Date of current revision: 2012-12-18	Date of first issue: 2012-07-06
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Final approval	Released	Distribution
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EXECUTIVE SUMMARY- VALIDATION OPINION

The validation team assigned by the DOE (TÜV Rheinland (China) Ltd.) has performed the validation of “Guacamaya Small Scale Hydropower Programme of Activities” Managed by CME: Anaconda Carbon S.A. in Republic of Honduras, Republic of Costa Rica, and Republic of Nicaragua on the basis of UNFCCC criteria for Clean Development Mechanism (CDM) programme of activities according to Article 12 of the Kyoto Protocol and the subsequent decisions by the COP/MOP and CDM Executive Board with regard to the simplified modalities and procedures for small-scale CDM project activities, the procedures for registration of a programme of activities and the application of approved methodologies. The validation findings are summarized in the validation report and the validation protocol.

The review of the Programme design documentations (i.e. PoA-DD, CPA-DD and a real-case CPA-DD) and the subsequent follow-up interviews have provided the DOE with sufficient evidence to determine the fulfillment of stated criteria.

The validation was executed in the following steps so far:

- First Public Stakeholder comment process¹ (from 13/04/2011 to 12/05/2011)
- Desk review of GSP PoA-PDD (version 01, 07/02/2011), Generic CPA (version and date not specified), Real-case CPA (i.e. Rio Quilio Hydroelectric Project version 01, 18/02/2011)
- On-site visit to Rio Quilio Hydroelectric Project with stakeholder interviews (from 20/06/2011 to 24/06/2011)
- Issue of checklist with corrective action requests (CARs) and clarification requests (CLs) and the draft validation report & protocol (25/08/2011)
- Second Public Stakeholder comment process (from 20/10/2011 to 18/11/2011), to re-publish the PoA-DD, Generic CPA and change in the real-case CPA due to changes in the project boundary and the initial CPA to be registered as real-case (please refer to section 3.3 for further clarification)
- Desk review of GSP PoA-PDD (version 02, 23/09/2011), Generic CPA (version and date not specified), Real-case CPA (i.e. San Alejo Hydroelectric Project version 02, 23/09/2011)
- On-site visit to San Alejo Hydroelectric Project with stakeholder interviews (01/11/2011 to 03/11/2011)
- Technical review of revised PoA-PDD (Version 04, 30/04/2012), Generic CPA (version and date not specified), Real-case CPA (i.e. San Alejo Hydroelectric Project version 04, 30/04/2011)
- Issue of the final validation report & protocol

¹ Two important events caused a second publication:

Firstly, during the GSP PoA-PDD (version 01) first uploading the DOE indicated only one Host Country, which is Honduras, the issue needs to be corrected accordingly to include all Host Countries in section A.4.1.1, also from the first to the second PoA-DD publication Republic of Nicaragua was included as Host Party.

Secondly, the initial Specific CPA (version 01), Rio Quilio Hydroelectric Project, was changed due to Anaconda's internal reasons, to the present one, San Alejo Hydroelectric Project, thus together with the new version of PoA-DD (version 02) a new real case was submitted for publication in the second GSP.

Also a second on-site visit was performed to perform validation of San Alejo Hydroelectric Project and to make interviews with relevant stakeholders.

According to the PoA-DD, Anaconda Carbon S.A. is the coordinating and managing entity (CME) and is also a project participant of the PoA from host countries. B.V. Mabanaf is another project participant from Annex I country i.e. the Netherlands.

The Host Countries are: Republic of Honduras, Republic of Costa Rica, and Republic of Nicaragua.

The host country Honduras, delivered a LoA from the Honduran DNA – Ministry of Natural Resources and Environment (SERNA), was issued on 10/12/2012 and received by the CME on 17/12/2012 to confirm the voluntary participation of Anaconda Carbon S.A. and to authorize Anaconda Carbon S.A. on their rights to the CERs generated by the program. In addition, the LoA indicates the PoA assists in achieving the sustainable development of the host country.

The host country Nicaragua, delivered a LoA from the Nicaraguan DNA – Ministry of Environment and Natural Resources Nicaraguan, was issued on 05/07/2012 and received by the CME on 09/07/2012 to confirm the voluntary participation of Anaconda Carbon S.A. and to authorize Anaconda Carbon as the CME of the PoA. In addition, the LoA indicates the PoA assists in achieving the sustainable development of the host country.

The host country Costa Rica, delivered a LoA from the Costa Rican DNA – Ministry of Environment, Energy and Telecommunications (MINAET), was issued on 17/10/2012 and received by the CME on 09/11/2012 to confirm the voluntary participation of Anaconda Carbon S.A. and to authorize Anaconda Carbon as the CME of the PoA. In addition, the LoA indicates the PoA assists in achieving the sustainable development of the host country.

Separated LoA from the DNA of the Netherlands was received for confirming the voluntary participation of B.V. Mabanaf.

The validation team did not reveal any information that indicates that the programme of activities can be seen as a diversion of ODA funding towards any of the mentioned Host Countries.

The CDM programme activities (CPAs) under the PoA apply AMS-I.D./Version 17 – “Grid connected renewable electricity generation” in connection with “Tool to calculate the emission factor for an electricity system / Version 02.2.1”. For demonstrating the additionality at CPA level, a CPA either applies: “Standard: Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities” (Version 02.0); “*Guidelines for demonstrating additionality of microscale project activities*”, (Version 04); or “Guidelines on the demonstration of additionality of small-scale project activities”, (Version 09”) using tools such as “Non-binding best practice examples to demonstrate additionality for SSC project activities” approved in Annex 34, EB 35 and “Guidelines for Objective Demonstration and Assessment of Barriers” version 1, Annex 13, EB50.

It is demonstrated that the PoA is not a baseline scenario. In the absence of the PoA, small hydropower projects face different barriers such as investment barriers - Access-to-finance, technological barriers and barriers due to prevailing practice. Hence, the baseline emission is related to the electricity produced by the power plants to be replaced by the CPAs, this involves emissions from displaced fossil fuel used at power plants connected to Host Countries power grids. Emission reductions attributable to a CPA included to the PoA are hence expected to be additional.

Monitoring plan and procedures have been presented in the PoA-DD and generic CPA-DD in accordance with AMS-I.D./Version 17. Relevant CDM trainings will be started before each CPA operation. Training plan and schedule about CDM monitoring is available for validation.

In summary, all of corrective action requests and clarification requests as stated in the draft validation report and protocol have been resolved and resulted in the updated PoA-DD, generic CPA-DD and real-case CPA-DD. Therefore, it is the validation team's opinion that the PoA, "Guacamaya Small Scale Hydropower Programme of Activities" managed by CME: Anaconda Carbon S.A. as described in the PoA-DD, the generic CPA-DD and the real-case CPA-DD all dated 04/12/2012, meet all the relevant UNFCCC requirements for a PoA under the CDM and relevant host countries criteria. The validation team of TÜV Rheinland (China) Ltd. thus recommends the PoA to be registered as a CDM Programme of Activities with the UNFCCC.

Guadalupe Avendaño (Team Leader)



TÜV Rheinland de México S.A. de C.V.
City, 2012-12-18

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TÜV Rheinland (China) Ltd.
Beijing, 2012-12-20

Abbreviations

AMS	Approved Methodology Small scale
ARESEP	Autoridad Reguladora de los Servicios Públicos. Regulatory Authority for Public Services in Costa Rica.
BE	Baseline Emission
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CEAC	Consejo de Electrificación de América Central. Council Central American Electrification
CM	Combine Margin
CPA	CDM Programme activity
CPA-DD	CDM Programme Activity Design Document
CER	Certified Emission Reduction
CL	Clarification Request
CME	Coordinating or Managing Entity
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
DSE	Dirección Sectorial de Energía. Energy Sectoral Management in Costa Rica
EB	Executive Board
EIA	Impact Assessment / Environmental Assessment
ENEE	Empresa Nacional de Energía Eléctrica (National Electric Energy Enterprise)
ER	Emission Reduction
FAR	Forward Action Request
FSR	Feasibility Study Report
GHG	Greenhouse Gas
GSP	Global Stakeholder Publication
GWh	Giga Watt Hours
I	Interview
INE	Instituto Nicaragüense de Energía. Nicaraguan Energy Institute.
IPCC	Intergovernmental Panel on Climate Change
kW	Kilo Watt
kWh	Kilo Watt Hours
LE	Leakage Emissions
LoA	Letter of Approval
MINAET	Ministerio de Ambiente, Energía y Telecomunicaciones (Ministry or Environmental, Energy and Telecommunications) in Costa Rica
MoV	Means of Verification
MoC	Modalities of Communications
MW	Mega Watt
MWh	Mega Watt Hours
NGO	Non Government Organisation
NIS	National Interconnected System
NOx	Nitrogen Oxides
ODA	Official Development Assistance
OM	Operating Margin
OSV	On Site Visit

PE	Project Emission
PoA	Programme of Activities
PoA-DD	Programme of activities design document
PP	Project Participant
SERNA	Secretaría de Recursos Naturales y Ambiente (Natural Resources and Environmental Ministry)
SD	Sustainable Development
t	Tonne
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual

TABLE OF CONTENTS

1	INTRODUCTION	9
1.1	Objective	9
1.2	Scope	9
2	METHODOLOGY	10
2.1	Desk Review of the Programme Design Documentation	10
2.2	Follow-up Interviews with Project Stakeholders	14
2.3	Resolution of Outstanding Issues	15
2.4	Internal Quality Control	17
2.5	Validation Team	17
3	VALIDATION FINDINGS	17
3.1	Approval and participation	17
3.2	Programme of Activities Design Documents	19
3.3	Programme Description	19
3.4	Eligibility Criteria for CPA Inclusion	27
3.5	Operational and Management Plan	39
3.6	Monitoring Plan	41
3.7	Baseline and Monitoring Methodology	42
3.8	Additionality	46
3.9	GHG Emission Reduction From a typical CPA	55
3.10	Monitoring Plan of a typical CPA	57
3.11	Sustainable Development	61
3.12	Local Stakeholder Consultation	61
3.13	Comments by Parties, Stakeholders and NGOs	62

Appendix A: Validation Protocol

Appendix B: Certificates of Competence

1. INTRODUCTION

Anaconda Carbon S.A. (hereafter referred as “the CME”) has commissioned the DOE TÜV Rheinland China Ltd. to perform validation of the proposed CDM Programme of Activities (PoA) “Guacamaya Small Scale Hydropower Programme of Activities” in Republic of Honduras, Republic of Costa Rica, and Republic of Nicaragua (hereafter called “the PoA”). This report summarises the findings of the validation of the PoA identified in the PoA Design Document (PoA-DD); the CDM Programme Activity Design Document (CPA-DD) template with generic information relevant to all CDM Program Activities (CPAs) to be included in the PoA; and the associated real case CPA-DD. The validation was performed on the basis of UNFCCC criteria for the PoAs under the CDM, as well as criteria given to provide for consistent programme operations, monitoring and reporting. The term “UNFCCC criteria” refers to Article 12 of the Kyoto Protocol, the CDM modalities and procedures, the simplified modalities and procedures for small-scale CDM project /programme activities, the procedures for registration of a programme of activities and the subsequent decisions by the COP/MOP and CDM Executive Board. In addition to these criteria, host countries criteria are also taken into account.

1.1 Objective

The purpose of a validation is to have an independent third party assess the PoA-DD, CPA-DD template and the associated real case CPA-DD (also known as specific CPA-DD). In particular, the eligibility criteria for inclusion and demonstration of additionality of CPAs, the programme’s baseline determination, monitoring plan, and the programme’s compliance with relevant UNFCCC and host Party criteria are validated in order to confirm that the programme design, as documented, is sound and reasonable and meets the identified criteria. Validation is a requirement for all CDM PoAs and is seen as necessary to provide assurance to stakeholders of the quality of the programme and its intended generation of certified emission reductions (CERs).

1.2 Scope

The validation scope is defined as an independent and objective review of the PoA-DD, CPA-DD template and the real case CPA-DD. The PoA-DD, CPA-DD template and the real case CPA-DD were reviewed against the criteria stated in Article 12 of the Kyoto Protocol, the CDM modalities and procedures, the simplified modalities and procedures for small-scale CDM project/ programme activities, the procedures for registration of a programme of activities as a single CDM project activity and the relevant decisions by the CDM Executive Board, including the approved baseline and monitoring methodology AMS-I.D./Version 17 – “Grid connected renewable electricity generation”

The validation team has, based on the requirements contained in the Validation and Verification Manual, Standard: Demonstration of additionality development of eligibility criteria and application of multiple methodologies for Programme of Activities and the procedures for registration of a programme of activities as a single CDM project activity employed a rules-based approach, focusing on the identification of significant risks for programme implementation and the generation of CERs.

The validation is not meant to provide any consulting towards the PoA Managing Entity, CPA Implementer(s) and/or project participant(s) (PP). However, stated requests for clarifications, corrective actions, and/or forward actions may provide input for improvement of the programme design.

2. METHODOLOGY

The validation consists of the following four phases:

- I. a desk review of the PoA-DD, CPA-DD template and the associated real case CPA-DD;
- II. publication of the programme design documents (PoA-DD, CPA-DD and completed CPA-DD) in UNFCCC for global stakeholder consultation;
- III. on-site visit and follow-up interviews with programme stakeholders; and
- IV. the resolution of outstanding issues and the issuance of the final validation report and opinion.

The following sections outline each step in more detail.

2.1 Desk Review of the Programme Design Documentation

Table 1.1 Documents provided by the project participant(s):

Reference	Documents	CDM Relevance
/P01/	<ol style="list-style-type: none"> 1. PoA-DD (first web hosted version) for the “Guacamaya Small Scale Hydropower Programme of Activities”, Version-01, Date-07/02/2011 2. PoA-DD (second web hosted version) for the “Guacamaya Small Scale Hydropower Programme of Activities”, Version-02, Date-23/09/2011 	First and second webhosted PoA-DDs
/P02/	<ol style="list-style-type: none"> 1. Generic CPA-DD template (first web hosted version), Version-01, Date-18/02/2011 2. Generic CPA-DD template (second web hosted version), Version-02, Date-23/09/2011 	First and second webhosted Generic CPA-DDs
/P03/	<ol style="list-style-type: none"> 1. Real-case CPA (i.e. Rio Quilio Hydroelectric Project), version 01, 18/02/2011 2. Real-case CPA (i.e. San Alejo Hydroelectric Project), version 02, 23/09/2011 	First and second webhosted Specific CPA-DDs
/P04/	PoA-DD for the “Guacamaya Small Scale Hydropower Programme of Activities”, Version-07, Date 04/12/2012	PoA-DD for requesting registration
/P05/	Generic CPA-DD template, Version-not specified, Date-17/12/2012	Generic CPA-DDs for requesting registration

Reference	Documents	CDM Relevance
/P06/	Real-case CPA (i.e. San Alejo Hydroelectric Project version 07, 04/12/2012)	Specific CPA-DD for requesting registration
/P07/	1. Honduras LoA: SERNA, Ministry of Natural Resources and Environment, "Letter of Approval for Guacamaya Small Scale Hydropower Programme of Activities", ref. DS-VU-0877-2012, dated 10/12/2012 2. Nicaragua LoA: MARENA, Ministry of Environment and Natural Resources Nicaragua, "Letter of Approval Guacamaya", Ref. MARENA/SG/MERS/470/07/12, dated 05/07/2012 3. Costa Rica LoA: MINAET, Ministry of Environment, Energy and Telecommunications "Letter of Approval Guacamaya" Ref. DM-741-2012, dated 17/10/2012	Host Countries LoA
/P08/	The Netherlands LoA: Netherlands Government, NL Agency "Ministry of the Infrastructure and the Environment", 05/10/2012. Reference number ANL2011-462.	Annex I Party Written Approval
/P09/	Anaconda Carbon S.A., Modalities of Communication Letter, 17/10/2012	MoC
/P10/	Anaconda Carbon S.A, "Development agreement relating to a CDM PoA between Anaconda Carbon and B.V. Mabanaf", 28/09/2010	Contract between the CME and PP
/P11/	Anaconda Carbon, "Guacamaya SSC Hydropower PoA CME Operational Manual", version 1.1, 30/04/2012	CME Operational Manual for the PoA lifetime
/P12/	Anaconda Carbon S.A., "Emission Factor calculation", delivered to DOE on 13/12/2012, version 2. 1. Honduras EF 2. Nicaragua EF 3. Costa Rica EF	Host Countries Emission Factor calculation work sheets
Specific CPA: San Alejo Hydroelectric Project		
/CPA01/	Planta Mecánica, "Drawings of the hydropower Plant San Alejo", October 2010.	Hydroelectric maps and drawings
/CPA02/	Planta Mecánica, "Feasibility Study Report", June 2009.	FSR
/CPA03/	Mecamidi, "Mecamidi - SA (27 sep 2011)", 27/09/2011	Technical and commercial proposal
/CPA04/	Hidrotecnia S.L., "Memoria Tecnica San Alejo – Final", December 2011	Project final design

Reference	Documents	CDM Relevance
/CPA05/	Honduras Government, "Gaceta 31 dic 2010", 31/12/2010	PPA official acceptance
/CPA06/	Empresa Nacional de Energía Eléctrica ENEE, "PPA San Alejo", contract # 046-2010, 31/12/2010	Signed PPA
/CPA07/	<ol style="list-style-type: none"> 1. Anaconda Carbon S.A., "Honduras Emission Factor calculation", delivered to DOE on 13/12/2012. 2. GeoIngeniería, "Emission Factor Calculation Report", August 2009 	<ol style="list-style-type: none"> 1. Emission Factor Calculation 2. Supporting data publicly available
/CPA08/	Anaconda Carbon S.A., "ER Calculations San Alejo v2", version 02, delivered to DOE on 17/12/2012	Emission Reduction Calculation
/CPA09/	Loan request chronology: <ol style="list-style-type: none"> 1. Acquafutura, "Loan requests" to different banks (i.e. Banco Atlántida, Banco FICOHOSA, Banco del País), between July - October 2009. 2. E + Co Energy Through Enterprises, "Summary of Terms and Loan Conditions", 30/06/2010 3. E + Co Energy Through Enterprises, "Investment recommendation for support", 27/07/2010 4. Banco del País, "Loan Term sheet", 04/01/2011 5. Banco LAFISE, "Loan Terms for approved letter", 09/11/2012 	Additionality demonstration: Access-to-finance barrier
/CPA10/	M.V. Mabanaf, "Emission Reduction Purchase Agreement", signed between Acquafutura and Mabanaf on 25/01/2011.	ERPA
/CPA11/	Acquafutura S.A de C.V., "Statement for the inclusion of the San Alejo Hydroelectric Project in the Guacamaya PoA", 12/03/2012	Eligibility criteria
/CPA12/	Secretaría de Recursos Naturales y Ambiente SERNA, "Environmental License No. 213-2010", 29/12/2010	EIA Approval
/CPA13/	Acquafutura S.A de C.V., "Stakeholders meeting evidence", 27/08/2009. <ol style="list-style-type: none"> 1. Invitation Letter 2. Reception evidence of the invitation letter 3. Participation List 4. Photographic evidence 	Stakeholders consultation
/CPA14/	Acquafutura S. A. de C. V. Timeline of San Alejo Hydroelectric Power Plant, 30/10/2012.	

Table 1.2 Background investigation and other referred documents/websites:

Reference	Documents	CDM Relevance
/B01/	UNFCCC, Clean Development Mechanism Validation and Verification Manual (Version 01.2), EB55 Annex1	VVM
/B02/	UNFCCC, Procedures for review of erroneous inclusion of a CPA, (Version 3.0), EB61 Annex 22	VVS
/B03/	UNFCCC, Standard: Clean Development Mechanism Project Standard, (Version 2.0), EB 70 Annex 02.0	Project Standard
/B04/	<ol style="list-style-type: none"> 1. UNFCCC, Small-Scale CDM Programme of Activities Design Document form (CDM-SSC-PoA-DD), Version 01, EB33, Annex 43 2. UNFCCC, Small-Scale CDM Programme Activity Design Document form (CDM-SSC-CPA-DD), Version 01, EB33, Annex 44 	Forms
/B05/	UNFCCC, AMS-I.D. "Grid connected renewable electricity generation" (Version17), EB61 Annex 17	Methodology
/B06/	UNFCCC, "Tool to calculate the emission factor for an electricity system" (Version 02.2.1), EB63 Annex 19	Tool
/B07/	<ol style="list-style-type: none"> 1. UNFCCC, "General Guidelines to SSC CDM Methodologies" (version 17), EB61Annex 21 2. UNFCCC, Guidelines on the demonstration of additionality of small-scale project activities (Version 09.0) previously known as Attachment A to Appendix B of the Simplified Modalities and Procedures for Small-scale CDM Project Activities (version 08) EB63 Annex 3. UNFCCC, "Non-binding best practice examples to demonstrate additionality for SSC project activities" (Version 01), EB35 Annex 34 4. UNFCCC, "Guidelines for demonstrating additionality of micro scale project activities" (Version 04), EB68 Annex 26 5. Guidelines for Objective Demonstration and Assessment of Barriers" version 1, Annex 13, EB50. 	General Guidelines
/B08/	<ol style="list-style-type: none"> 1. UNFCCC, "Guideline on assessment of de-bundling for SSC Project Activities" (Version 03), EB54, Annex 13 2. UNFCCC, "Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities" (Version 04.1), EB55, Annex 38 3. UNFCCC "Procedures for review of erroneous inclusion of a CPA" (Version 03), EB61 Annex 22 4. UNFCCC, Clarifications regarding the "Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities" (Version01), EB60 Annex 26 	Relevant PoA Procedures, Guidelines and Standards

	5. UNFCCC, Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (version 02.0), EB70 Annex 05	
/B09/	UNFCCC, Glossary of Terms, Version 07 EB70, Annex	

2.2 Follow-up Interviews with Programme Stakeholders

Table 2: The following table identifies the personnel who have been interviewed and/or provided additional information to the presented documentation²:

Sr. No	Date	Name	Organization	Topic
/I-01/	20 – 23 /06/2011	Sergio Degener	Anaconda Carbon	<ul style="list-style-type: none"> • PoA design and description. • CME and PP • Eligibility criteria • Additionality • PoA Boundary • PoA related legal issues • PoA development history • Crediting period
/I-02/	01 – 03 /11/2011	Felipe De León		<ul style="list-style-type: none"> • Monitoring plan • Operation and Management system • Environmental impacts • Approval by the host countries • PoA status
/I-03/	01 – 03 /11/2011	Boris Arévalo	Acquafutura	<ul style="list-style-type: none"> • Technical equipment • Programme related legal issues • Environmental impacts • Approval by the local governments • Stakeholder process • Issues affecting the local community.

Validation Team considered the views obtained in these interviews while arriving at Validation Opinion.

²Even when relevant interviews were held with personnel related with Río Quilio Project, those are omitted since the Río Quilio will not be part of the CPAs included in the Guacamaya PoA

2.3 Resolution of Outstanding Issues

The objective of this phase of the validation is to resolve any outstanding issues which need be clarified prior to TÜV Rheinland's conclusion on the PoA design. In order to ensure transparency a validation protocol is customised for the programme. The protocol shows in transparent manner criteria (requirements), means of verification and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements a CDM PoA is 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 validation protocol consists of five tables. The different columns in these tables are described in the figure below. The completed validation protocol for the PoA is enclosed in Appendix A to this report.

Findings established during the validation can either be seen as a non-fulfilment of CDM criteria or where a risk to the fulfilment of programme objectives is identified. Corrective action requests (CAR) are issued, where:

- i) mistakes have been made with a direct influence on programme results;
- ii) CDM and/or methodology specific requirements have not been met; or
- iii) there is a risk that the programme would not be accepted as a CDM PoA or that emission reductions will not be certified.

A request for clarification (CL) may be used where additional information is needed to fully clarify an issue.

A forward action request (FAR) may be raised to highlight issues related to the PoA implementation that require review during the first verification.

Revised PoA-DD, generic CPA-DD and real-case CPA-DD all version 07, were submitted to the validation team for final validation. The revision was based on the CARs and CLs in the draft validation report. The major amendments include:

- LoAs from Host Countries and Annex I Party issuance
- MoC issuance
- Host Countries to be included in the PoA boundary definition
- Additionality demonstration in compliance with EB 55 annex 38 paragraph 6 (e)
- Clearer eligibility criteria
- Clearer baseline definition following applied methodology
- PoA CDM prior consideration, timeline and starting date
- Monitoring plan complete and correct description (i.e. calibration frequency, monitoring procedure from CME)
- Consistency between PoA-DD and Generic and Specific CPA-DDs

- Formal issues: compliance with template and guidelines to be followed in the PoA-DD and CPA elaboration
- Update of the applied methodology AMS-I.D from version 16 to 17
- Emission Factor from the grids calculation (tool to be updated, sources of data to be provided and specified in the PoA-DD, complete data to be included)
- Real case CPA: documents to be delivered, format issues and consistency with PoA-DD

Validation Protocol Table 1: Validation requirements				
Checklist Question	Reference	Means of verification (MoV)	Comment	Draft and/or Final Conclusion
<i>The various UNFCCC requirements as specified in the VVM are linked to checklist questions the project should meet. The checklist is organised in different sections, following the logic of the VVM.</i>	<i>Gives reference to documents where the answer to the checklist question or item is found.</i>	<i>Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.</i>	<i>The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached.</i>	<i>This is either acceptable based on evidence provided (OK), or a corrective action request (CAR) due to non-compliance with the checklist question (See below). A request for clarification (CL) is used when the validation team has identified a need for further clarification.</i>

Validation Protocol Table 2: List of Requests for Corrective Action (CAR) and Clarification (CL)			
Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Validation conclusion
<i>If the conclusions from the draft Validation are either a CAR or a CL, these should be listed in this section.</i>	<i>Reference to the checklist question number in Table 2 where the CAR or CL is explained.</i>	<i>The responses given by the project participants during the communications with the validation team should be summarised in this section.</i>	<i>This section should summarise the validation team's responses and final conclusions. The conclusions should also be included in Table 2, under "Final Conclusion".</i>

Table 3: List of forward action requests (FARs)			
FAR number	Reference	Summary of project owner response	Validation team conclusion
<i>Forward action request (FAR) to be 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.</i>	<i>Reference to the checklist question number in Table 2 where the CAR or CL is explained.</i>	<i>The responses given by the project participants during the communications with the validation team should be summarised in this section.</i>	<i>This section should summarise the validation team's responses and final conclusions. The conclusions should also be included in Table 2, under "Final Conclusion".</i>

Figure 1. PoA Validation protocol tables

2.4 Internal Quality Control

The validation report including the validation findings underwent a technical review. The technical review was performed by a technical reviewer qualified in accordance with TÜV Rheinland's qualification scheme for CDM validation and verification.

2.5 Validation Team

Table 3: Validation team

Validation Team			Type of Involvement						
Full name	Affiliation TÜV Rheinland	Appointed for Sectoral Scopes (Technical Areas)	Supervising the work	Desk review	Site Visit + Interview	Report and protocol Writing	Technical Expert Input	Reporting Support	Technical Reviewer
Ms. Guadalupe Avendaño	Mexico	1, 13	X	X	X	X	X		
Mr. Lixin Li	China	1, 2, 3, 4							X

The Team Leader, Ms. Avendaño, performed both on-site visits:

- On-site visit to Rio Quilio Hydroelectric Project with stakeholder interviews (from 20/06/2011 to 24/06/2011)
- On-site visit to San Alejo Hydroelectric Project with stakeholder interviews (01/11/2011 to 03/11/2011)

TL followed up validation process through report and protocol writing. Mr. Li performed TR to the PoA.

3. VALIDATION FINDINGS

The findings of the validation are stated in the following sections. The validation criteria (requirements), the means of verification and the results from validating the identified criteria are documented in more detail in the validation protocol in Appendix A.

The final validation findings relate to the programme design as documented and described in the revised and resubmitted PoA-DD and generic CPA-DD and real-case CPA-DD.

3.1 Approval and participation

According to the PoA-DD, Anaconda Carbon S.A. is the coordinating and managing entity (CME) and is also a project participant of the PoA from host country Honduras. B.V. Mabanft is another project participant from Annex I country i.e. the Netherlands.

Anaconda Carbon S.A. is a private entity, which acts as the coordinating/managing entity (CME) of the PoA. The host parties, i.e. Republic of Honduras, Republic of Costa Rica, and Republic of Nicaragua meet all relevant participation requirements in CDM.

All the Letters of Approval (LoA) /P07/ are delivered at the moment of the issue of this report.

Separated LoA /P07.1/ from SERNA, Ministry of Natural Resources and Environment, "Letter of Approval Guacamaya Small Sacle Hydropower Programme of Activities", Ref. DS-VU-0877-2012, dated 10/12/2012 was received to confirm the voluntary participation of Anaconda Carbon S. A. as PP and CME. Please notice the LoA also includes the name of the First CPA to be included in the PoA, San Alejo, the DOE asked for a clarification and the DNA responded that the LoA must state the specific CPA in the Letter. Also the DOE cross-checked with another registered PoA project in Honduras, reference number 3562, and the LoA presents the name of the first CPA inclusion, thus the validation team concluded that the LoA is complet and correct.

Separated LoA /P07.2/ from MARENA, Ministry of Environment and Natural Resources Nicaragua, "Letter of Approval Guacamaya", Ref. MARENA/SG/MERS/470/07/12, dated 05/07/2012 was received to confirm the voluntary participation of Anaconda Carbon S. A. as PP and CME.

Separated LoA /P07.3/ from MINAET, Ministry of Environment, Energy and Telecommunications Costa Rica, "Letter of Approval Guacamaya", Ref. DM-741-2012, dated 17/10/2012 was received to confirm the voluntary participation of Anaconda Carbon S. A. as PP and CME.

The separated LoA /P08/ issued by the Netherlands' DNA was received to confirm the voluntary participation of the project participant, i.e. B.V. Mabanft.

Table 4: The below table summarizes the project participants and parties involved:

Project participants	Anaconda Carbon S. A. (CME)			B.V. Mabanft (PP, as a CER Buyer)
Parties involved	Honduras	Nicaragua	Costa Rica	The Netherlands
APPROVAL				
LoA received	Yes	Yes	Yes	Yes
Date of LoA	10/12/2012	05/07/2012	17/10/2012	05/10/2012
Reference to document	Not applicable	Not applicable	Not applicable	Not applicable
LoA received from	PP	PP	PP	PP
Reference N° of letter	DS-VU-0877-2012	MARENA/SG/MERS/470/07/12	DM-741-2012	ANL2011-462.
Validation of authenticity	Yes, by means of the e-mail from Climate Change National Direction	Yes, by means of the e-mail from Bismarck Morales of MARENA	Yes, by official seal and official translation of LoA.	Yes, confirmed comparing to other CDM registered projects.

Validity of LoA	Valid	Valid	Valid	Valid
PARTICIPATION				
Party is party to Kyoto Protocol ³	Yes. Honduras ratified the Kyoto Protocol on 19/07/2000	Yes. Nicaragua ratified the Kyoto Protocol on 18/11/1999.	Yes. Costa Rica ratified the Kyoto Protocol on 09/08/2002.	Yes. The Netherlands ratified the Kyoto Protocol on 31/05/2002.
Voluntary participation	Yes. Indicated in clause I) of the LoA	Yes. Indicated in clause b) of the LoA	Yes. Indicated in clause (I.) of the LoA	Yes. Indicated in clause (ii) of the LoA
Diversion of official development aid towards host country	No. /P04/	No. /P04/	No. /P04/	Not applicable
Project contribution to SD	Yes, indicated in clause II) of the LoA	Yes, indicated in clause c) of the LoA	Yes, indicated in clause (IV.) of the LoA	Not applicable

Validation of ODA

According to Section A.4.5 and Annex 2 of the PoA-DD and the on-site interview with the representative from Anaconda Carbon S.A. /I-01 and I-02/, there is no public funding was involved in the PoA. In addition, Anaconda Carbon requires each CPA implementer to sign a declaration letter before the inclusion to the PoA so as for confirming no diversion of ODA to each CPA. For the real-case CPA, a declaration letter /CPA11/ was received to declare this issue.

Confirmation of MoC

The Letter MoC was delivered to the DOE /P09/ from the CME, the same was signed on 17/10/2012 by Anaconda Carbon and B.V Mabanafit

3.2 Programme of Activities Design Documents

The validation team validated that the provided PoA-DD /P04/ and generic CPA-DD /P05/, real-case CPA-DD /P06/ are based on the currently valid PoA-DD form (i.e. CDM SSC- PoA-DD) /B02/ and CPA-DD form (i.e. CDM SSC-CPA-DD) /B02/, and are correctly completed.

3.3 Programme Description

PoA Description

The “Guacamaya Small Scale Hydropower Programme of Activities” involves the support of development of new small scale hydropower projects (i.e. ≤ 15MW installed capacity) in throughout of Republic of Honduras, Republic of Costa Rica, and Republic of Nicaragua. The CDM programme activities (CPAs) under the PoA will be implemented in different regions of the mentioned countries. Referring to the Section

³Source of data: http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php

A.4.2.1 of the PoA-DD, a CPA under the PoA consists of small scale run-of-river hydropower plants and hydro power plants with reservoir and power density of no less than 4 W/m² with an installed capacity below or equal to 15 MW connecting to the national electricity grid of the relevant Host Countries.

The objective of the PoA is to develop a platform for overcoming the financial hurdles for implementing small hydropower projects in the Host Countries. Under on-site interviews, projects' developers of small hydropower projects are usually private entities, and they were facing the capital shortages due to the difficulty to access finance /I-03/. The validation team considers that the PP has demonstrated that in the absence of the CDM, the current conditions will not be changed; the CPAs (i.e. SSC hydropower projects) under the PoA will difficultly be launched.

By document review and on-site interviews, the validation team confirms that there is no mandatory law or regulation to force/ to require the coordinating/ managing entity (CME) or other party to develop the PoA in the Host Countries. Therefore, the development of the PoA is a voluntary action by Anaconda Carbon S.A. (the CME). This was be further confirmed by the LoAs of the Host Countries /P07/. At the issuance of this report the "Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities" (Version 04.1)" EB55, Annex38, paragraph 6(d) was fulfilled /B08.2/.

According to the PoA-DD, the starting date of the PoA is selected as 13/04/2011 as the date where the PoA-DD was published the first time for global stakeholder consultation, in line with CDM Project Standard paragraph 159 b), of EB70, Annex 2 /B03/. By checking the UNFCCC uploading template and requirements, the selected starting date of the PoA is reasonable. Meanwhile, the length of the PoA is taken as 28 years which complies with the procedures EB55 Annex 38 paragraph 6(h) /B08.2/

Table 5: The critical programme description milestones from the PoA-DD are tabulated as follows:

StartingdateofPoA	LengthofthePoA
13/04/2011	28years

Herewith, the Validation Team summarizes major changes between webhosted PoA-DD and final version of PoA-DD for submission as follows:

Subject	Webhosted PDD	Correction to webhosted PDD in the final PDD submission for registration with DOE assessment and reason of acceptance.
PDD (project title / participants involved/ project location /project technology etc)	Change. The programme of activities involves the development of micro and small scale hydropower plants in Guatemala, Honduras, Nicaragua and Costa Rica.	The programme of activities involves the development of micro and small scale hydropower plants in Honduras, Nicaragua and Costa Rica.
Methodologies	Change. The applied guideline to	The applied guideline to assess the

and tools applied (scope and version numbers)	<p>assess the additionality for the small project activities was <i>Attachment A to Appendix B of the simplified modalities and procedures for small scale CDM project activities</i>. Version 08.</p> <p>For micro scale project activities the applied guidelines was “<i>Guidelines for demonstrating additionality of renewable energy projects up to 5 MW</i>”; Version 02</p> <p>The eligibility criteria had 8 considerations to assess the inclusion of the CPA in the PoA.</p> <p>The “<i>Tool to calculate the emission factor for an electricity system</i>”, Version 02.2.0 was applied.</p>	<p>additionality for small-scale project activities is “<i>Guidelines on the Demonstration of Additionality of Small-Scale Project Activities</i>” version 09.</p> <p>For micro-scale project activities the applied guideline is “<i>Guidelines for Demonstrating Additionality of Microscale Project Activities</i>”. Version 04</p> <p>Also, is considered in the additionality analysis the “<i>Standard: Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities</i>” Version 02.0</p> <p>The eligibility criteria has 14 considerations to assess the inclusion of the CPA in the PoA.</p> <p>“<i>Tool to calculate the emission factor for an electricity system</i>”, Version 02.2.1 was applied.</p>																																																						
CER calculations (formula applied/ amount of emission reduction)	<p>Changes.</p> <p>The OM emission factor</p> <table><tr><td>Country</td><td>OM (tCO₂/MWh)</td></tr><tr><td>Costa Rica</td><td>0.4655</td></tr><tr><td>Honduras</td><td>0.6476</td></tr><tr><td>Nicaragua</td><td>0.7629</td></tr><tr><td>Guatemala</td><td>0.745</td></tr></table> <p>The BM emission factor</p> <table><tr><td>Country</td><td>OM (tCO₂/MWh)</td></tr><tr><td>Costa Rica</td><td>0.060</td></tr><tr><td>Honduras</td><td>0.618</td></tr><tr><td>Nicaragua</td><td>0.591</td></tr><tr><td>Guatemala</td><td>0.407</td></tr></table> <p>The CM emission factor</p> <table><tr><td>Country</td><td>OM (tCO₂/MWh)</td></tr><tr><td>Costa Rica</td><td>0.2628</td></tr><tr><td>Honduras</td><td>0.6328</td></tr><tr><td>Nicaragua</td><td>0.6769</td></tr><tr><td>Guatemala</td><td>0.579</td></tr></table>	Country	OM (tCO ₂ /MWh)	Costa Rica	0.4655	Honduras	0.6476	Nicaragua	0.7629	Guatemala	0.745	Country	OM (tCO ₂ /MWh)	Costa Rica	0.060	Honduras	0.618	Nicaragua	0.591	Guatemala	0.407	Country	OM (tCO ₂ /MWh)	Costa Rica	0.2628	Honduras	0.6328	Nicaragua	0.6769	Guatemala	0.579	<p>Changes.</p> <p>The OM emission factor</p> <table><tr><td>Country</td><td>OM (tCO₂/MWh)</td></tr><tr><td>Costa Rica</td><td>0.4537</td></tr><tr><td>Honduras</td><td>0.6449</td></tr><tr><td>Nicaragua</td><td>0.7467</td></tr></table> <p>The BM emission factor</p> <table><tr><td>Country</td><td>OM (tCO₂/MWh)</td></tr><tr><td>Costa Rica</td><td>0.0612</td></tr><tr><td>Honduras</td><td>0.5997</td></tr><tr><td>Nicaragua</td><td>0.5537</td></tr></table> <p>The CM emission factor</p> <table><tr><td>Country</td><td>OM (tCO₂/MWh)</td></tr><tr><td>Costa Rica</td><td>0.2575</td></tr><tr><td>Honduras</td><td>0.6223</td></tr><tr><td>Nicaragua</td><td>0.6502</td></tr></table>	Country	OM (tCO ₂ /MWh)	Costa Rica	0.4537	Honduras	0.6449	Nicaragua	0.7467	Country	OM (tCO ₂ /MWh)	Costa Rica	0.0612	Honduras	0.5997	Nicaragua	0.5537	Country	OM (tCO ₂ /MWh)	Costa Rica	0.2575	Honduras	0.6223	Nicaragua	0.6502
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<p>Additionality: (Benchmark / input values / analysis type /project start date/ IRR or NPV values etc.)</p>	<p>Changes:</p> <p>For Approach 1: Demonstrating additionality for CPAs up to 5 MW and located in the areas indicated within the special underdeveloped zone of the host country by the relevant authority. The CPA shall demonstrate compliance with the applicability conditions listed under Annex 25 of EB 60, article 2, point (a) <i>“The geographic location of the project activity is in LDCs/SIDs or in a special underdeveloped zone of the host country identified by the Government before 28 May 2010”</i>, as may be updated from time to time.</p> <p>For Approach 2: Criteria in relation to demonstrating additionality for other CPAs.</p> <p>Access-to-finance barrier: the project activity could not access appropriate capital without consideration of the CDM revenues.</p> <ul style="list-style-type: none"> • By providing a letter by a bank stating that income from carbon finance was an important factor for the ultimate decision of the bank to finance to CPA. <p>Prevailing practice barriers: the project activity differs from the business as usual scenario</p> <ul style="list-style-type: none"> • By providing evidence of issues faced by the project which would not have been faced by a similar project which would have produced higher emissions. <p>Other barriers: The CPA may prove “Other Barriers” by employing one or more of the following:</p> <ul style="list-style-type: none"> • By providing explanation to show that due to other barriers such as institutional barriers or limited information, managerial resources, organizational capacity, financial resource, or capacity to absorb new technologies, emissions would have been higher if the CPA were not implemented. 	<p>Two criteria will be applied to assess the Additionality of CPA:</p> <p>Approach 1: Demonstrating additionality for CPAs up to 5 MW and located in the areas indicated within the special underdeveloped zone of the host country identified by the appropriate national authority.</p> <p>A CPA will be additional if it is able to demonstrate its additionality in accordance with Annex 26 to EB 68, “Guidelines for demonstrating additionality of microscale project activities”, as may be updated from time to time.</p> <p>Approach 2: Demonstrating additionality for other CPAs</p> <p>The additionality of each CPA will be demonstrated in accordance with “Guidelines on the Demonstration of Additionality of Small-Scale Project Activities” in its latest version at the time of inclusion of the CPA in the programme, currently version 9.0, EB68, Annex 27 and “Non-binding best practice examples to demonstrate additionality for SSC project activities” approved in Annex 4, EB 35 and “Guidelines for Objective Demonstration and Assessment of Barriers” version 1, Annex 13, EB50. The managing entity will use one or more of the barriers (listed below) in demonstrating the additionality of a given CPA.</p> <p>The relevant requirements for Approach 1 or 2 will be assessed as part of the applicability criteria of the CPA to enter into the PoA.</p> <ul style="list-style-type: none"> • Investment barrier: the project activity could not access appropriate capital without consideration of the CDM
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		<p>revenues;</p> <ul style="list-style-type: none"> • Technological barrier: the project activity could not access appropriate technology without leveraging CDM involvement; • Barrier due to prevailing practice: prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with higher emissions; • Other barriers: such as institutional barriers or limited information, managerial resources, organizational capacity, capacity to absorb new technologies or investment analysis would be performed in case the project IRR is below a defined benchmark.
Monitoring (parameters / frequency)	<p>EG_y [MWh/y]</p> <p>Net Electricity energy baseline in year y.</p> <p>The net electricity production will be measured continuously and recorded monthly. The net electricity will be calculated by subtracting the electricity exported with the electricity imported by the CPA. A high level of accuracy of the measurements will be achieved due to the use of high-precision equipment calibrated and tested according to recognized standards.</p>	<p>EG_y [MWh/y]</p> <p>Quantity of net electricity supplied to the grid in year y.</p> <p>The net electricity production will be measured continuously and recorded monthly. The net electricity will be calculated by subtracting the electricity exported with the electricity imported by the CPA. A high level of accuracy of the measurements will be achieved due to the use of high-precision equipment calibrated and tested according to recognized standards.</p> <p>Cap_{PJ} (W) (for CPAs with reservoir) Installed capacity of the hydro power plant after the implementation of the project activity. Determine the installed capacity based on recognized standards or project documents. Yearly monitoring.</p> <p>A_{PJ} [m²] (for CPAs with reservoir) 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.</p>

		Measured from topographical surveys, maps, satellite pictures, etc... Yearly monitoring.
Crediting period (type / start date)	On the website PoA-DD only established a length of 28 years for the PoA. The starting date was stated on 01/11/2010 as the date where Anaconda Carbon and Mabanft signed the contract for the development of the PoA.	The last version of PoA-DD established a crediting period of 28 years length period. Renewable crediting periods with length of 7 years and starting date established as the date of its registration.
<p>Please refer to Appendix A of this report for details of each change between webhosted PDD and the final PDD for submission. The Validation Team has carried out the validation process based on the Webhosted PDD and raised CARs/CLs against the project by issuing the validation protocol.</p> <p>With the updated information and corrections done on final PDD, the PP has addressed all the CARs /CLs that were raised by the Validation Team.</p> <p>It is concluded that the Validation Team has reviewed the project in line with the VVM (version 01.2) and all the evidence, corrections, justifications and updating done on the final PDD with respect to CARs /CLs raised are accepted and closed by the Validation Team, issuing the positive validation opinion for project registration. FAR are further issued to the DOE verification team to check the implementation and operational completeness during the first verification.</p>		

CPA Description

Table 6: The real-case CPA description were validated and presented in tabularized form:

Items	The real-case CPA (i.e. San Alejo Hydroelectric Project)
Project Owner/ CPA Implementer	Acquafutura S.A. de C.V. (Ref. PPA /CPA06/)
Installed capacity	1 x 2.211 MW (Ref. San Alejo Hydroelectric final design /CPA04/)
Type of hydropower project	Run-of-river (Ref. San Alejo Hydroelectric final design /CPA04/) (Ref. PPA/CPA06/)
Project Design and equipment	<ul style="list-style-type: none"> 1 unit of water turbine (i.e. Pelton vertical turbine) in connection to associated power generator (Synchronous) with 2.211 MW unit capacity; 2.00 m³/s water flow rate; From the water intake the flow is diverted to the power plant, always leaving a minimum residual flow in the natural river bed. The water is conducted through an open channel of 1000 meters to the power house. From there the plant connects to the next nearby power sub-station through a new or modified existing 34.5kv power line with an air lineal distance of 5.2 km. A discharge channel returns the

	<p>water to the natural river bed.</p> <p>(Ref. The real-case CPA-DD /P06/, San Alejo Hydroelectric final design /CPA04/, hydroelectric plant drawings /CPA01/, Technical and commercial proposal /CPA03/)</p>
Physicallocations	<p>At the Salto River, San Alejo Hydroelectric Project will be located in Department of Comayagua, Honduras.</p> <p>(Ref. PPA /CPA06/)</p>
Geographiccoordinates	<p>Water Intake: Latitude+14.3469° Long- 87.5356° Power house: 2.5.1 Latitude+14.3442° 2.5.2 Long- 87.4758° Corroborated with Google Earth software</p>
Annual power supply to the grid	<p>9,260 MWh</p> <p>(Ref. San Alejo Hydroelectric final design /CPA04/)</p>
Plant Load Factor (PLF)	<p>50%</p> <p>(Ref. San Alejo Hydroelectric final design /CPA04/)</p> <p>The value is determined by a third party contracted by the project participants, fulfilling the "Guidelines for the reporting and validation of the Plant load factors, Version 01" EB 48, Annex 11).</p>
Grid connection arrangement	<p>Generated electricity will be transmitted to the nearby substation via 34.5 kV transmission line, and then finally connected to the National Honduran Electricity grid.</p> <p>(Ref. PPA /CPA06/)</p>
Project implementation status	<p>During on-site visit, no construction work started. According to the CPA implementer's plan, the project is expected to complete the construction at February 2014, the test period in May 2014and it is expected to start operation at June 2014.</p>
CPA starting date	<p>01/01/2013 expected date of purchase of turbines</p>
Starting date of crediting period	<p>Later of 01/06/2014,when is expected to start operation, or date of registration of the PoA.</p> <p>The duration of crediting period shall not exceed the end date of the PoA.</p> <p>The expected starting date of crediting period fulfils the procedure for registration of PoA EB55, Annex 38 /B06.2/ paragraph 7(c)</p>
Type of crediting period	<p>7-year renewable crediting period</p>
CPA technical lifetime	<p>25 years</p>

Herewith, the Validation Team summarizes major changes between webhosted specific CPA-DD San Alejo and final version of specific CPA-DD San Alejo for submission as follows:

Subject	Webhosted PDD	Correction to webhosted PDD in the final PDD submission for registration with DOE assessment and reason of acceptance.
PDD (project title / participants involved/ project location /project technology etc)	Change. The project activity involves one Turbo turbine (2.28MW) and a suitable generator located in the power house in Honduras.The install capacity is 2.28 MW in	The project activity involves one Pelton vertical turbine (2.307MW) and a suitable generator are located in the power house. The installed capacity is 2.21 MW based on nominal generator capacity.
Methodologies and tools applied (scope and version numbers)	Change. The applied guideline to assess the additionality for the small project activities was <i>Attachment A to Appendix B of the simplified modalities and procedures for small scale CDM project activities</i> . Version 08. The Tool to calculate the emission factor for an electricity system, Version 02.2.0 was applied.	The applied guideline to assess the additionality for small-scale project activities is " <i>Guidelines on the Demonstration of Additionality of Small-Scale Project Activities</i> " version 09. Tool to calculate the emission factor for an electricity system, version 02.2.1 was applied.
CER calculations (formula applied/ amount of emission reduction)	Changes. The CM emission factor is 0.6329 tCO ₂ /MWh and the expected energy generation per year is 9,260 MWh/year. Therefore the expected emission reductions are 5,860 tCO ₂ /y. The estimation of emission reductions during the first crediting period is a total of 41,020 tCO ₂ e.	Changes. The CM emission factor is 0.6223 tCO ₂ /MWh and the expected energy generation per year is 9,260 MWh/y. Therefore the expect emission reductions are 5,762 tCO ₂ The estimation of emission reductions during the first crediting period is a total of 40,334 tCO ₂ e.
Additionality: (Benchmark / input values / analysis type /project start date/ IRR or NPV values etc.)	The additionality of the project is based on the investment barrier. Therefore, Approach 2: Criteria in relation to demonstrating additionality for other CPAs. Access-to-finance barrier: the project activity could not access appropriate capital without consideration of the CDM revenues. <ul style="list-style-type: none"> By providing a letter by a bank stating that income from carbon finance was an important factor for the ultimate decision of the bank to finance to CPA. 	The additionality of the project is based on the investment barrier specifcly Access to finance as it is stated in Approach 2:
Monitoring (parameters / frequency)	EG _y [MWh/y] Net Electricity energy baseline in year y.	EG _y [MWh/y] Quantity of net electricity supplied to the grid in year y.

	The net electricity production will be measured continuously and recorded monthly. The net electricity will be calculated by subtracting the electricity exported with the electricity imported by the CPA. A high level of accuracy of the measurements will be achieved due to the use of high-precision equipment calibrated and tested according to recognized standards.	The net electricity production will be measured continuously and recorded monthly. The net electricity will be calculated by subtracting the electricity exported with the electricity imported by the CPA. A high level of accuracy of the measurements will be achieved due to the use of high-precision equipment calibrated and tested according to recognized standards.
Crediting period (type / start date)	On the website CPA-DD a renewable crediting period was chosen with the starting date defined as the later of registration date of Guacamaya PoA or start of electricity generation of CPA; whichever is later.	The last version of CPA-DD established a renewable crediting period and starting date defined as the later of 01/06/2014 or date of registration of the PoA.
<p>Please refer to Appendix A of this report for details of each change between webhosted PDD and the final PDD for submission. The Validation Team has carried out the validation process based on the Webhosted PDD and raised CARs/CLs against the project by issuing the validation protocol.</p> <p>With the updated information and corrections done on final PDD, the PP has addressed all the CARs /CLs that were raised by the Validation Team.</p> <p>It is concluded that the Validation Team has reviewed the project in line with the VVM (version 01.2) and all the evidence, corrections, justifications and updating done on the final PDD with respect to CARs /CLs raised are accepted and closed by the Validation Team, issuing the positive validation opinion for project registration. FAR are further issued to the DOE verification team to check the implementation and operational completeness during the first verification.</p>		

In summary, under the validation by means of document review and on-site interviews with stakeholders, the validation team considers that the programme description in PoA-DD, CPA description in the real-case CPA-DD are accurate and complete, and also fulfil the relevant requirements of VVM, Procedures for registration of a PoA /B06.2/ and PoA-DD template /B02.1/ and CPA-DD template /B.02.2/.

3.4 Eligibility Criteria for CPA Inclusion

Project Participant has been taken into consideration Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (Version 02.0) to set up the eligibility criteria for PoA followed the next statements:

Paragraph 6 a) Definition:

Measures are a broad class of greenhouse gas emission reduction activities possessing common features, for example fuel and feedstock switch, switch of technology with or without change of energy source (including energy efficiency improvement), methane destruction, and methane formation avoidance.

Note: Two different activities can be considered to be using the same measure if they constitute the same course of action and result in the same kind of effect.

Note: Two different activities can be considered to be applying the same technology if they provide the same kind of output and use the same kind of equipment and conversion process.

Paragraph 16 a) – l) The eligibility criteria shall cover as a minimum the following:

- (a) The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA;
- (b) Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo);
- (c) The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications;
- (d) Conditions to check the start date of the CPA through documentary evidence;
- (e) Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs;
- (f) The conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality as specified in Section A, above;
- (g) The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis;
- (h) Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance;
- (i) Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/off-grid) and distribution mechanisms (e.g. direct installation);
- (j) Where applicable, the conditions related to sampling requirements for a PoA in accordance with the approved guidelines/standard from the Board pertaining to sampling and surveys;
- (k) Where applicable, the conditions that ensure that every CPA in aggregate meets the small-scale or microscale threshold criteria and remains within those thresholds throughout the crediting period of the CPA;
- (l) Where applicable, the requirements for the debundling check, in case CPAs belong to small-scale (SSC) or microscale project categories.

As per the PoA-DD section A.4.2.2 states eligibility criteria for inclusion of a CPA under the PoA as below. The validation team validates the eligibility criteria in accordance with the VVM (version 01.2) paragraph 167; the procedure for registration of a PoA (version 04.1) paragraph 6 (g); and Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (version 02.0) paragraph 16, PP shall define (DOE shall assess) the eligibility criteria for inclusion of a project activity as a CPA under the PoA, which shall include, as appropriate, criteria for demonstration of additionality of the CPA, applicability of applied methodology (ies), and the type and/or extent of information that shall be provided by each CPA in order to ensure its eligibility.

The validation team summarized the validation of the eligibility criteria as follows:

No. 1	
Eligibility criteria	<i>Be a newly installed hydroelectric power plant in Honduras, Nicaragua or Costa Rica;</i>
Information requirement/ Conditions to meet the criteria	All permits and project description, such as EIA, PPA, maps, and drawings shall recognize the location of the CPA.
Validation Opinion	Ok. This fulfills the Standard EB70 Annex 5 paragraph 16(a). The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA. Also, this fulfills the CDM Project Standard EB70 Annex 2; paragraph 142 The coordinating/managing entity shall define the boundary for the proposed CDM PoA in terms of a geographical area (e.g. municipality, region within a country, country or several countries) within which all CPAs to be included in the PoA will be implemented, taking into consideration that all applicable national and/or sectoral policies and regulations within the chosen boundary are reflected in the establishment of the baseline
Validation Opinion to the fulfilment of 1 st real-case CPA	Validation team visited the site at which the CPA will be implemented in Honduras. Furthermore all related documents are consistent on the CPA location, which is in Comayagua, Honduras. References: Hydroelectric plant drawings /CPA01/, Technical and commercial proposal /CPA03/, San Alejo Hydroelectric final design /CPA04/, and PPA /CPA06/. Environmental License /CPA12/ The eligibility criterion is met.

No. 2	
Eligibility criteria	<i>Be a newly built plant and must not involve retrofitting or modifying of an existing facility for renewable energy generation.</i>
Information requirement/ Conditions to meet the criteria	All permits and project description, such as EIA, PPA, maps, and drawings shall sufficiently describe the CPA.
Validation Opinion	Ok. CME indicates that the CPA can be a greenfield project of a run-of-river or hydro power plant with reservoir which its installed capacity is lower or equal to 15MW, which is consistent to small scale category I limit.
Validation Opinion to the fulfilment of 1 st real-case CPA	Validation team visited the site at which the CPA will be implemented in Honduras and can corroborate that the project will be a new installed plant. Furthermore all related documents are consistent on the CPA location, which is in Comayagua, Honduras. References: Hydroelectric plant drawings /CPA01/,

	Technical and commercial proposal /CPA03/ San Alejo Hydroelectric final design /CPA04/ PPA /CPA06/. and Environmental License /CPA12/ The eligibility criterion is met.
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No. 3

Eligibility criteria	<i>Have no energy generating equipment which is transferred from another activity and no existing equipment is transferred to another activity;</i>
Information requirement / Conditions to meet the criteria	Quotations and/or purchase orders shall be showed to prove equipment to be installed is totally new.
Validation Opinion	Ok. CME is trying to avoid unintended emissions from uninstalling of equipment and transport of it.
Validation Opinion to the fulfilment of 1 st real-case CPA	Ok. The technical and commercial proposal /CPA03/ was showed to prove equipment will be newly purchased. The eligibility criterion is met.

No. 4

Eligibility criteria	<i>Have an installed capacity of $\leq 15\text{MW}$, the technology shall be provided by an experienced supplier.</i>
Information requirement / Conditions to meet the criteria	All permits and project description, such as EIA, PPA, maps, and drawings shall sufficiently describe the CPA.
Validation Opinion	Ok. CME indicates that the CPA shall comply with installed capacity lower or equal to 15MW, which is consistent to small scale category I limit.
Validation Opinion to the fulfilment of 1 st real-case CPA	All related documents are consistent on the CPA installed capacity of 2.11 MW. References: Hydroelectric plant drawings /CPA01/ Technical and commercial proposal /CPA03/ San Alejo Hydroelectric final design /CPA04/, and PPA /CPA06/. The eligibility criterion is met.

No. 5

Eligibility criteria	<i>Have a plant power density of no less than 4 W/m^2; (in case hydro power plants with reservoir are included)</i>
Information requirement / Conditions to meet the criteria	All permits and project description, such as EIA, PPA, maps, and drawings shall sufficiently describe the CPA.
Validation Opinion	Ok. In order to avoid unintended CH ₄ emissions, CPAs must comply with this requirement.

Validation Opinion to the fulfilment of 1 st real-case CPA	<p>All related documents are consistent on the CPA installed capacity 2.211 MW in this case this eligibility criterion is not applicable as the hydroelectric power plant is a run-of riverplant.</p> <p>References: Hydroelectric plant drawings /CPA01/, The eligibility criterion is met.</p>
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No. 6	
Eligibility criteria	<i>Connect to the National Electricity Grid of the host country;</i>
Information requirement / Conditions to meet the criteria	All permits and project description, such as EIA, PPA, maps, and drawings shall sufficiently describe the CPA.
Validation Opinion	Ok. CME intends to support the energy matrix of the Host Countries by means of renewable energy.
Validation Opinion to the fulfilment of 1 st real-case CPA	<p>The PPA clearly states that the Generated Electricity will be delivered to ENEE and sold to the grid, in case of Honduras to the National Interconnected Grid.</p> <p>Reference PPA /CPA06/.</p> <p>The eligibility criterion is met.</p>

No. 7	
Eligibility criteria	<i>Not be the result of the CPA implementer seriously considering grid connected electricity generation with a different technology as an alternative to the project. This is supported by a written statement by the project owner.</i>
Information requirement / Conditions to meet the criteria	<p>Document to be delivered:</p> <ul style="list-style-type: none"> - A written confirmation from each the project owner
Validation Opinion	Ok. The project owner shall comply with the written statement.
Validation Opinion to the fulfilment of 1 st real-case CPA	<p>The statement was delivered to the DOE.</p> <p>Reference: Letter: "Statement for the inclusion of the San Alejo Hydroelectric Project in the Guacamaya PoA", signed on 12/03/2012, issued by Acquafutura.</p> <p>The eligibility criterion is met.</p>

No. 8	
Eligibility criteria	<i>No ODA funds from Annex I countries will be used for the development of the projects. This is supported by a written statement by the project owner.</i>
Information requirement / Conditions to meet the criteria	<p>Document to be delivered:</p> <p>A written confirmation from each the project owner</p>

Validation Opinion	Ok. This fulfills the Standard EB 70 Annex 5 paragraph 16h).The project owner shall comply with the written statement.
Validation Opinion to the fulfilment of 1 st real-case CPA	<p>The statement was delivered to the DOE.</p> <p>Reference: Letter: "Statement for the inclusion of the San Alejo Hydroelectric Project in the Guacamaya PoA", signed on 12/03/2012, issued by Acquafutura. The eligibility criterion is met.</p>

No. 9	
Eligibility criteria	<i>Comply with the latest version of the "Guidelines on Assessment of de-bundling for SSC Project Activities".</i>
Information requirement / Conditions to meet the criteria	<p>According with the "Guidelines on Assessment of de-bundling for SSC Project Activities" version 03, EB54 Annex 13, paragraph 2:</p> <p><i>2. A proposed small-scale project activity shall be deemed to be a debundled component of a large project activity if there is a registered small-scale CDM project activity or an application to register another small-scale CDM project activity:</i></p> <ul style="list-style-type: none"> <i>a. With the same project participants;</i> <i>b. In the same project category and technology/measure; and</i> <i>c. Registered within the previous 2 years; and</i> <i>d. Whose project boundary is within 1 km of the project boundary of the proposed small- scale activity at the closest point.</i>
Validation Opinion	OK. This fulfills the Guideline mentioned above; the CDM Project Standard EB70 Annex 2 paragraph 158 and the Standard EB70 Annex 5 paragraph 16l). Each CPA will has a different project participants depending of the Host Country and Anaconda Carbon will be act as the CME. Therefore, for each CPA, shall be confirmed that it is not a debundled component of a large scale project activity even in cases where they are taking place in different project categories, if the project activities are Type 1 project activities providing energy to the same user and are registered, or submitted for registration, with 2 years of each other.
Validation Opinion to the fulfilment of 1 st real-case CPA	<p>The project participants of the CPA, Anaconda Carbon and Acquafutura are not participating together in any other hydro power plant under validation or registered in Honduras. Acquafutura is developing his first hydro ower project. Anaconda Carbon has participated in other hydro validations in Honduras, but never as project participant. This can be crosschecked with the PDD published for validation and registered under the UNFCCC webpage.</p> <p>Reference: Real-case CPA (i.e. San Alejo Hydroelectric Project version 06, 29/10/2012 /P06/ UNFCCC, "Guideline on assessment of de-bundling for</p>

	SSC Project Activities" (Version 03), EB 54, Annex 13 /B08.1/ The eligibility criterion is met.
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No. 10	
Eligibility criteria	<i>Not seek registration in other emission reduction schemes, or as a stand-alone project under the CDM, or by being included in other programme of activities to avoid any possibility of double counting.</i>
Information requirement / Conditions to meet the criteria	<p>According with the "Guidelines on Assessment of de-bundling for SSC Project Activities" version 03, EB54 Annex 13, paragraph 2:</p> <p><i>2. A proposed small-scale project activity shall be deemed to be a debundled component of a large project activity if there is a registered small-scale CDM project activity or an application to register another small-scale CDM project activity:</i></p> <ul style="list-style-type: none"> <i>a. With the same project participants;</i> <i>b. In the same project category and technology/measure; and</i> <i>c. Registered within the previous 2 years; and</i> <i>d. Whose project boundary is within 1 km of the project boundary of the proposed small- scale activity at the closest point.</i>
Validation Opinion	OK. This fulfills the Guideline mentioned above; the CDM Project Standard EB70 Annex 2 paragraph 158 and the Standard EB70 Annex 5 paragraph 16 l). Each CPA will be a different project participants depending of the Host Country and Anaconda Carbon will be act as the CME. Also, the PP shall provide the ERPA with the carbon credit buyer or similar evidence to the DOE.
Validation Opinion to the fulfilment of 1 st real-case CPA	<p>For San Alejo CPA, the PP provided the ERPA between ACQUAFUTURA S. A. de C. V. as a seller and B. V. Mabanft as a buyer, which provides exclusivity of the carbon credits to one entity.</p> <p>Reference: M. V. Mabanft, "Emission Reduction Purchase Agreement" signed between Acquafutura and Mabanft on 25/01/2012. /CPA10/</p> <p>The eligibility criterion is met.</p>

No. 11	
Eligibility criteria	<p><i>Demonstrate additionality in line with the requirements of the “Guidelines on the Demonstration of Additionality of Small-Scale Project Activities” or, if applicable, with the “Guidelines for Demonstrating Additionality of Microscale Project Activities”. The CME shall use the latest version of these guidelines at the time of the inclusion of the new CPA.</i></p> <p><i>If the CPA applies the “Guidelines on the Demonstration of Additionality of Small-Scale Project Activities” to demonstrate additionality an explanation will be provided by the project participants to show that the project activity would not have occurred anyway due to at least one of the following barriers:</i></p> <ul style="list-style-type: none"> <i>I) Investment barrier: a financially more viable alternative to the project activity would have led to higher emissions;</i> <i>II) Technological barrier: a less technologically advanced alternative to the project activity involves lower risks due to the performance uncertainty or low market share of the new technology adopted for the project activity and so would have led to higher emissions;</i> <i>III) Barrier due to prevailing practice: prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with higher emissions;</i> <i>IV) Other barriers: without the project activity, for another specific reason identified by the project participant, such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher.</i> <p><i>If the CPA applies “Guidelines for Demonstrating Additionality of Microscale Project Activities” to demonstrate additionality for project activities up to five megawatts that employ renewable energy technology, the project is considered additional if any one of the conditions below is satisfied:</i></p> <ul style="list-style-type: none"> <i>I) The geographic location of the project activity is in one of the least developed countries or the small island developing States (LDCs/SIDS) or in a special underdeveloped zone (SUZ) of the host country.</i> <i>(i) SUZ is a region in the host country (zone, municipality or any other designated official administrative unit) identified by the Government in official notifications for</i>

	<p>development assistance including for planning, management, and investment satisfying any one of the following conditions using most recent available data:</p> <ul style="list-style-type: none"> - The proportion of population with income less than USD 2 per day (PPP) in the region is greater than 50%; - The GNI per capita in the country is less than USD 3000 and the population of the region is among the poorest 20% in the poverty ranking of the host country as per the applicable national policies and procedures; <p>(ii) In cases where, based on the recommendation of the designated national authority of the host country, the SUZ in the host country has been approved by Executive Board (here in after referred to as the Board) of the clean development mechanism (CDM), the list of such SUZ shall be maintained on the UNFCCC website (e.g. at <http://cdm.unfccc.int/DNA/submissions/index.html>). In the case of these SUZ listed on the CDM website there is no need for the project proponents to provide proofs as indicated in paragraph 2 (a) above.</p>
Information requirement / Conditions to meet the criteria	<p>For validation of PoA; now PP shall use <i>Guidelines on the demonstration of additionality of small-scale project activities version 9 of EB68 annex27</i>. If the project activity has an install capacity \geq 5MW, hence, the PP shall use "<i>Guidelines for Demonstrating Additionality of Microscale Project Activities</i>"; paragraph 2:</p>
Validation Opinion	<p>OK. This fulfills the Standard EB70 Annex 5 paragraphs 8 and 9. The PP will provide evidences and explanation for SSC to comply with <i>Guidelines on the demonstration of additionality of small-scale project activities version 9 of EB68 Annex27 paragraph 1</i>, which stated that:</p> <ol style="list-style-type: none"> 1. Project participants shall provide an explanation to show that the project activity would not have occurred anyway due to at least one of the following barriers: <ol style="list-style-type: none"> a. Investment barrier: a financially more viable alternative to the project activity would have led to higher emissions; b. Technological barrier: a less technologically advanced alternative to the project activity involves lower risks due to the performance uncertainty or low market share of the new technology adopted for the project activity and so would have led to higher emissions; c. Barrier due to prevailing practice: prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with higher emissions; d. Other barriers: without the project activity, for another specific reason identified by the project participant, such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher. <p>For Microscale Project Activity, PP shall provide evidences</p>

	and explanation of how the CPA complies with paragraph 2 of <i>“Guidelines for Demonstrating Additionality of Microscale Project Activities”</i>
Validation Opinion to the fulfilment of 1 st real-case CPA	<p>For San Alejo CPA, PP used the is using <i>Guidelines for Demonstrating Additionality of Microscale Project Activities</i> in order to comply with Standard EB 70 Annex 05 paragraph 8. However this was not applicable, hence PP applied for demonstrating additionality of CPA the latest version of <i>“Non-binding best practice examples to demonstrate additionality for SSC project activities”</i> approved in Annex 34, EB 35 paragraph 11. Project participants shall provide an explanation to show that the project activity would not have occurred anyway due to at least one of the following barriers:</p> <p>(a) Investment barrier: a financially more viable alternative to the project activity would have led to higher emissions; Best practice examples include but are not limited to, the application of investment comparison analysis using a relevant financial indicator, application of a benchmark analysis or a simple cost analysis (where CDM is the only revenue stream such as end-use energy efficiency). It is recommended to use national or global accounting practices and standards for such an analysis.</p> <p>(b) Access-to-finance barrier: the project activity could not access appropriate capital without consideration of the CDM revenues; Best practice examples include but are not limited to, the demonstration of limited access to capital in the absence of the CDM, such as a statement from the financing bank that the revenues from the CDM are critical in the approval of the loan.</p> <p>The San Alejo CPA is facing the access to finance barrier.</p> <p>References: Loan request Chronology /CPA09.1/, /CPA09.2/, /CPA09.3/, /CPA09.4/ and /CPA09.5/</p> <p>Therefore, the eligibility criterion is met.</p>

No. 12	
Eligibility criteria	<i>The start date of the CPA (purchase of the main equipment) shall not be before commencement of validation of the PoA.</i>
Information requirement / Conditions to meet the criteria	<p><i>Clean Development Mechanism Project Standard (Version 012.0); EB 70; Annex 2; paragraphs 161 and 162.</i></p> <p><i>161. The coordinating/managing entity shall determine the start date and expected operational lifetime of any proposed CPA and provide a description of how the start date has been determined. The start date of a CPA is the earliest date at which either the implementation or construction or real action of the CPA begins</i></p>

	<i>162. The coordinating/managing entity shall confirm that the start date of any proposed CPA is on or after the start date of the PoA.</i>
Validation Opinion	Anaconda Carbon as CME of the PoA confirmed in this validation process that any CPA will not be prior to the starting date of the proposed CDM PoA as the 1 st CPA San Alejo has as expected starting date 01/01/2013 which is after the starting date of the PoA defined as 13/04/2011 which was the date when PoA-DD was published the first time for GSP. Therefore, the subsequences CPAs will start after starting date of PoA.
Validation Opinion to the fulfilment of 1 st real-case CPA	<p>For San Alejo CPA, PP stated on the CPA-DD that the expected starting date is 01/01/2013 and sent the timeline as evidence.</p> <p>Reference: Acquafutura S. A. de C. V. Timeline of San Alejo Hydroelectric Power Plant, 30/10/2012. /CPA14/</p> <p>Therefore, the eligibility criterion is met.</p>

No. 13	
Eligibility criteria	<i>Have performed the local stakeholder consultation process before start of inclusion in the programme and must comply with environmental approval requirements of the host country.</i>
Information requirement / Conditions to meet the criteria	<p><i>Clean Development Mechanism Project Standard (Version 02.0); EB70; Annex 2; paragraph 167 and 168</i></p> <p>167. The local stakeholder consultation, as per section 7.5 VII. E. above, may be carried out for the whole PoA or at the CPA level. The coordinating/managing entity shall specify the level of consultation applied.</p> <p>168. For the actual CPA part of the proposed CDM PoA, the local stakeholder consultation shall be completed before submission of the PoA for validation. For CPAs to be included in the registered PoA, the local stakeholder consultation shall be completed before inclusion in the PoA.</p>
Validation Opinion	Anaconda Carbon as CME of the PoA confirmed in this validation process that any CPA will have the local stakeholder consultation in CPA level and it will be completed before the inclusion in the PoA
Validation Opinion to the fulfilment of 1 st real-case CPA	<p>For San Alejo CPA, PP carried out the stakeholder consultation on 27/08/2009.</p> <p>Reference: Acquafutura S.A de C.V., "Stakeholders meeting evidence", 27/08/2009. /CPA13.1/ Invitation Letter, /CPA13.2/ Reception evidence of the invitation letter, /CPA13.3/ Participation List and /CPA13.4/ Photographic evidence.</p> <p>Therefore, the eligibility criterion is met.</p>

No. 14	
Eligibility criteria	<i>The CPA shall meet the small-scale or microscale threshold criteria and remain within those thresholds throughout the crediting period of the CPA.</i>
Information requirement / Conditions to meet the criteria	<i>Standard: Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (Version 02.0); EB70; Annex 5; paragraph 31(a) to (d)</i>
Validation Opinion	Anaconda Carbon as CME of the PoA confirmed in this validation process that each CPA will comply with the small-scale or microscale threshold criteria and it will be completed for the inclusion in the PoA
Validation Opinion to the fulfilment of 1 st real-case CPA	<p>For San Alejo CPA, PP concluded that this CPA can not be included in the PoA under the microscale criteria; therefore PP carried out the analysis inclusion with the small-scale criteria, this is in line with the CDM Project Standard paragraph 13 which states that <i>“The CME shall demonstrate that compliance with the additionality-related eligibility criteria set in the PoA design document will ensure that all the relevant additionality related guidelines, tools or any requirements embedded in the methodologies”</i>; and paragraph 14 which states that: <i>“For PoAs involving combinations of technologies/measures and/or methodologies, the eligibility criteria relative to each of them shall be proposed to demonstrate additionality.”</i></p> <p>Reference: UNFCCC, Guidelines on the demonstration of additionality of small-scale project activities (Version 09.0) /B07.2/ UNFCCC, “Non-binding best practice examples to demonstrate additionality for SSC project activities” (Version 01), EB35 Annex 34 /B07.3/ UNFCCC, “Guidelines for demonstrating additionality of micro-scale project activities” (Version 04), EB68 Annex 26 /B07.4/ UNFCCC; Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (version 02.0), EB70 Annex 5 /B08.5/</p> <p>Therefore, the eligibility criterion is met.</p>

Based on above assessment to each eligibility criteria, the validation team can conclude as below,

- ../ All of eligibility criteria are appropriate to the PoA and its CPA inclusion;
- ../ All of eligibility criteria are verifiable;
- ../ All of eligibility criteria are sufficiently objective and comprehensive to permit validation team on assessment of the inclusion of CPA(s) in the PoA.

Therefore, this is in line with paragraph 18 of EB70 Annex 05: *“The validating DOE shall determine whether the eligibility criteria are sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA”.*

In addition, as per PoA-DD Section A.4.2.2 and provided supporting evidences, the validation team considers that the CME, Anaconda Carbon S.A. has developed and implemented a clear, transparent operation and management system for checking any potential CPA inclusion so as to ensure each CPA that meets all requirements of eligibility criteria.

The validation team checked the below components;

- A CME Operational Manual /P11/ was established to address the purpose of the manual is to comply eligibility criteria by referring with the “Standard: Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (version 02.0)”.
- In the Manual, management system such as (i) organization chart, (ii) responsibility of each position, (iii) training, (iv) document control, (v) procedures for technical review of CPA inclusion, (vi) procedures for avoiding double counting, (vii) Non conformity and corrective & preventive actions, (viii) Internal Audit Review, (ix) Management Review, (x) Continuous Improvement, etc...a well-established quality management system for CPA inclusion can be seen.
- Checklists for double counting check, and technical review were verified;
- Job descriptions to each position were verified;

As above and the detailed assessment in Section 3.5, the validation team considers the compliance of EB70 Annex 5 paragraph 17: *“The eligibility criteria shall be verifiable.”*

In conclusion, the validation team considers that the stated eligibility criteria in the PoA-DD comply with the VVM requirements and the procedure for registration of a PoA /B01/ and the Standard EB70 Annex 2 paragraphs 15-22.

Based on above validation team confirms the compliance of §7, 8 and 9 of annex 05 of EB 70.

3.5 Operational and Management Plan

3.5.1 Operation and Management plan

The operational and management arrangements have been established by the CME, Anaconda Carbon and presented in the PoA-DD Section A.4.4.1. According to the PoA-DD form /B04/ Section A.4.4.2 and the procedure for registration of a PoA /B08.2/ para. 6(i), four issues should be addressed and complied;

i) A record keeping system for each CPA under the PoA:

As per PoA-DD Section A.4.4.2 and E.7.2, the mainly measuring is the net electricity supplied to the grid, also, an electronic database will be maintained with the following information from each CPA to be included as part of the PoA, necessary information for identifying each CPA will be included, for instance, (i) Name of the CPA (ii) implementing

entity of the CPA; (iii) installed capacity of the CPA; (iv) Location of the CPA (GPS coordinates of the power house); (v) Description of the CPA, and so on. The database will be fully controlled, monitored and updated by the CME within the crediting period of the PoA and its CPAs.

The electricity supplied by the project activity to the grid will be measured by calibrated electricity meters. The parameter will be monitored at the project site and crosschecked with the invoices of electricity commercialized. Data will be monitored continuously, measured hourly and recorded monthly as required by the applicable methodology. If there are discrepancies in the data, the source of the variation will be identified, whatever is the main measured value or the control value. The data will be compiled monthly in a report and will be verified by the Project Developer's Head Office. All data collected as part of monitoring should be archived electronically and be kept at least for 2 years after the end of the last crediting period.

In addition, the operation and management structure of the PoA and the responsibilities of the CME and each CPA implementer have been clearly presented in the PoA-DD and also in the Operational Manual /P11/. Therefore, the validation team considers that the record keeping system is clear and practical.

The real-case will follow procedures on the Operational Manual.

ii) **A system/procedure to avoid double accounting e.g. to avoid the case of including a new CPA that has been already registered either as a CDM project activity or as a CPA of another PoA:**

As per the PoA-DD, the eligibility criterion number 9 the CPA shall comply with the "Guidelines on Assessment of Debundling for SSC Project Activities" at its latest version, for the real-case the last version is Version 03 approved at EB54 Annex 13. The CME will notify the interested CPA implementer about the double accounting principle and indicate that issue in the signed ERPA between B. V. Mabanaf (buyer) and the interested CPA implementer(s). As the above measures, the validation team considers that the double accounting can be avoided.

The real-case CPA doubling accounting check

As mentioned in the real-case CPA-DD Section A.4.7, dated 04/12/2012, the CPA was checked the geographic location from the database of registered CDM projects and PoAs in and confirmed the CPA is neither a registered CDM project nor a CPA of another project.

The validation team checked the database (on-going PDD list, PoA list and CDM project list) in the UNFCCC CDM/JI Pipeline Analysis and Database⁴ by selecting the geographic location (Honduras), and confirmed the CPA is neither a registered to register single CDM project, nor a CPA of another PoA.

Also the signed ERPA /CPA10/ was provided in which the above condition is a requisite to sign the ERPA.

⁴Please refer to: <http://www.cdmpipeline.org/>

iii) The SSC-CPA included in the PoA is not a de-bundled component of another CDM programme activity (CPA) or CDM project activity:

The CME indicated in the PoA-DD that de-bundling check will be performed before the inclusion of each CPA according to the "Guideline for determining the occurrence of de-bundling under a programme of activities" (version 03) /B06.1/ paragraph 8 and 9. The CME will confirm the information of nearest hydropower project(s) of each CPA to verify (i) 1km distance between the CPA and the nearest hydropower plant(s); and (ii) the project developer name of the nearest hydropower plants. As the above measures, the validation team considers that the de-bundling check can be effectively conducted to each CPA before its inclusion.

The real-case CPA de-bundling check

As mentioned in the real-case CPA-DD Section A.4.6, no hydroelectric power project (whatever large scale or small scale) was developed within 1km of the proposed CPA. This was corroborated during the site visit, in which the validation team covered approximately 8 km within the project area, confirming that there is no other hydroelectric power project in the near constructed or in construction.

Therefore, the validation team can conclude no de-bundling to the real-case CPA.

iv) The provisions to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA:

As per PoA-DD section A.4.4.1, the CME indicated a contractual relationship that will be formed with the CPA implementers so as to ensure that those operating the CPA are aware of and have agreed being subscribed to the PoA. The validation team checked the signed agreements, ERPA /CPA10/, and the "Statement for the inclusion of the San Alejo Hydroelectric Project in the Guacamaya PoA" /CPA11/ between the CPA implementer and the CME and confirms that the CPA implementer was aware of and agreed to subscribe the CPA into the PoA. From the signed agreements /CPA10 and CPA11/, the debundling check, double accounting and monitoring issues are confirmed. Therefore, the validation team considers that the CME provides sufficient information and awareness to participating CPA implementers before their CPAs subscribe to the PoA.

In summary, the validation team considers that the PP clearly demonstrates the operational and management arrangements for the PoA in the PoA-DD and this complies with the VVM requirement (paragraph 166), CDM Project Standard (paragraph 154) and the procedure for registration of a PoA /B06.2/ paragraph 6(i).

3.6 Monitoring Plan

As per the PoA-DD Section A.4.4.2, the monitoring will be carried out per CPA. The CME will continuously update a list of all CPAs as well as collect the monitoring information of all participating CPAs for the purpose of the verification by DOE. The verification status will be recorded by the Managing entity in the database for each CPA.

All of monitoring information will be collected by the CME during the monitoring period and then will prepare the monitoring report for verification.

The responsibility for monitoring by the CME and CPA implementers clearly indicate in the Section A.4.4.1; Section E.7.2 of the PoA-DD and the Coordinating/Managing Entity Operation Manual (Version 1.1) /P11/. The monitoring plan and procedures for a CPA is assessed in Section 3.9 of this report. The validation team validated the relevant parts in the PoA-DD and checked with the Operational Manual /P11/ and the signed agreements /CPA10 and CPA11/ between the CME and the CPA implementer, then considers a clear and transparent verification procedure has been implemented by the CME to ensure all participating CPAs being properly monitored and verified.

The CME will verify all of emission reductions generated by all CPAs under the PoA. That means the CME opts for a verification method that does not use sampling but verifies each CPA. By reviewing the PoA-DD Section E.7 and the Operational Manual /P11/, the validation team considers that a transparent system for monitoring has been described in the PoA-DD. In addition, a system (i.e. Operating Manual /P11/) with clear procedures ensures that no double accounting occurs.

3.7 Baseline and Monitoring Methodology

3.7.1 Applicability of the selected methodology

As per the PoA-DD Section E.1, a CPA under the PoA applies the approved baseline and monitoring methodology AMS-I.D./version 17 “Grid connected renewable electricity generation” in connection with the “Tool to calculate emission factor for an electricity system (version 02.2.1)”, the “Guidelines on the demonstration of additionality of small-scale project activities (Version 09.0) and the micro-scale additionality “Guidelines for demonstrating additionality of microscale project activities” (version 04).

Applicability criteria for the baseline methodology in PoA-DD Section E.2 are assessed by the validation team by means of document review and interview. It is validated by the validation team that the PoA and the real-case CPA fully met the criteria of applied baseline methodology AMS-I.D./ Version 17 as described below:

- A CPA consists of a run-of-river diversion-type hydropower project or hydroelectric power plants with reservoir, which generates electricity by utilizing the renewable hydro resource, which supplies electricity to and displaces electricity from the national grid of each Host Country. This statement is part of the eligibility criterion. Host Countries national grids mainly comprises fossil fuel-fired power plants which have been supplied by more than one fossil fuel-fired generating unit;
- A CPA involves installation of new hydropower plant(s) (i.e. Greenfield project);
- A CPA will not involve any retrofit, addition or modifying of existing power unit(s)/plants;
- The power density of the hydropower plant(s) in the CPA is greater than 4W/m^2 , in case of hydro power plants with reservoir are included;
- The total installed capacity of a CPA does not exceed the threshold of 15MW for small-scale CDM project;
- The CPA does not involve heat recovery and co-fired fossil fuel, thus it is not a combined heat and power (co-generation) system;

- The geographic and system boundaries for each of the National grids can be clearly identified and information on the characteristics of the grid is available;

The validation team checks the real-case CPA-DD /P06/ Section B.2 regarding the applicability criteria of applied methodology to the CPA and found correctly demonstrated with supporting evidence.

Thus the validation team considers that project participant (i.e. the CME, Anaconda Carbon) has correctly applied the approved baseline methodology for individual CPA under the PoA. As advised from the CME, no auxiliary fuel would be used for the operation of a CPA under the PoA. Apart from this, the validation team confirms that there are no other major sources of emission from the CPAs. Therefore the validation team considers that the greenhouse gas emissions occurring within the proposed CPA boundary as a result of the implementation of the proposed CPA which are not addressed by the applied methodology, is deemed to contribute less than 1% of the overall expected average annual emission reductions.

3.7.2 CPA Boundary

A CPA boundary is the physical geographical site of each CPA with the connected National power grid. It is defined as the geographical locations of each certified hydropower plant under the PoA-DD. The validation team considers that the physical, geographical site of each specific CPA deline as the project boundary is in accordance with AMS-I.D/version17.

The exact location of the real-case CPA has been clearly defined in the real-case CPA-DD /P064/. The most relevant documentations assessed, in order to confirm the real-case CPA boundary, are the following:

Hydroelectric plant drawings /CPA01/,
Technical and commercial proposal /CPA03/,
San Alejo Hydroelectric final design /CPA04/, and
PPA /CPA06/.

Table 8: The CPA boundary is justified transparently and is presented as below:

	GHGsinvolved	Description
Baseline emissions	CO ₂	Major emission source, which is emitted from the electricity generation by dominant fossil fuel-fired power plants connected to National Grids
Project emissions	CH ₄	<p>No use of supplementary fossil fuel is observed during OSV.</p> <p>The project activity of each CPA is implemented to:</p> <ul style="list-style-type: none"> (i) formal new reservoir or (ii) increase of water depth in an existing reservoir with power density higher than 4 W/m², or; (iii) No change in volume of reservoir in an existing reservoir with no change in the volume of reservoir. <p>However, in case a CPA project with reservoir is included, the existence or not from project emissions will be demonstrated at CPA level.</p> <p>For the real-case CPA, the validation team confirms that the project is a run-of river hydroelectric power plant, therefore, power density is not considered and the project emissions is deemed as negligible as per AMS-I.D (Version17).</p>
Leakage		Since each CPA is a new hydropower project (i.e.Greenfield project) and the energy generating equipment is not transferred from another activity, leakage is thus considered negligible as per AMS-I.D (Version 17).

3.7.3 Baseline Identification

As per the PoA-DD, each CPA is the installation of new grid-connected renewable hydropower plant(s). In the countries where this PoA will take place and are included in the boundary, the current situation of utilization of hydroelectric power plants is as follows:

Honduras: As per the official information published by ENEE (http://204.249.98.211/Pagina_Web/Estadisticas2009/estadisticasPDF_2009/CUA1_2009%20.pdf) the installed capacity of private hydro power plants corresponds to 3.6 % (57.5MW) of the total installed capacity of the Honduran grid.

Costa Rica: The generation from privately owned hydro power plants has a very low participation in the total generation, as can be seen under <http://www.grupoice.com/wps/wcm/connect/3bd3a78047cdebee904df9f079241ace/PEG2011rev1.pdf?MOD=AJPERES> and <http://www.dse.go.cr/>.

Nicaragua: The installed capacity of hydro power plants represents 10% of the total installed capacity, as can be observed in the CEAC website: http://www.ine.gob.ni/DGE/estadisticas/1991_2007/04%20Serie%20Historica%201991%20al%202008%20para%20Web%20Gen_Neta.p

According to the applied methodology AMS-I.D./Version17 (clause10 and 11), the baseline scenario is prescribed as:

“The baseline emissions are the product of electrical energy baseline $EG_{BL,y}$ expressed in kWh of electricity produced by the renewable generating unit multiplied by an emission coefficient (measured in $kgCO_2e/kWh$, i.e. combine margin, CM) calculated in a transparent and conservative manner. CM is calculated by applying the latest “Tool to calculate the emission factor for an electricity system”.

The validation team has checked the following in accordance with the latest version of CDM Validation and Verification Manual /B01/, and the results are tabulated as follows. The details can be referred to AppendixA.

Table 9: Summary of baseline discussion

The approved base line methodology applicable to CPA under the PoA - explicit criteria - implicit criteria (e.g. available scenarios, applicability of formulas for OM, BM and EF calculations)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per AMS-I.D./Version17, the baseline scenario is prescribed. Please see details in Section 3.7.1
PoA-DD and CPA-DD(s) includes all assumptions and data used by project participants	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per AMS-I.D./Version17, all assumptions and data used by the PP are included in the PoA-DD and CPA-DD /P04 and P06/.
All the references and documents used are relevant for establishing the baseline scenario	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per AMS-I.D./Version17, all the references and documents used are relevant for establishing the baseline scenario in the PoA-DD and CPA-DD /P04 and P06/.
All the references and documents used are correctly quoted and conservatively interpreted in the PoA-DD and CPA-DD(s)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per AMS-I.D./Version17, all references used are correctly quoted and conservatively interpreted in the PoA-DD and CPA-DD /P04 and P06/.
All relevant policies/regulations considered are listed in the PoA-DD and CPA-DD(s)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per AMS-I.D./Version17, all relevant policies/regulations are considered in the PoA-DD and CPA-DD /P04 and P06/.

Identified potential baseline scenarios reasonably represent what would/could occur in the absence of the PoA and associated CPA.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per AMS-I.D./Version17, since CPAs are the installation of new grid-connected renewable power plant(s), the baseline scenarios prescribed.
The baseline scenario selection is appropriate and determined according to the methodology.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per AMS-I.D./Version17, the baseline scenario is prescribed.
The approved methodology used is applicable to the identified baseline scenario	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As per AMS-I.D./Version 17, the baseline scenario is prescribed.

The baseline determination for CPA(s) under the PoA is considered as transparent and reasonable.

3.8 Additionality

3.8.1 CDM consideration

For PoA level

According to the "Clarifications regarding the Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities" (Version01) EB60 Annex 26 para.3, it states that: "it is expected no component of the programme will commence prior to the starting date of validation, the "Guidelines for the demonstration and assessment of prior consideration of the CDM" do not apply to PoA". *Thus, prior CDM consideration is not applicable to the PoA.* Also the *Clean Development Mechanism Project Standard* (Version 02.0) EB 70 Annex 02 /B03/ paragraph 161 establishes that: *"The coordinating/managing entity shall confirm that the start date of any proposed CPA is on or after the start date of the PoA."*

For CPA level

According to the definition of starting date of a CPA in "Glossary of CDM Terms" (Version 07) /B09/ in connection to the "Procedures for registration of a PoA" para.7(d) /B08.2/, it states, "The starting date of a CDM programme activity is the earliest date at which either the implementation or construction or real action of a programme activity begins. The starting date of the CPA cannot be prior to the commencement of validation of the programme of activities, i.e. the date on which the CDM PoA-DD is first published for GSP; with the exemption granted as per EB47 Para72 (i.e.CPAs with starting date between 22 June 2007 and 31 December 2009 shall be considered subject to the list of such CPAs submitted to DOE for intimation to UNFCCC before 31 January 2010, exemption granted as per EB47 Para72)".

Therefore, except the exemption cases, *all of CPAs being included to the PoA with valid starting date have automatically met the requirement of prior CDM consideration since the starting date of a CPA is not prior to the PoA GSP.* No further discussion is required. In addition, the PoA will not apply any exemption cases in the P P/CME did not ask for such exemption.

Table 10: Summary of prior CDM consideration of the real-case CPA:

Starting date of CPAs	Justification of and evidences (references) on the starting date.	Date of CDM consideration
For the real-case CPA (i.e. San Alejo Hydroelectric Project) 01/01/13, expected date of purchase of turbines	<p>The validation team interviewed with the CPA implementer during on-site visit and found that no economic expenditure was carried out at the moment of the visit.</p> <p>Furthermore, the validation team can confirm during the visit that implementation was not yet started at the moment of publication. The above fulfils the requirement of the procedure for registration of PoA EB55, Annex38 /B08.2/ para. 7(d) and CDM Project Standard para. 160.</p> <p>Thus, the validation team considers the starting date was correctly selected and transparently demonstrated.</p>	Automatically met the requirement of prior CDM consideration since the starting date of a CPA is not prior to the PoA GSP.

3.8.2 AdditonalityofthePoA

According to the PoA-DD Section A.4.3, the CME has demonstrated the proposed PoA is a voluntary coordinated action and then in the absence of the CDM support,

- (i) the proposed voluntary measure would not be implemented “in accordance with the “Procedures for registration of a PoA ”EB55, Annex 38, para. 6(e) /B08.2/ and the “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (version02.0)”, EB70 Annex05 para.7-14 /B08.5/

National and/or local laws and regulations require the development of the smallscale hydropower projects in Host Countries. The validation team confirms this from the DNAs documentation during on-site interview with CME and Implementer representatives. The development of the PoA is a voluntary coordinating action by the CME, Anaconda Carbon S. A. This confirms in the letter of approval /P07/ issued by the Host Countries DNA.

Based on the findings, the validation team can conclude that the CME demonstrated the barrier (access to finance) in developing small-scale hydropower projects in Host Countries. Therefore, in the absence of the CDM support, (i) the proposed voluntary measure would not be implemented“.

Besides, the CME demonstrates barrier(s) to individual CPA according to “*Guidelines on the demonstration of additionality of small-scale project activities (Version 09.0)*” previously known as “*Attachment A of Appendix B to simplified modalities and procedures of small scale CDM project activities*” “Investment barrier analysis” and Micro-scale additionality “*Guidelines for demonstrating additionality of micro-scale project activities*” (Version04.0)”. Details of assessment were done in Section 3.8.3.

Therefore, the validation team considers that the CME has demonstrated "(i) the proposed voluntary measure would not be implemented" under absence of CDM support. The demonstration of additionality was in accordance with the "Procedures for registration of a PoA" EB55, Annex 38, para. 6 (e) /B08.2/ and "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (version 02.0)", EB70 Annex05 para.7-14 /B08.5/

3.8.3 Approach for demonstrating additionality of CPA under the PoA

As per the PoA-DD Section A.4.3 and Section E.5, the generic CPA-DD Section B.3 and real-case CPA Section B.3, the additionality of a CPA is assessed and demonstrated below:

2 approaches of additionality are indicated in the PoA-DD to demonstrate the additionality of each CPA:

Approach 1: As per the PoA-DD, the CME selects the "Guidelines for demonstrating additionality of micro-scale project activities" (Version04) in EB68 Annex26 /B07.4/ for demonstrating additionality for CPAs up to 5MW and located in the geographic locations/ regions indicated within the special underdeveloped zone(s) of the host countries.

Approach 2: As per the PoA-DD, the CME selects the "*Guidelines on the demonstration of additionality of small-scale project activities (Version 09.0)*" previously known as "*Attachment A to Appendix B Version08 of the simplified modalities and procedures for small-scale CDM project activities from UNFCCC*" /B07.2/ for demonstrating additionality of a CPA with ≤15MW installed capacity or with ≤ 5MW but not in a special underdeveloped zone of the Host countries.

The CME has provided an explanation to show a CPA would not have occurred anyway due to the different barriers faced by the CPAs.

Therefore the additonality of the CPA will be fund in:

- a) "*Guidelines for demonstrating additionality of microscale project activities*" (Version04) in EB68 Annex26
- b) "*Guideline on the demonstration of additonality of small-scale project activities*" (Version 9) EB68 Annex27
- c) "*Non-binding best practice examples to demonstrate additionality for SSC project activities*" (Version 01.0) Annex 34 EB 35 and;
- d) "*Guidelines for objective demonstration and assessment of barriers*" (Version 01.0) Annex 13 EB 50

For the **Approach 1** the additionality is supported with the “*Guidelines for demonstrating additionality of microscale project activities*” (Version04) in EB68 Annex26 paragraph 2(a), which states that:

2. *Project activities up to five megawatts that employ renewable energy technology are additional if anyone of the conditions below is satisfied:*

(a) *The geographic location of the project activity is in one of the least developed countries or the small island developing States (LDCs/SIDS) or in a special underdeveloped zone (SUZ) of the host country.*

(i) *SUZ is a region in the host country (zone, municipality or any other designated official administrative unit) identified by the Government in official notifications for development assistance including for planning, management, and investment satisfying any one of the following conditions using most recent available data:*

- *The proportion of population with income less than USD 2 per day (PPP)⁴ in the region is greater than 50%;*
- *The GNI per capita in the country is less than USD 3000 and the population of the region is among the poorest 20% in the poverty ranking of the host country as per the applicable national policies and procedures;⁶*

(ii) *In cases where, based on the recommendation of the designated national authority of the host country the SUZ in the host country has been approved by Executive Board (hereinafter referred to as the Board) of the clean development mechanism (CDM), the list of such SUZ shall be maintained on the UNFCCC website (e.g. at <<http://cdm.unfccc.int/DNA/submissions/index.html>>). In the case of these SUZ listed on the CDM website there is no need for the project proponents to provide proofs as indicated in paragraph 2(a) above.*

Therefore, the validation team considers that the approach 1 is clearly demonstrated in the PoA-DD and generic CPA-DD for CPA inclusion.

For the **Approach 2**, the additionality is supported by:

- *“Guideline on the demonstration of additonality of small-scale project activities” at its latest version (Version 9) EB 68 Annex 27*
- *“Non-binding best practice examples to demonstrate additionality for SSC project activities” (Version 01.0) Annex 34 EB 35 and;*
- *“Guidelines for objective demonstration and assessment of barriers” (Version 01.0) Annex 13 EB 50*

As per the “Guideline on the demonstration of additionality of SSC project activities” paragraph 1:

1. *Project participants shall provide an explanation to show that the project activity would not have occurred anyway due to at least one of the following barriers:*
 - a) *Investment barrier: a financially more viable alternative to the project activity would have led to higher emissions;*
 - b) *Technological barrier: a less technologically advanced alternative to the project activity involves lower risks due to the performance uncertainty or low market share of the new technology adopted for the project activity and so would have led to higher emissions;*
 - c) *Barrier due to prevailing practice: prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with higher emissions;*
 - d) *Other barriers: without the project activity, for another specific reason identified by the project participant, such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher.*

For support the statement above, for example at San Alejo CPA, the CME has used the Investment Barrier, as the project is facing problems to access to finance, this is based with the “Guidelines for objective demonstration and assessment of barriers” (Version 01.0) Annex 13 EB 50 paragraph 4, which states:

4. **Guideline 1:** *While demonstrating barriers related to the lack of access to capital, technologies and skilled labour, the project proponents shall provide information on the nature of the companies and entities involved in the financing and implementation of the project. More specifically:*

- *While demonstrating barriers related to the lack of access to capital, information should include nature of company, organization and its ownership and, financial information;*

Anaconda Carbon S. A. has provided evidences to prove this barrier, lack of access to capital, please referred to reference /CPA09/ Loan request chronology.

Also, this is confirmed with the “Non-binding best practice examples to demonstrate additionality for SSC project activities” (Version 01.0) Annex 34 EB 35 paragraph 1.b which is used to support this barrier, as it stated the following:

- “1. *Project participants shall provide an explanation to show that the project activity would not have occurred anyway due to at least one of the following barriers:*

...

- (b) **Access-to-finance barrier:** *the project activity could not access appropriate capital without consideration of the CDM revenues;
Best practice examples include but are not limited to, the demonstration of limited access to capital in the absence of the CDM, such as a statement from the financing bank that the revenues from the CDM are critical in the approval of the loan.*

Therefore, the validation team considers that the approach 2 is clearly demonstrated in the PoA-DD and generic CPA-DD for CPA inclusion.

For the real-case CPA

As per the real-case CPA-DD /P06/ SectionB.3, it applies the approach 2 for demonstrating additionality. The validation team validated as the below:

Table11: Summary of additionality assessment of the real-case CPA

Criteria for applying	San Alejo HydroelectricProject	Validation opinion
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<p>Approach 2</p>	<p>Access to finance barrier. San Alejo project owner searched for a loan, which was not provided without the carbon credits revenues as part of the guarantees of the project.</p> <p>The DOE checked the following documents:</p> <p>/CPA09/:</p> <ol style="list-style-type: none"> 1. Acquafutura, "Loan requests" to different banks (i.e. Banco Atlántida, Banco FICOHOSA, Banco del País), between July - October 2009. 2. E + Co Energy Through Enterprises, "Summary of Terms and Loan Conditions", 30/06/2010 3. E + Co Energy Through Enterprises, "Investment recommendation for support", 27/07/2010 4. Banco del País, "Loan Terms for approval letter", 04/01/2011 <p>Furthermore, the Banco LAFISE "Loan approved letter, dated 9/11/2012 was revised in which it is stipulated that the loan has been approved since the project can be registered as a CDM project activity and can access to the issue of CERs, which gives more financial support to the project and is developed with minimal environmental impact as this validation process assesses and is internationally recognised.</p>	<p>Through the chronology showed in the CPA-DD section B.3 and document delivered to the DOE, the validation team can corroborate that without the CDM revenues, the project will not have access to loans since the banks take carbon credits as payment guarantee. Term sheets clearly indicate as part of the contractual agreements, as it is clearly indicated in both letters E+Co and Banco LAFISE that CDM revenues are taken into account to have access to finance. In the E+Co "Investment recommendation for support", the financial institution stated that:</p> <p><i>E+CO'S FINANCIAL MODEL SUGGESTS THAT THE PROJECT CAN TOLERATE 17% IRR ON PREFERRED EQUITY AND GENERATE ADEQUATE CASH FLOWS FOR UNFORESEEN COSTS OR LOWER CAPACITY FACTORS</i></p> <p>Paragraph above is based on the following assumption from E+Co:</p> <p>Revenues from sales of electricity are estimated at US \$ 1.08 million for the first year which include a 1.5% increase to reflect inflation. In addition, revenues from carbon credits by offsetting ~ 9,131 TCO₂/yr would represent ~ \$146,235 (@ US \$16/TCO₂).</p> <p>Hence, E+Co is expecting that the CDM revenues became the project more financially attractive and can access to finance.</p>
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In summary, the validation team considers that the approaches 1, applicable for micro-scale projects, and approach 2, applicable for both micro and small-scale projects, of additionality in CPA level under the PoA have been reasonably and

transparently demonstrated. As it has been demonstrated in the San Alejo CPA-DD supported with evidence of E+Co "Investment recommendation for support" which terms stated that:

E+Co's financial projections are summarized below.

Annual generation of 9.2 GWh is based on a 50% capacity factor which includes inefficiencies, down time and a 30% variation on water flows. The project yields a 17% IRR on the first 8 years of operation. Debt coverage ratio for years 2 thru 8 is between 1.3 and 2.1, which is considered adequate. The senior debt terms are assumed at 10% interest for 10 years with 2 years grace period on principal only.

E+Co is assumed that:

Revenues from sales of electricity are estimated at US\$ 1.08 million for the first year which include a 1.5% increase to reflect inflation. In addition, revenues from carbon credits by offsetting ~ 9,131 TCO₂/yr would represent ~ \$146,235 (@ US \$16/TCO₂). The company has signed a 28 year PoA with South Pole, promoted through the AHPPER' in order to displace 100,000 TCO₂/yr through 25 MW of AHPPER associates projects, with an annual 6% commission for South Pole. The minimum base price was established between 12 and 16 USD, and guaranteed despite market conditions changes after 2012. The PoA is supported by the MDL Foundation by Honduras, therefore the sponsor feels confident they could maintain this prices at least through the first 10 years of the project. E+Co LAC discussed about this PoA with E+ Co, and they recommended projecting CER's revenues with the minimum price guaranteed in the contract.

All electricity generated will be sold to the government's utility company *Empresa Nacional de Energia Electrica* (ENEE) through a power purchase agreement (PPA). The PPA that PHSA negotiated with ENEE has an initial price of \$0.098 per KWh. However the PPA price is adjusted regularly based on the Consumer Price Index (CPI) from the time it is signed between both parties. At the start of commercial operations, the negotiated price will include almost 2.5 years of adjustment and approximate 0.1010 per Kwh. This hydroproject is promoted by Aquafutura S.A. de C.V. (Aquafutura), a Honduran corporation owned by 12 well known and respected Honduran business people, divided among three different groups or corporations.

Strategic Importance and Rationale for Support:

- Small Size Hydro within E+Co's scope: San Alejo fits into E+Co size and type of investment. E+Co would be financing a small size hydro project and will be supporting committed entrepreneurs, which feel confident that E+Co is the best solution for their project, due to our experience, flexibility and financial creativity.
- Project enhances E+Co's IRR on investments: E+Co's preferred equity investment will yield an IRR of 17% which is higher than the average IRR that E+Co generally attains from the other projects in its portfolio. It will also provide a differentiated equity investment in the regional portfolio which has traditionally been outweighed by debt investments.

Finally the most important investment costs considered in San Alejo CPA are:

The construction of the project is expected to take between 18 to 22 months. The project's total cost is estimated at US\$4,736,827. The estimated cost per MW installed is US\$ 2,255,632, which is reasonable, considering that the project would be built through several Engineering Procurement and Construction Agreements, which are currently being negotiated with several local companies. Constructing through an EPC

is beneficial because the sponsor does not have to cover cost overruns, but for the same reason the cost of the project typically increases by 20%-30%. Aquafutura will invest US\$475,000 or 10% of the projects total costs.

About PPA, the most important support for it is:

PH San Alejo is one of the Renewable Energy generation projects approved under the 250 MW Private Generation Bid supported by the Honduran Government. The project has completed all pertinent requirements such as water licenses, environmental permits and approvals. Under the government's initiative, all approved projects will sign a preferential 30 year PPA with ENEE.

As the additionality for the San Alejo CPA is based on financial barriers specifically access to finance, the most important financial parameters are presented and compared with the most recent registered hydroelectric projects of Honduras.

Table 12: Comparison of IRR=17% for San Alejo-CPA with 2.211 MW install capacity against others CDM Projects.

Project	UNFCCC Reg. N°	Date of Registration	Install Capacity	Benchmark
Rio Blanco Small Hydroelectric Project	0028	11/01/2005	5 MW	12%
Cuyamapa Hydroelectric Project	0045	24/04/2005	12.416 MW	15%
Cortecito and San Carlos Hydroelectric Project	0051	3/06/2005	9.752 MW	15%
La Esperanza Hydroelectric Project	0009	19/08/2005	13.8 MW	15%
Cuyamel Hydroelectric Project	0083	26/11/2005	7.9146 MW	13%
La Gloria Hydroelectric Project	0154	9/01/2006	7.9146 MW	13%
Zacapa Mini Hydro Station Project	0235	2/03/2006	0.52 MW	NA
Cececapa Small Hydroelectric Project	0156	2/03/2006	3.148 MW	NA
Yojoa Small Hydropower Project	0157	2/03/2006	0.63 MW	NA
Mezapa Small-Scale Hydroelectric Project	4206	8/03/2011	9.4 MW	15%
Coronado Hydroelectric Project	4560	17/06/11	6.1 MW	18.8%
Chamelecón 280 – Hydroelectric project	5069	Rejected	11.12 MW	NA
La Vegona Hydroelectric Project	5354	18/08/2011	37.92 MW	Not applicable
San Martin Hydroelectric Project	NA	Pending	2.77 MW	12.27%

As it can be observed the IRR for San Alejo-CPA is in the range of IRR value between 12% to 18.8%, as the IRR=17%, which is was stated by E+Co in the “Investment recommendation for support” /CPA09.3/. Therefore, given that the benchmark chosen for the project activity was taken from a third party source (E+Co), the team validation considers the benchmark reasonable.

The construction of the project is expected to take between 18 to 22 months. The project's total cost is estimated at US\$4,736,827. The estimated cost per MW installed is US\$ 2,255,632, which is reasonable.

As the loan is planning for eight years, E+Co is expecting an average revenues for energy sales revenues of 1.08 MMUSD with a electricity price of 101 USD/MWh and O&M cost of 12.5% of revenues, which means an average cost of 135,00 USD/y. The validation team was looking for this information above to compare with the presented CDM projects above but it was not available for all of them. However this is the comparison table for the described parameters:

Table 13. Comparison Table of financial parameters.

Project Name	Total Investment USD	Investment USD/MW	Electricity Tariff USD/MWh	O&M aCost USD/year
Coronado Hydroelectric Project	10,200,000	1,672,131.148	42.583 – 87.276	521,000
San Martin Hydroelectric Project	7,390,763	2,668,145.487	109.372	202,878.5
San Alejo-CPA	4,736,827	2,142,391.226	101.00	135000

As it can be observed, the cost are similar when we compare the CPA against similar projects, which one of them are registered, Coronado, and the other, San Martin is expected to be registered, also. Therefore, the validation team considered the cost reasonable.

Furthermore when comparing the CDM projects it was observed that for Honduras all the projects based their additionality with barrier analysis supported by different manners following the applied methodology AMS-I.D at its different versions.

3.9 GHG Emission Reductions from a typical CPA

The calculations of GHG emission reductions are transparently documented in PoA-DD with assumptions in PoA-DD Section E.6, generic CPA-DD & the real-case CPA-DD Section B.5 regarding the forecast emission reductions. The validation team could confirm the estimation of emission reductions have been calculated in accordance to the approved methodology.

According to the selected methodology AMS-I.D./Version17, the emission reductions (ER_y) by a CPA during the crediting period is the difference between

the baseline emissions (BE_y), project emissions (PE_y) and emissions arising from leakage (LE_y), which is expressed as follows:

$$ER_y = BE_y - PE_y - LE_y$$

Regarding the calculation of project emissions, there is a component to be considered for hydropower project activities, i.e. emission from the reservoir ($PE_{HP,y}$).

Regarding to the leakage (LE_y), through document review and on-site interview, the validation team did not notice any equipment transfer from any other programme activity to the proposed CPA, or existing equipment of the CPA to another programme activity. Thus, there is no leakage in the CPA according to the definition of applied AMS-I.D./version17 paragraph 20.

For the real-case CPA

According to AMS-I.D./Version17, since there is no power density of the project as it is a run-of river hydroelectric power plant, thus, the project emissions of the project are considered as zero.

$$PE_y = PE_{HP,y} = 0$$

Leakage is considered as negligible in accordance with AMS-I.D./Version17, and hence can be assumed as zero. While the project emissions & leakage are zero, baseline emissions (BE_y) are equal to the emission reductions (ER_y) due to the project activity and have been estimated to be 5,762 tCO₂e per year in the real-case CPA-DD /P06/, based on an ex-ante fixed baseline emission factor for Honduras of 0.6223 tCO₂e/MWh in the PoA- DD and the real-case CPA-DD.

$$ER_y = BE_y = EG_{BL,y} \times EF_{grid,CM,y}$$

$$ER_y = 9,260 \text{ MWh} \times 0.6223 \text{ tCO}_2/\text{MWh} = 5,762 \text{ tCO}_2\text{e}$$

where:

BE_y = Baseline emission in year y (tCO₂/y)

$EG_{BL,y}$ = Quantity of net electricity supplied by the hydroelectric power plant to the grid as a result of the implementation of the CDM project activity in year y (MWh/y), estimated, for real-case San Alejo CPA, as 9 260 MWh/y annual power supply under the assumption of zero power import from the grid.

$EF_{grid,CM,y}$ = The combined margin CO₂ emission factor for grid connected power generation in year y and the applied values, for each Host Country, are:

Host Country	Emission Factor tCO ₂ e/MWh
Honduras	0.6223
Nicaragua	0.6502
Costa Rica	0.2575

The validation team has cross-checked the data and calculation listed in the PoA-DD and real-case CPA-DD Section B.6 and Annex 3. It is found that the values to calculate OM and BM data are publicly available.

The validation team has carried out an interview with the CME and project developers and checked the calculation procedures of the emission factors /P12/. The national grid websites of Host Countries was used to obtain the data used in the calculation of emission factors also followed the latest “Tool to calculate the emission factor for an electricity system”. Therefore, the validation team can conclude the emission factors are reliable and plausible; also, the validation team considers that this is the latest available information at the time of submission of the PoA-DD to the DOE for validation.

The data used in the PoA-DD and associated CPA-DDs is consistent with the data source /CPA07/ to give the baseline emission factor ($EF_{grid,CM,y}$) of the project activity. The ex-ante estimation of emission reductions of a CPA under the PoA is based on the most recent data available at the time of submission of the PoA-DD to the DOE for validation, i.e. the time for global stakeholder consultation, for the relevant baseline emissions and project emissions of each CPA, which is reasonably and transparently carried out.

3.10 Monitoring Plan for a typical CPA

The monitoring plan for a typical CPA is presented in the PoA-DD Section E.7, generic CPA-DD Section B.6 and the real-case CPA-DD Section B.6 based on the approved monitoring methodology AMS-I.D/Version 17. The validation team confirms the monitoring plan for a typical CPA can meet the requirement of the approved monitoring methodology AMS-I.D/Version17. Monitoring of GHG emission reduction of a CPA is based on measuring the net quantity of electricity supplied by a proposed CPA to the Host Countries National Power Grid which is transparently presented in PoA-DD Section E.7, generic CPA-DD Section B.6 and the real-case CPA-DD Section B.6.

3.10.1 Parameters determined ex-ante

Each CPA under the PoA adopts the ex-ante calculation of emission factor of the grid. The parameters applied in the calculation of Combined Margin Emission Factor ($EF_{grid,CM,y}$) are validated by the validation team based on the “Tool to calculate the emission factor for an electricity system (Version 02.2.1)”; and are presented as below:

Table 12: Summary of Data and Parameters ex-ante:

<i>Data and Parameters</i>	<i>Unit</i>	<i>Value applied</i>	<i>Source of data used</i>
Installed Capacity of the CPA project activity	MW	-	To be confirmed at CPA level
HONDURAS			
Operating margin of ENEE (OM)	tCO ₂ /MWh	0.6449	ENEE and CEAC websites, data from 2006 to 2008, IPCC 2006
Build Margin of ENEE (BM)	tCO ₂ /MWh	0.5997	
Emission factor of ENEE (CM)	tCO ₂ /MWh	0.6223	
NICARAGUA			
Operating margin of INE (OM)	tCO ₂ /MWh	0.7467	INE and CEAC website, data from 2008 to 2010, IPCC 2006
Build Margin of INE (BM)	tCO ₂ /MWh	0.5537	
Emission factor of INE (CM)	tCO ₂ /MWh	0.6502	
COSTA RICA			
Operating margin of NIS (OM)	tCO ₂ /MWh	0.4537	ARESEP, DSE and CEAC website, data from 2007 to 2009, IPCC 2006
Build Margin of NIS (BM)	tCO ₂ /MWh	0.0612	
Emission factor of NIS (CM)	tCO ₂ /MWh	0.2575	

The following assumptions were used to do the calculations of the emission factors:

Operating Margin (OM) emission factor ($EF_{grid,OM,y}$):

For the countries Nicaragua and Honduras, the method used to calculate the operating margin emission factor ($EF_{grid,OM,y}$) was the simple OM; the method applies as the low-cost-must-run generation is below 50% of the total generation for the 5 years before start of validation, for which data is available.

For Costa Rica the method used to calculate the operating margin emission factor ($EF_{grid,OM,y}$) was the Simple Adjusted OM (b). The data vintage used was the ex ante option, where a 3 year generation weighted average based on the most recent data available, without the requirement to monitor and recalculate the emissions factor during the crediting period.

Build Margin emission factor ($EF_{grid,BM,y}$)

The BM calculation for the countries included in the PoA, demonstrates that in all countries the most recent capacity addition to reach 20% applies. The generation of the newest five power units does not reach 20% of the total generation in any case. The calculation of the BM emission factor is to be based only on the most recent year for which data are available.

Combined Margin (CM) emission factor ($EF_{grid,CM,y}$)

The combined margin EF_{CM} will be the simple average of the EF_{OM} and the EF_{BM} for all the countries included in the PoA. The tool has indicated that the default weights for OM and BM for all projects other than wind and solar, these will be equal for the first crediting period. The tool does allow for alternative weights to be proposed for specific circumstances, but for the concerned PoA the suggested default values ($\omega_{OM} = 0.5$ and $\omega_{BM} = 0.5$) will be applied.

For the real-case CPA

Referring to the real-case CPA-DD Section B.5, the parameters for determining the combined margin emission factor ($EF_{grid,CM,y}$) have been clearly described in tabular format in accordance with the monitoring methodology AMS-I.D./Version17 in connection to the "Tool to calculate the emission factor for an electricity system (Version 02.2.1)". The value of $EF_{grid,CM,y}$ for the CPA is correctly determined based on the best available information during the GSP of PoA.

Table 13: Summary of Data and Parameters ex-ante, real-case San Alejo-CPA.

Data and Parameters	Unit	Value applied	Source of data used
Installed Capacity of the project activity	MW	2.211	FSR
Operating margin of ENEE (OM)	tCO ₂ /MWh	0.6449	ENEE and CEAC websites, data from 2006 to 2008, IPCC 2006
Building Margin of ENEE (BM)	tCO ₂ /MWh	0.5997	
Emission factor of ENEE (CM)	tCO ₂ /MWh	0.6223	

3.10.2 Parameters monitored ex-post

According to the PoA-DD Section E.7, the generic CPA-DD & the real-case CPA-DD Section B.6.3; the major parameter required to be monitored, is:

- i) Net electricity supplied to the national grid by the proposed hydropower plant ($EG_{BL,y}$);

This parameter has been described in the monitoring plan, in which $EG_{BL,y}$ will be directly measured by the meter system. The monitoring frequency of $EG_{BL,y}$ is continuous monitoring, hourly measurement and at least monthly recording. The validation team considers that the monitoring parameters are correctly demonstrated in the CPA-DDs and meet the requirements of the applied monitoring methodology AMS-I.D./Version17.

For the real-case CPA

The validation team checked the real-case CPA-DD Section B.6, the monitoring parameter has been correctly demonstrated which are consistent to the monitoring parameters in PoA-DD, so that the validation team considers the correct demonstration in the real-case CPA-DD. The expected value of $EG_{BL,y} = 9620$ MWh/y

3.10.3 Management system and quality assurance

According to the PoA-DD Section E.7.2, the generic CPA-DD & the real-case CPA-DD Section B.6, the monitoring plan for a CPA outlines the followings:

Subject	Measure
Monitoring objective	Ensure a complete, clear, accurate and reliable calculation of emission reductions from a CPA;
Monitoring Data	Mainly monitor the net electricity supplied by CPA ($EG_{BL,y}$) via main electricity meter and back-up meter. Both meters are bi-directional with accuracy 0.5s;
Monitoring Responsibility	the roles and their responsibilities for the CPA monitoring are identified;
Monitoring Equipment	Meter specifications and the calibration of the meters are indicated and complied with the relevant national standards. In addition, the meter diagram showed the meter locations and connection arrangement between a CPA and the Host Countries National Power Grid. Electricity generation data of a CPA: Indicate the handling and recording the electricity generation data by different parties;
QA and QC	Conduct regular inspection of monitoring plan and procedures;
Calibration of meters	Two meters will be calibrated by the grid company every two years;
Data management system	All data will be archived in electronic and hard-copies and kept until 2 years after the crediting period;
Training	Operation training and CDM monitoring will be provided to the relevant staff; and
Meter damage and emergency handling	Back-up meter will be used to measure the net electricity supply if main meter damages. In case both meters fail, a conservative estimation of emission reductions will be calculated and selected.

Steps undertaken to assess the monitoring plan:

Through document review in the PoA-DD, generic CPA-DD and real-case CPA-DD, on-site interviews with representatives of the CME /I-01 – I-02/ and CPA implementer /I-03/, the monitoring arrangements described in the monitoring plan were assessed. Procedures have been developed and the implementation of these will enable subsequent verification of the emission reductions of the real-case CPA and further inclusion of new CPAs. Monitoring team of a CPA is identified in the PoA-DD, generic CPA-DD and associated real-case CPA-DD.

The relevant training plans for technical training will be provided by the equipment provider before the operation; and CDM training will be provided by the CME

Anaconda Carbon S.A. before project monitoring. By document review /P11/ and interviews with the CME /I-01 and I-02/ and CPA implementer /I-03/ during OSV, the validation team considers that the CME and included CPA implementer have ability to implement the monitoring plan and to generate the emission reductions from a CPA.

3.11 Sustainable Development

The validation team validated that the programme is considered to be contributing to sustainable development (SD) of Host Countries in the following ways:

- i) Contribution to economic development: The PoA could increase the employment opportunities in the host countries; it enhances the local economic development by providing additional electricity; it can also enhance the stability of the grid by decentralized electricity generation.
- ii) Contribution to social development: It supports to provide electricity to the remote area in the host countries and provide access to power for the populations in those areas. It also generates temporary work opportunities for the locals in construction time; it also generates the demands for various kinds of mechanical work as well as the spare parts.
- iii) Contribution to environmental development: Substituting fossil fuels used in the co-fired power plant in Host Countries, reduction of the emissions of greenhouse gases, etc.

Through the document review and interviews with representative of CME, project developer and local community, the validation team considers the SD that can be achieved by implementation of the PoA. Moreover, the LoA from the DNA of the Host Countries is also confirmed the contribution of the PoA.

3.11.1 Sustainable Development (at CPA level)

Referring to the PoA-DD form /P04/, it is allowed the environmental analysis to be done at PoA level or CPA level. It has been indicated in PoA-DD /P04/ that the environmental analysis is done at the CPA level.

All the delivered LoAs /P07/ state that the PoA contributes to the sustainable development of the Host Countries.

The real-case CPA

For “San Alejo Hydroelectric Project”, the CPA owner (i.e. CPA implementer) showed the Environmental License granted by SERNA /CPA12/. By reviewing the real-case CPA-DD /P06/, identified environmental impacts and recommended preventive & mitigation measures in the EIA report have been summarized in the real-case CPA-DD.

During OSV, the CPA construction work was not yet started. During the on-site interview, the local resident replied that there was no significant environmental /social impact(s) to their living environment. Besides, there was no re-settlement of residents arisen from the project activity.

3.12 Local Stakeholder Consultation

Referring to the PoA-DD form /P04/, it is allowed the local stakeholder consultation to be done at PoA level and/or CPA level. It has been indicated in the PoA-DD that the local stakeholder consultation is done at the CPA level.

CPA Level:

According to the real-case CPA-DD Section D, the stakeholder consultation was carried out on 27/08/2009 /CPA13/. Invitation letters were sent to the stake holders before the consultation /CPA13/. The consultation was summarized in the CPA-DD Section D.2 and reflected the concerns of stakeholders to the CPA implementation. It was found the stakeholders who supported the CPA implementation.

During the on-site visit, the representatives from the Community were interviewed. In general, the interviewees showed their support to the development of the CPA. They considered there were no adverse environmental / social impacts brought by the project activities. The interviewees' overall response was supportive to the CPA development.

3.13 Comments by Parties, Stakeholders and NGOs⁵

The first time that the PoA-DD /P01.1/, Generic CPA-DD/P02.1/ and real-case CPA-DD /P03.1/, were made publicly available on UNFCCC's website: (<http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/L4GKXH1FTNAMON2GR2T OXPIGK08XT4/view.html>); and parties, stakeholders and NGOs were through the CDM website invited to provide comments during a 30 days period from 13/04/2011 to 12/05/2011, where no comment was received.

The second GSP that the PoA-DD /P01.2/, Generic CPA-DD /P02.2/ and real-case CPA-DD /P03.2/, were made publicly available on UNFCCC's website: <http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/A6IFE8OJZ2RMVMK89LH8V MWV/LWFNDF/view.html>; and parties, stakeholders and NGOs were through the CDM website invited to provide comments during a 30 days period from 20/10/2011 to 18/11/2011, where compilation of submitted inputs are not yet available.

⁵ Two important events caused a second publication:

Firstly, during the GSP PoA-PDD (version 01) first uploading the DOE indicated only one Host Country, which is Honduras, the issue needs to be corrected accordingly to include all Host Countries in section A.4.1.1, also from the first to the second PoA-DD publication Republic of Nicaragua was included as Host Party.

Secondly, the initial Specific CPA (version 01), Rio Quilio Hydroelectric Project, was changed due to Anaconda's internal reasons, to the present one, San Alejo Hydroelectric Project, thus together with the new version of PoA-DD (version 02) a new real case was submitted for publication in the second GSP.

Also a second on-site visit was performed to perform validation of San Alejo Hydroelectric Project and to make interviews with relevant stakeholders.

Appendix A

THE VALIDATION PROTOCOL FOR CDM PROGRAMME OF ACTIVITIES

based on CDM Validation and Verification Manual, Annex 2 of EB55 report

Guacamaya Small Scale Hydropower Programme of Activities Small-scale

San Alejo Hydroelectric Project

Report No. 01 997 9105064224

Version No.DRAFT

Table 1: Validation requirements

(based on § 37 of the CDM Modalities and Procedures and on CDM Validation and Verification Manual)

Checklist question	Ref.	MoV ⁶	Findings, comments, references, data sources	Draft conclusion	Final conclusion
1. General Description of Programme Activity					
Preparation of a Programme of Activities Design Document					
1.1 Does the PoA-DD include the Identification of the coordinating/ managing entity, Host Party(ies) and PoA participants?	/P04/	DR	<p>Yes, the coordinating entity has been correctly identified in the PoA, and is Anaconda Carbon S.A.</p> <p>CAR 1</p> <p>a) However, evidence that the proposed PoA is a voluntary coordinated action is required (i.e. incentives schemes and voluntary programmes), such information shall be submitted to the DOE accordingly.</p> <p>b) The Modalities of Communication Letter shall be submitted to the DOE</p>	CAR-1	OK
1.2 Does the PoA-DD include the definition of the boundary for the PoA in terms of a geographical area within which all CDM programme activities (CPAs) included in the PoA will be implemented?	/P04/	DR	<p>CAR 2</p> <p>a) Define whether the Host Country Nicaragua will be included as part of the PoA. In case please include it in section A.4.1.1.</p> <p>b) Description of the location and boundary for the PoA in terms of a geographical area (e.g., municipality, region within a country, country or several countries), shall be addressed in the PoA as per Procedures for registration of PoAs EB 55 annex 38.</p>	CAR-2	OK

⁶MoV = Means of Verification, DR= Document Review, I= Interview, www = internet search.

1.3 Does the PoA-DD take into consideration the requirement of all applicable national and/or sectoral policies and regulations of each host country within the chosen boundary?	/P04/	DR/I	CAR 3 The host country republic of Nicaragua shall be included in the Description of policies and regulations and General operating and implementing framework of PoA.	CAR 3	OK
1.4 Does the PoA-DD include the description of the policy/measure or stated goal that the PoA seeks to promote?	/P04/	DR	Yes, the Guacamaya Small Scale Hydropower Programme of Activities aims at developing a series of small hydroelectric projects in Honduras, Costa Rica and Nicaragua	OK	OK
1.5 Is there any Confirmation on the PoA-DD that the proposed PoA is a voluntary action by the coordinating/ managing entity?	/P04/	DR	Yes, a confirmation is available on the PoA-DD. However, please refer section 1.1.	CAR 4	OK
1.6 Does the PoA includes a Demonstration that in the absence of the CDM: (a) the proposed voluntary measure would not be implemented, or (b) the mandatory policy/regulation would be systematically not enforced and that noncompliance with those requirements is	/P04/	DR	CAR 4 a) In accordance with Attachment A to Appendix B of the simplified modalities and procedures for small-scale CDM project activities the PP's shall provide explanation to show that the project activity would not have occurred anyway due to at least one of the following barriers: - Investment barrier - Technological barrier - Barrier due to prevailing practice - Other Barriers b) Demonstration on compliance on EB 55 annex 38 paragraph 6 (e) shall be addressed in the PDD	CAR 4	OK

widespread in the country/region, or (c) that the PoA will lead to a greater level of enforcement of the existing mandatory policy /regulation?			c) Guidelines for demonstrating additionality of microscale project activities (EB 60 annex 25) shall be followed. Sections A.4.3, E.5.1 and E.5.2 of the CDM SSC-PoA-DD and SSC CPA shall be corrected by the PPs accordingly.		
1.7 Does the PoA includes a definition of eligibility criteria for inclusion of a project activity as a CPA under the PoA, which shall include criteria for demonstration of additionality, type or any extent of information to ensure its eligibility?	/P04/	DR/I	<p>Yes, A CPA to be included in the Present PoA shall:</p> <ol style="list-style-type: none"> 1. Be a newly installed hydroelectric power plant in Honduras, Nicaragua or Costa Rica. 2. Be a newly built plant and must not involve retrofitting or modifying of an existing facility for renewable energy generation. 3. Have no energy generating equipment which is transferred from another activity and no existing equipment is transferred to another activity; 4. Have an installed capacity of ≥ 15 MW. The technology shall be provided by an experienced provider. 5. Have a plant power density of no less than 4 W/m² (in case hydro power plants with reservoir are included). 6. Connect to the National Electricity Grid of the host country; 7. Not be the result of the CPA implementer seriously considering grid connected electricity generation with a different technology as an alternative to the project. This is supported by a written statement by the project owner. 8. No ODA funds from Annex I countries will be used for the development of the projects. This is supported by a written statement by the project owner. 9. Shall Comply with the latest version of the "Guidelines on Assessment of Debundling for SSC Project Activities". 10. Shall Not seek registration in other emission reduction schemes, or as a stand-alone project under the CDM, or by being included in 	CAR-5 CAR-6 CL-7	OK

			<p>other Programmes of Activities to avoid any possibility of double counting. This item is included and assured through the signature of the ERPA with the carbon credit buyer.</p> <p>11. Shall Demonstrate additionality in line with the requirements of the "Guidelines on the Demonstration of Additionality of Small-Scale Project Activities" or, if applicable, with the "Guidelines for Demonstrating Additionality of Microscale Project Activities". The CME shall use the latest version of these guidelines at the time of the inclusion of the new CPA.</p> <p>If the CPA applies the "Guidelines on the Demonstration of Additionality of Small-Scale Project Activities" to demonstrate additionality an explanation will be provided by the project participants to show that the project activity would not have occurred anyway due to at least one of the following barriers:</p> <p>V) Investment barrier: a financially more viable alternative to the project activity would have led to higher emissions;</p> <p>VI) Technological barrier: a less technologically advanced alternative to the project activity involves lower risks due to the performance uncertainty or low market share of the new technology adopted for the project activity and so would have led to higher emissions;</p> <p>VII) Barrier due to prevailing practice: prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with higher emissions;</p> <p>VIII) Other barriers: without the project activity, for another specific reason identified by the project participant, such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher.</p> <p>If the CPA applies "Guidelines for Demonstrating Additionality of Microscale Project Activities" to demonstrate additionality for project activities up to five megawatts that employ renewable energy technology, the project is considered additional if any one of the</p>		
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		<p>conditions below is satisfied:</p> <p>II) The geographic location of the project activity is in one of the least developed countries or the small island developing States (LDCs/SIDS) or in a special underdeveloped zone (SUZ) of the host country.</p> <p>(i) SUZ is a region in the host country (zone, municipality or any other designated official administrative unit) identified by the Government in official notifications for development assistance including for planning, management, and investment satisfying any one of the following conditions using most recent available data:</p> <ul style="list-style-type: none"> -The proportion of population with income less than USD 2 per day (PPP) in the region is greater than 50%; -The GNI per capita in the country is less than USD 3000 and the population of the region is among the poorest 20% in the poverty ranking of the host country as per the applicable national policies and procedures; <p>(ii) In cases where, based on the recommendation of the designated national authority of the host country, the SUZ in the host country has been approved by Executive Board (hereinafter referred to as the Board) of the clean development mechanism (CDM), the list of such SUZ shall be maintained on the UNFCCC website (e.g. at <http://cdm.unfccc.int/DNA/submissions/index.html>). In the case of these SUZ listed on the CDM website there is no need for the project proponents to provide proofs as indicated in paragraph 2 (a) above.</p> <p>12. The start date of the CPA (purchase of the main equipment) shall not be before commencement of validation of the PoA.</p>		
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			<p>13. Have performed the local stakeholder consultation process before start of inclusion in the programme and must comply with environmental approval requirements of the host country.</p> <p>The CPA shall meet the small-scale or microscale threshold criteria and remain within those thresholds throughout the crediting period of the CPA</p> <p>CL & CAR However, the PP shall clarify or correct the following issues:</p> <p>CAR 5 The PP shall correct the inconsistencies between the eligibility criteria discussed in the PoA and the CPA.</p> <p>CAR 6 Regarding the baseline, please note:</p> <ul style="list-style-type: none"> a) Paragraph 3 regarding whether the plant will involve a retrofitting or modifying of an existing facility for renewable energy generation, shall be defined as per observed during the site visit of the validation team. b) In section E.4, the baseline scenario shall be described as per methodology paragraph 10 <p>CL 7 The PP shall clarify if the paragraph 8 applies in the section of the eligibility criteria, and in case a clarification is required whether the managing entity Anaconda Carbon S.A. or Mabanafit will receive the rights to claim and own emission reductions from the project owner under the Clean Development Mechanism of the UNFCCC. Also Section A.4.4.1 shall be corrected accordingly.</p>		
1.8 Is the starting date and length of the PoA exceeding 28 years? (60 years in case of A/R)	/P04/	DR	No, the length is 28 years.	OK	OK
1.9 a) If the starting date of the project/ programme activities is	/P04/	DR/I	CAR 8 The starting date of the project/programme activities has started before the date of validation, reliable evidence shall be provided to the DOE that the evidence from the CDM	CAR 8	OK

<p>before the date of validation, has sufficient evidence been provided that the incentive from the CDM was seriously considered in the decision to proceed with the programme?</p> <p>b) Has it been checked the confirmation that the start date of any CPA is not, or will not be, prior to the commencement of validation of the programme of activities?</p>			was seriously considered in the decision to proceed with the programme.		
1.10 Is the date stated in the provided evidence consistent with other available evidence (e.g. dates of construction, purchase orders for equipment)?	/P04/	DR	CAR 9 Section E8 of the PoA-DD shall indicate if responsible entity is considered project participants as per guideline indications (EB 41, annex 12)	CAR 9	OK
1.11 Is there any description of operational and management arrangements established by the CME for implementation of the PoA? (Record keeping system, procedures to avoid	/P04/	DR/I	<p>CAR 10 Following information shall be addressed for each CPA and subscribing to the PoA:</p> <p>a) It is not clear who will be the direct responsible of the monitoring by the Implementing and the Coordinating / Managing Entity (data collection, records keeping and backup). There is no reference whether if a crosscheck of the values delivered by each CPA will be performed, and how the ME is assuring that the values delivered are in compliance with the expected results.</p> <p>b) Description stated in the PoA is not consistent with the</p>	CAR 10	OK

double counting, etc) Can this description be considered as complete?			submitted in CPA, this shall be corrected accordingly. c) Calibration frequency shall be established as per national standards and/or should be undertaken as prescribed in the relevant paragraph of General Guidelines to SSC Methodologies. d) Documented procedures to Monitoring data that includes responsibilities, Management, Quality Assurance, Means of Verification of data, data transferring and data trails should be submitted to the audit team.		
1.12 Is there a description of a monitoring plan for a CPA in accordance with the approved monitoring methodology? Can this description be considered as complete?	/P04/	DR	Please refer to section 1.10	CAR 10	OK
1.13 Does the monitoring plan include a description of a proposed statistically sound sampling method and procedure to be used by designated operational entities for verification of GHG emission reductions by CPAs under the programme? or If the programme does not use verification method that applies a statistical method for	/P04/	DR	No, the system is not clearly defined, please refer to section 1.10	CAR 10	OK

sampling, has a system been defined to avoid double counting of CERs, and is the system transparent?					
1.14 Are both stakeholder"s process and environmental analysis level indicated on the PoA-DD?	/P04/	DR	Yes, both stakeholders process and environmental analysis level have been indicated on the PoA-DD.	OK	OK
1.15 Has it been checked that if there is public funding for the programme from Parties in Annex I?, this funding shall not be a diversion of official development assistance.	/P04/	DR	N/A The PoA does not receive public funding.	OK	OK
2. Participation Requirements					
2.1 Which Parties and programme participants are participating in the project?	/P04/	DR/I	Managing entity: Anaconda Carbon S. A. Carbon S.A. and B.V. Mabanafit	OK	OK
2.2 Have all involved Parties provided a valid and complete letter of approval and have all private/public project participants been authorized by an involved Party?	/P04/	DR/I	CAR 11 a) In accordance with the EB annex 38 (Procedures for registration of PoAs), The coordinating /managing entity shall obtain letters of authorization of its coordination of the PoA from each host Party. b) Please submit the LoA of the Annex I Country.	CAR 11	OK
3. Environmental Impacts					

3.1 Has an analysis of the environmental impacts of the programme been sufficiently described?	/P05/	DR/I	CAR 12 The environmental impacts analysis or environmental analysis has been addressed. However, following inconsistencies and corrections shall be addressed in the PoA, Generic CPA and in each CPA: <ul style="list-style-type: none"> a) The installed capacity ranging shall be corrected in each CPA as per observed during the site visit of the validation team. b) As per procedure for completing PoA-DD, project participants of each CPA shall undertake the laws and regulations of the host country. c) Countries Costa Rica and Nicaragua are missing in the in the analysis of the environmental analysis. 	CAR 12	OK
3.2 In case an EIA is required, has the EIA has been approved by local authorities and is the outcome accurately reflected in the PoA-DD?	/P04/	DR	CAR 13 Sources and evidences of the environmental impact assessment shall be provided to the DOE.	CAR 13	OK
3.3 Are those effects properly addressed in the design of the project activity?	/P04/	DR	Please refer to section 3.1 and 3.2	CAR 12 CAR 13	OK
3.4 Does the project comply with environmental legislation in the host country?	/P04/	DR	Please refer to section 3.1 and 3.2	CAR 12 CAR 13	OK
4. Stakeholder Comments					
4.1 Were the stakeholders identified in appropriate and complete manner?	/P04/	DR/I	CAR 14 a) Considering that local stakeholder consultation is done at SSC-CPA level, this has to be described and reflected in the CDM-PoA-	CAR 14	OK

			DD and in each CDM-CPA-DD. b) Please include in the CDM-POA-DD and the CDM-CPA-DD; the means used to invite the stakeholders to the meetings (i.e. letters, news paper announce, etc.)		
4.2 Have appropriate media been used to invite comments by local stakeholders?	/P04/	DR	Please refer to section 4.1	CAR 14	OK
4.3 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?	/P004/	DR/I	Please refer to section 4.1	CAR 14	OK
4.4 Is a summary of the stakeholder comments received provided?	/P04/	DR	Please refer to section 4.1	CAR 14	OK
4.5 Has due account been taken of any stakeholder comments received?	/P04/	DR	Please refer to section 4.1	CAR 14	OK
5. Baseline and Monitoring methodology					
5.1 General requirements					
5.1.1 Does the project/programme apply an approved methodology and the correct version thereof?	/P04/	DR	Yes, the project/programme apply and approved methodology AMS-I.D., version 16 Grid connected renewable electricity generation.	OK	OK
5.2 Applicability of the selected methodology					

5.2.1 Are the applicability criteria in the baseline methodology all fulfilled?	/P04/	DR	CAR 15 a) The applicability criteria stated in section E.2 of the CDM SSC-PoA-DD shall be amended as per methodology AMS I.D. b) Applicability criteria of the used Tools shall be included in the PoA-DD	CAR 15	OK
5.2.2 Do CPAs under the programme qualify as a smallscale CDM project activity as defined in paragraph 6 (c) of decision 17/CP.7 on the modalities and procedures for the CDM?	/P04/	DR	Yes, this PoA comprises one or more small run of river hydropower plants with an installed capacity not exceeding 15 MW.	OK	OK
5.3 Project boundary					
5.3.1 Does the PDD correctly describe the project boundary? Are they clearly defined and in accordance with the methodology?	/P04/	DR	Yes, the Programme of Activities boundary are the Host Countries, for each CPA the project boundary will be the country which it applies. However, CAR 2 and CAR 3 were raised. CAR 2 a) Define whether the Host Country Nicaragua will be included as part of the PoA. In case please include it in section A.4.1.1. b) Description of the location and boundary for the PoA in terms of a geographical area (e.g., municipality, region within a country, country or several countries), shall be addressed in the PoA as per Procedures for registration of PoAs EB 55 annex 38. CAR 3 To comply with paragraph 6 (b) of EB 55 annex 38, please describe in the PoA-PDD how the applicable national and/or sectoral policies and regulations are taken on account for each of the Host Countries included in the project boundary.	CAR 2 CAR 3	OK

5.3.2 Does the PDD correctly indicate and describe the emission sources and sinks of GHG gases that are included in the project boundary?	/P04/	DR / I	<p>Yes, the PoA-DD and real-case CPA-DD correctly indicates the emission sources and sinks of GHG gases. However CAR 6 was reised:</p> <p>CAR 6 Regarding the baseline, please note:</p> <p>a) In the eligibility criteria, section A.4.2.2 of the PoA-DD, paragraph 3 regarding whether the plant will involve a retrofitting or modifying of an existing facility for renewable energy generation, shall be defined as per observed during the site visit of the validation team.</p> <p>b) In section E.4, the baseline scenario shall be described as per methodology paragraph 10</p>	CAR-6	OK
5.3.3 In cases where the methodology allows project participants to choose whether a source or gas is to be included in the project boundary, is the choice explained and justified by PPs?	/P04/	DR / I	Not Applicable	OK	OK
5.3.4 Does the project involve other emissions sources not foreseen by the methodologies that may question the applicability of the methodology? Do these sources contribute with more than 1% of the estimated emission reductions of the project?	/P04/	DR / I	No, the PoA and each CPA will not involve another emission sources that contribute with more than 1% of the estimated emission reductions.	OK	OK
5.4 Baseline identification					
5.4.1 Is the identified baseline scenario plausible?	/P04/	DR	Please refer to section 1.7	CAR-6	OK

5.4.1.1 Has the baseline scenario been determined according to the methodology?	/P04/	DR	Please refer to section 1.7	CAR-6	OK
5.4.1.2 Are all assumptions stated in a transparent and conservative manner?	/P04/	DR	Please refer to section 1.7	CAR-6	OK
5.4.2 Does the baseline scenario sufficiently take into account relevant national and/or sectoral policies, macroeconomic trends and political aspirations?	/P04/	DR	Please refer to section 1.3	CAR-3	OK
5.4.2.1 Is the baseline scenario determination compatible with the available data and all literature and sources clearly referenced?	/P04/	DR	Please refer to section 1.7	CAR-6	OK
5.4.3 Have the major risks to the baseline been identified?	/P04/	DR	Please refer to section 1.7	CAR-6	OK
5.5 Algorithm and/or formulae used to determine emission reductions					
5.5.1 Does the PoA-DD provide a clear and correct way of calculating the emission reductions	/P04/	DR	CAR 16 Inconsistencies figure in the provided PoA: a) As per VVM 01.2 paragraph 89 the steps taken and equations applied to calculate project emissions, baseline emissions, leakage and emission reductions shall comply with the	CAR-16	OK

from each CPA?			<p>requirements of the selected baseline and monitoring methodology.</p> <p>b) As per article 24 of the Procedures for Registration of a PoA as a single CDM project activity and issuance of certified emission reductions for PoA all fixed parametric values, to be used for calculation of emission reductions of a SSC-CPA shall be presented in the section E.6.2 of the CDM SSC-PoA-DD as required.</p> <p>c) The calculation of the tool to calculate the emission factor for an electricity system has to be corrected; all the host countries have to be added in the calculation tool and the PoA-DD. The calculation tool shall be submitted to the DOE</p> <p>d) Sources from the Host Countries to calculate the emission factor for an electricity system shall be addressed in the CDM SSC-PoA-DD.</p> <p>e) Values of Combined Margin of each Host Country shall be included in section E.6.3</p>		
<p>5.5.2 Are all calculations applied and documented according to the selected methodology and in a complete and transparent manner?</p> <p>5.5.2b) Are correct units applied and consistency between parameter dimensions and parameter value ensured?</p>	/P04/	DR	<p>CL 17</p> <p>a) Considering that the current version of the Methodology AMS-I.D version 16 used in the CDM-PoA-DD has a deadline, the update to new version shall be considered by the PP.</p> <p>b) Considering that the current version of the Tool to calculate the emission factor version 02 used in the CDM-PoA-DD has a deadline, the update to new version shall be considered by the PP.</p>	CL 17	OK
5.5.3 In case the methodology allows a	/P04/	DR	Please refer to section 5.5.1 and 5.5.2	CAR 15 CL 16	OK

selection between different options for equations or parameters, has adequate justification been given and have the correct equations and parameters been used, in accordance with the methodology selected?					
5.5.4 In case some data and parameters will not be monitored throughout the crediting period, but have already been determined and fixed, are all data sources, assumptions and calculations correct, applicable to the proposed CDM project activity and conservative?	/P04/	DR	Please refer to section 5.5.1 and 5.5.2	CAR 15 CL 16	OK
5.5.5 Have the major risks and uncertainties, which can influence the emission reduction estimates, been identified and addressed?	/P04/	DR	Please refer to section 5.5.1 and 5.5.2	CAR 15 CL 16	OK
5.6 Leakage					
5.6.1 Has the leakage been identified and calculated according to the approved methodology	/P04/	DR	N/A No energy generating equipment is transferred from another activity to this project and there is no existing equipment to be transferred to another activity.	OK	OK

and in a complete and transparent manner?					
5.6.2 Have conservative assumptions been used when determining the procedure to be used to calculate the leakage emissions? Are uncertainties in the leakage emission estimates properly addressed?	/P04/	DR	N/A	OK	OK
6. Monitoring plan					
6.1 Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring the greenhouse gas emissions within the programme boundary during the crediting period?	/P04/	DR	Please refer to section 1.11	CAR 10	OK
6.2 Are the choices of project GHG indicators reasonable and conservative?	/P04/	DR	Please refer to section 5.5.1 and 5.5.2	CAR 15 CL 16	OK
6.2.1 Is the measurement method clearly stated for each value to be	/P04/	DR	Please refer to section 5.5.1 and 5.5.2	CAR 15 CL 16	OK

monitored and deemed appropriate?					
6.3 Is the measurement equipment for each parameter described and deemed appropriate?	/P04/	DR	Please refer to section 1.11	CAR 10	OK
6.4 Is the measurement accuracy addressed and deemed appropriate?	/P04/	DR	CAR 18 The calibration frequency of the electricity meter shall be addressed in the in the PoA that are to be reported in CDM-SSC-CPA-DD form.	CAR 18	OK
6.5 Are the equipment calibration intervals identified and justified?	/P04/	DR	Please refer to section 1.11	CAR 10	OK
6.6 Are procedures identified for maintenance of monitoring equipment and installations? Are the calibration intervals being observed?	/P04/	DR	Please refer to section 1.11	CAR 10	OK
6.7 Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)?	/P04/	DR	Please refer to section 1.11	CAR 10	OK
6.8 Are the monitoring arrangements described in the monitoring plan feasible	/P04/	DR	Please refer to section 1.11	CAR 10	OK

within the project design?					
6.9 Are the means of implementation of the monitoring plan, including the data management and quality assurance and quality control procedures, sufficient to ensure that the emission reductions achieved by / resulting from the project activity can be reported ex post and verified?	/P04/	DR	Please refer to section 1.11	CAR 10	OK
6.10 Do the PPs make provisions for personnel training needs?	/P04/	DR/I	Yes, Training provisions for the involved personnel has been addressed in the CDM SSC-PoA-DD form.	OK	OK
6.11 Is the authority and responsibility of overall project management clearly described?	/P04/	DR	Please refer to section 1.11	CAR 10	OK
6.12 Are procedures identified for emergency preparedness for cases where emergencies can cause unintended emissions?	/P04/	DR	CAR 19 Procedures identified for emergency preparedness for cases where emergencies can cause unexpected situations shall be addressed in the CDM SSC-PoA-DD form. Also, default values to be applied in case of data missing shall be indicated in the PoA-DD	CAR 19	OK
6.13 Are procedures identified for review of	/P04/	DR	Please refer to section 1.11	CAR 10	OK

reported results/ data?					
6.14 Are procedures identified for corrective actions in order to provide for more accurate future monitoring and reporting?	/P04/	DR	Please refer to section 1.11	CAR 10	OK
7. Monitoring of Sustainable Development					
Indicators/ Environmental Impacts					
7.1 Is the monitoring of sustainable development indicators/ environmental impacts warranted by legislation in the host country?	//	DR	Please refer to section 3.1	CAR 12	OK
7.2 Does the monitoring plan provide for the collection and archiving of relevant data concerning environmental, social and economic impacts?	//	DR	Please refer to section 3.1	CAR 12	OK
7.3 Are the sustainable development indicators in line with stated national priorities in the Host Country?	//	DR	Please refer to section 3.1	CAR 12	OK

Table 2: List of Requests for Corrective Action (CAR) and Clarification (CL)**Validation / Verification Manual**

(35) The DOE shall raise a corrective action request (CAR) if one of the following occurs:

- (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.

(36) The DOE shall raise a clarification request (CL) if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

**The wording of CAR/CL shall clearly address nonconformity or seek clarification,
and avoid instructive / consultative language in order to prevent actual or perceived consultancy.**

No.	CAR/CL		Observation (CAR/CL)	Reference	Summary of project owner response	Validation team conclusion
1.	x		<p style="text-align: center;">CAR 1</p> <p>a) However, evidence that the proposed PoA is a voluntary coordinated action is required (i.e. incentives schemes and voluntary programmes), such information shall be submitted to the DOE accordingly, through the LoA of each Host Country.</p> <p>b) The Modalities of Communication Letter shall be submitted to the DOE</p>	1.1 1.5	<p>Requested documents were delivered.</p> <p><u>Further request from DOE:</u></p> <ul style="list-style-type: none"> a) LoAs are pending to be delivered b) Please note that some parts of the original template are missing. Please see CAR 27 for more details. <p><u>Further request from the PP</u></p> <p>The document was corrected; there is no discrepancy between the MoC and the project documentation.</p>	<p>a) CLOSED, all LoAs were delivered</p> <p>b) CLOSED, MoC was delivered and has consistency with the PoA-DD.</p>

					<p>Further request from DOE:</p> <p>a) OPEN Issue will remain open until the delivery of the LoA from Honduras</p> <p>b) OPEN, details in the telephone and fax numbers are not consistent to the PoA-DD. Discrepancies and errors in the MoC may contribute to incompleteness message.</p> <p>Further request from the PP:</p> <p>The document was corrected; there is no discrepancy between the MoC and the project documentation.</p>	
2.	x		<p>CAR 2</p> <p>c) Define whether the Host Country Nicaragua will be included as part of the PoA. In case please include it in section A.4.1.1.</p> <p>d) Description of the location and boundary for the PoA in terms of a geographical area (e.g., municipality, region within a country, country or several countries), shall be addressed in the PoA as per Procedures for registration of PoAs EB 55 annex 38.</p>	1.2	<p>The project documentation was corrected accordingly. The geographical description of all countries included in the boundary was included</p>	<p>a) All the Host Countries to be included in the PoA are clearly indicated in the PoA-DD, version 6.</p> <p>b) Location of the sites is now more precise indicated in the PoA-DD, version 6</p> <p>This CAR is CLOSED</p>
3.	x		<p>CAR 3</p> <p>To comply with paragraph 6 (b) of EB 55</p>	1.3 5.3.2	<p>Information regarding compliance with national and sectoral policies</p>	<p>PoA-DD declares that national and sectoral policies will be</p>

			annex 38, please describe in the PoA-PDD how the applicable national and/or sectoral policies and regulations are taken on account for each of the Host Countries included in the project boundary.		was included in the PoA-DD.	taken into account at CPA level. This CAR is CLOSED
4.	x		CAR 4 a) In accordance with “Guidelines on the demonstration of additionality of small-scale project activities” (Version 09.0) previous known as Attachment A to Appendix B of the simplified modalities and procedures for small-scale CDM project activities the PP’s shall provide explanation to show that the project activity would not have occurred anyway due to at least one of the following barriers: <ul style="list-style-type: none"> - Investment barrier - Technological barrier - Barrier due to prevailing practice - Other Barriers b) Demonstration on compliance on EB 55 annex 38 paragraph 6 (e) shall be addressed in the PoA-PDD c) Guidelines for demonstrating additionality of microscale project activities (EB 68 annex 26) shall be followed. Sections A.4.3, E.5.1 and E.5.2 of the CDM SSC-PoA-DD and SSC CPA shall be corrected by the PPs accordingly.	1.6	a) No Technological barrier applies for the San Alejo Hydroelectric Project CPA. The technological barrier is included in the PoA-DD in case is applicable in future CPAs. c) The requested chapters have been updated to include the latest version of the latest guidelines.	a) PP confirms that no technological barrier applies for the San Alejo Hydroelectric Project. b) Demonstration of additionality of the PoA as a whole is indicated in the PoA-DD, version 03, and complies with relevant procedure. c) The “Guidelines for demonstrating additionality of microscale project activities” has been updated and reflected in POA-DD. Furthermore changes on the guideline title were updated within POA-DD and Generic CPA, complying with EB70 Annex 5. This CAR is CLOSED

5.	x		CAR 5 The PP shall correct the inconsistencies between the eligibility criteria discussed in the PoA and the Generic and Specific CPA.	1.7	The POA-DD, Generic and specific CPA have been updated to address consistency in eligibility criteria.	Eligibility criteria is consistent between the PoA-DD, Generic and specific CPA. This CAR is CLOSED
6.	x		CAR 6 Regarding the baseline, please note: c) In the eligibility criteria, section A.4.2.2 of the PoA-DD, paragraph 3 regarding whether the plant will involve a retrofitting or modifying of an existing facility for renewable energy generation, shall be defined as per observed during the site visit of the validation team. d) In section E.4, the baseline scenario shall be described as per methodology paragraph 10	1.7 5.3.1 5.3.1.1 5.3.1.2 5.3.2.1 5.3.3		a) Eligibility criteria PoA-DD version 6 is defined and clear. b) The baseline scenario in the PoA-DD, version 6 is consistent with methodology definition. This CAR is CLOSED
7.		x	CL 7 In the eligibility criteria, section A.4.2.2 of the PoA-DD, the PP shall clarify if the paragraph 8 applies in the section of the eligibility criteria, and in case a clarification is required whether the managing entity (ME) Anaconda Carbon S.A. or B. V. Mabanafit will receive the rights to claim and own emission reductions from the project owner under the Clean Development Mechanism of the UNFCCC. Also Section A.4.4.1 shall be corrected accordingly.	1.7	The ERPA is provided to confirm the request.	PP has submitted the ERPA. It declares that Anaconda Carbon and B. V. Mabanafit will be included in the contractual agreement. This CAR is CLOSED
8.	x		CAR 8 The starting date of the project/programme activities has started before the date of validation, reliable evidence shall be	1.9	The contract between Anaconda and the buyer, Mabanafit, is provided to support the starting date of the program.	a) PP has submitted the signed contract between Anaconda and the buyer as evidence for the starting date and it is consistent

			provided to the DOE that the evidence from the CDM was seriously considered in the decision to proceed with the programme.		<p>Further request from DOE:</p> <p>a) The document submitted "DA_Guacamaya_signatures" is not verifiable for the DOE. PP is requested to submit a verifiable version of this document. Furthermore, The date from document "Development Agreement_Manbaft_AC_28Sept2010.doc" has different date from the starting date established in the PoA-DD. PP shall correct as needed.</p> <p>Further response from PP:</p> <p>The date in the PoA_DD has been corrected to be in line with the date of signature of the PoA development contract between the CME and the CER buyer. Furthermore, the contract with the signed pages has been included.</p>	<p>with PoA-DD.</p> <p>b) PP has amended the starting date of the specific CPA and included a timeline of the specific CPA CDM prior consideration.</p> <p>This CAR is CLOSED</p>
9.	x		<p>CAR 9</p> <p>Section E.8 of the PoA-DD shall indicate if responsible entity is considered project participants as per guideline indications (EB 41, annex 12).</p>	1.10	<p>The project documentation was corrected accordingly.</p>	<p>The PoA-DD section E.8 is clearly indicating Anaconda Carbon S. A. as Project Participant.</p> <p>This CAR is CLOSED</p>
10.	x		<p>CAR 10</p> <p>Following information shall be addressed for each CPA and subscribing to the PoA:</p>	<p>1.11</p> <p>1.12</p> <p>1.13</p>	<p>a) The CME has implemented a management manual, which will be used for data</p>	<p>a) PP Clarified that CME implemented a management manual</p>

		<p>a) It is not clear who will be the direct responsible of the monitoring by the Implementing and the Coordinating / Managing Entity (data collection, records keeping and backup). There is no reference whether if a crosscheck of the values delivered by each CPA will be performed, and how the CME is assuring that the values delivered are in compliance with the expected results.</p> <p>b) Description stated in the PoA is not consistent with the submitted in CPA, this shall be corrected accordingly.</p> <p>c) Calibration frequency shall be established as per national standards and/or should be undertaken as prescribed in the relevant paragraph of General Guidelines to SSC Methodologies.</p> <p>d) Documented procedures to Monitoring data that includes responsibilities, Management, Quality Assurance, Means of Verification of data, data transferring and data trails should be submitted to the audit team.</p>	<p>6.1 6.3 6.5-6.9 6.11 6.13 6.14</p>	<p>management of the CPAs under the programme.</p> <p>b) The descriptions were updated and are the same.</p> <p>c) The section in the PoA-DD was corrected; the calibration frequency will be performed as per national standards or CDM requirements, whichever applies first.</p> <p>d) The management plan includes the data management procedures to be applied during verification.</p>	<p>which will be used for data management of the CPAs under the programme.</p> <p>b) Differences regarding the monitoring plan in the PoA-DD and CPA Generic and Specific in sections E.7.2 and B.6.1 respectively were corrected to be consistent.</p> <p>c) The calibration frequency will be performed as per national standards which are established in the "PPA San Alejo. Pdf"</p> <p>d) The document submitted "CME_Operational_Manual_for_Guacamaya.docx" establishes the data management procedure to be applied during the verification complying with EB specifications.</p> <p>This CAR is CLOSED</p>
11.	x	<p>CAR 11</p> <p>a) In accordance with the EB 55 annex 38 (Procedures for registration of PoAs), The coordinating/managing entity shall obtain letters of authorization of its coordination of the PoA from each host Party.</p> <p>b) Please submit the LoA of the Annex I</p>	2.2	<p>The LoAs available were submitted.</p> <p>Further request from DOE:</p> <p>a) LoAs are pending to be delivered</p> <p>b) Also, PP indicated that all the host countries are mentioned in the Netherlands' LoA, however only Nicaragua is mentioned.</p>	<p>Closed, all the LoA were delivered.</p>

			Country.		<p><u>Further response from PP:</u> The LoA from Netherlands were corrected. The Honduran LoA is pending. Nicaragua and Costa Rica are available and provided to the DOE.</p> <p><u>Further request from DOE:</u> a) OPEN. Issue will remain open until the delivery of the LoA from Honduras. b) OPEN, the Host Country Guatemala is included in the LoA from Annex I Country. This is not consistent to section A.4.1.1 of the PoA-DD. Discrepancies and errors may contribute to incompleteness message</p> <p><u>Further response from PP:</u> The LoA from Netherlands was corrected.</p> <p><u>Further request from DOE:</u> a) OPEN. Issue will remain open until the delivery of the LoA from Honduras. b) CLOSED. The LoA of Netherlands is correct.</p>	
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12.	x		<p>CAR 12</p> <p>The environmental impacts analysis or environmental analysis has been addressed. However, following inconsistencies and corrections shall be addressed in the PoA, Generic CPA and in each CPA:</p> <p>a) The installed capacity ranging shall be corrected in each CPA as per observed during the site visit of the validation team.</p> <p>b) As per procedure for completing PoA-DD, project participants of each CPA shall undertake the laws and regulations of the host country.</p> <p>c) Countries Costa Rica and Nicaragua are missing in the in the analysis of the environmental analysis.</p>	<p>3.1 3.3 3.4 7.1- 7.3</p>	<p>c) The relevant text has been added to the PDD.</p> <p>Further request from DOE:</p> <p>Please include Nicaragua in the environmental analysis of Generic CPA. Also indicate the country and authority in order to be easily identifiable.</p> <p>Further response from PP:</p> <p>The Generic CPA has been revised to include the Nicaragua Environmental Impact Assessment procedures and relevant authority</p>	<p>a) PP has corrected the installed capacity in CPA "San Alejo Hydroelectric Project" as per on site observations</p> <p>b) Project Participant has undertaken the laws and regulations of the host country in the PoA-DD, as well in the CPA.</p> <p>c) Costa Rica and Nicaragua's environmental analysis were included in the PoA DD and Generic CPA.</p> <p>This CAR is CLOSED</p>
13.	x		<p>CAR 13</p> <p>Sources and evidences of the environmental impact assessment shall be provided to the DOE.</p>	<p>3.2 3.3 3.4</p>	<p>"As per decree 70-2007, projects with an installed capacity ranging 0-3 MW require an environmental authorization[...]", cited from the GM-CPA San Alejo Section C.3. No DAC is required and therefore none was performed.</p> <p>The required environmental authorizations are provided as "10. Lic ambiental San Alejo 1.pdf" and "10a. Lic ambiental San Alejo 2.pdf".</p>	<p>The decree 70-2007 "<i>Ley de promoción a la generación de energía eléctrica con recursos renovables article 34</i>" which establishes that project activities with an installed capacity below 3 MW require environmental authorizations was verified and the required environmental authorizations were provided to the DOE.</p> <p>This CAR is CLOSED</p>
14.	x		<p>CAR 14</p> <p>a) Considering that local stakeholder</p>	<p>4.1 4.2</p>	<p>a) Changes are done.</p> <p>b)</p>	<p>a) The PoA-DD, version 6 and the San Alejo CPA reflect changes in the stakeholder</p>

			<p>consultation is done at SSC-CPA level, this has to be described and reflected in the CDM-PoA-DD and in each CDM-CPA-DD.</p> <p>b) Please include in the CDM-CPA-DD; the means used to invite the stakeholders to the meetings (i.e. letters, news paper announce, etc.)</p>	<p>4.3</p> <p>4.4</p> <p>4.5</p> <p>3.</p>	<p>i) No stakeholder consultation events were held during this period; however, the established channels of communication with the community remained open and active.</p> <p>ii) The consultation process began when the attempts at launching the project began in earnest. Difficulties in access to financing (as discussed in additionality argument) delayed the execution of the project.</p> <p>iii) A copy of the invitation is provided as "11. Invitación a consulta publica.pdf", the approval signatures are provided in the document "12. Entrega tarjetas de invitacion a Consulta Publica.pdf". A copy of the invitation was included in the PDD for clarification.</p> <p>iv) The assistance record is provided in document "13. Listado de Asistencia a Consulta Publica.pdf"</p>	<p>process.</p> <p>b) PP has submitted to the DOE documental evidence of the means used to invite the stakeholders to the meetings and has clarified the early start of consultation process.</p> <p>This CAR is CLOSED</p>
15.	x		<p>CAR 15</p> <p>a) The applicability criteria stated in section E.2 of the CDM SSC-PoA-DD shall be amended as per methodology AMS I.D.</p>	<p>5.2</p> <p>5.5.3</p> <p>5.5.4</p> <p>5.5.5</p> <p>6.2</p>	<p>The applicability criteria was corrected in the project documentation accordingly</p>	<p>a) Applicability criteria of the methodology is completely and correctly followed</p> <p>b) The used tool applicability is correctly addressed and</p>

			b) Applicability criteria of the used Tools shall be included in the PoA-DD	6.2.1		complied. This CAR is CLOSED
16.	x		<p>CAR 16</p> <p>Inconsistencies figure in the provided PoA:</p> <p>a) As per VVM 01.2 paragraph 89 the steps taken and equations applied to calculate project emissions, baseline emissions, leakage and emission reductions shall comply with the requirements of the selected baseline and monitoring methodology.</p> <p>b) As per article 24 of the Procedures for Registration of a PoA as a single CDM project activity and issuance of certified emission reductions for PoA all fixed parametric values, to be used for calculation of emission reductions of a SSC-CPA shall be presented in the section E.6.2 of the CDM SSC-PoA-DD as required.</p> <p>c) The calculation of the tool to calculate the emission factor for an electricity system has to be corrected; all the host countries have to be added in the calculation tool and the PoA-DD. The calculation tool shall be submitted to the DOE</p> <p>d) Sources from the Host Countries to calculate the emission factor for an electricity system shall be addressed in the CDM SSC-PoA-DD.</p> <p>e) Values of Combined Margin of each Host Country shall be included in section E.6.3</p>	<p>5.5.1</p> <p>5.5.3</p> <p>5.5.4</p> <p>5.5.5</p> <p>6.2</p> <p>6.2.1</p>	<p>c) All EF calculations have been included in the PoA DD. The EF have been calculated using the latest available information provided by the national DNAs and with the latest "tool to calculate the emission factor from an electricity system"</p> <p>d) The sources of information were included whenever possible in the PoA-DD or are included in the EF calculation sheets.</p> <p>Further request from the DOE:</p> <p>PP has submitted the Emission Factor calculation for each Host Country. The chosen vintage data is ex-ante. Also, PP presented the EF in Honduras based on the latest version of the tool. However, PP is requested to submit to the DOE the website link or print screen where data from operating & building margin were obtained and calculate the average of Operating Margin emission factor as indicated in the tool, the same should be publicly available.</p>	<p>a) CLOSED Changes addressed in the PoA-DD</p> <p>b) CLOSED Changes addressed in the PoA-DD</p> <p>c) CLOSED PP has corrected the emission factor calculation and the emission factors for each country have been addressed in the PoA DD.</p> <p>d) CLOSED Data sources were included in the POA-DD whenever was possible. The rest was included in EF calculation sheets</p> <p>e) CLOSED Changes addressed in the PoA-DD PP has corrected all the requested inconsistencies in the PoA-DD.</p> <p>This CAR is CLOSED</p>

					<p>Further response from PP:</p> <p>The link where the information has been taken on is:</p> <p>http://www.ahpper.org/Documentos_desc/EF_Honduras.pdf</p> <p>The EF has been calculated by a consulting company, after request of the SERNA. The complete report is also submitted for the DOE for assessment. The average OM emission factor can be seen in the cell C66, Sheet Step 4, which is the average of the OM 06-08.</p>	
17.		x	<p>CL 17</p> <p>a) Considering that the current version of the Methodology AMS-I.D version 16 used in the CDM-PoA-DD has a deadline, the update to new version shall be considered by the PP.</p> <p>b) Considering that the current version of the Tool to calculate the emission factor version 02 used in the CDM-PoA-DD has a deadline, the update to new version shall be considered by the PP.</p>	5.5.2	<p>b) The "tool to Calculate the emission factor for an electricity system was updated to the latest available version".</p>	<p>a) CLOSED</p> <p>Methodology version has changed to the most recent one</p> <p>b) CLOSED</p> <p>PP has updated the tool to the latest available version</p> <p>This CAR is CLOSED</p>
18.	x		<p>CAR 18</p> <p>The calibration frequency of the electricity meter shall be addressed in the in the PoA that are to be reported in CDM-SSC-CPA-DD form.</p>	6.4	<p>The calibration frequency in the Monitoring Plan section of the Generic and Specific CPA has been updated to include references consistent with the PoA-DD.</p> <p>Supporting documentation is provided in "21. Clausula 16ta -</p>	<p>PP has established calibration frequency according to the local authorities in the PPA "PPA San Alejo.pdf", which has been provided to the DOE. Therefore,</p> <p>This CAR is CLOSED</p>

					PPA San Alejo (calibracion).pdf"	
19.	x		CAR 19 Procedures identified for emergency preparedness for cases where emergencies can cause unexpected situations shall be addressed in the CDM SSC-PoA-DD form. Also, default values to be applied in case of data missing shall be indicated in the PoA-DD	6.12	Data management is covered by the management plan that has been developed by the CME. NO default values will be used in case of data loss to assure conservativeness. Further request from DOE: PP has clarified that NO default values will be used in case of data loss. Also, he has submitted "CME_Operational_Manual_for_Guacamaya.docx" where establishes the procedures for data management. However, procedures for emergency preparedness were not identified in this document. Further response from PP: The document has been updated to include the emergency procedures requested. The changes have been done in section 09.	PP has addressed in the PoA-PDD that internal procedure will be followed in case emergencies could cause unexpected situations. The internal procedure with file name "CME_Operational_Manual_for_Guacamaya v2.docx" has been submitted to the DOE. This CAR is CLOSED
20.	x		CAR 20 Please provide to the DOE the following documents regarding San Alejo project: a) Feasibility Study 2009		The requested documents are attached to this response. Further request from DOE: PP has submitted the requested	PP has submitted the requested documents. This CAR is CLOSED

			<p>b) Implementation timeline</p> <p>c) EPC proposals (3)</p> <p>d) MoU 2008</p> <p>e) Project drawings and maps</p> <p>f) PPA June 2010 (pages 1,2 and 17)</p> <p>g) La Gaceta pages 1 and 411 (in which the PPA is published)</p> <p>h) ERPA</p> <p>i) Contract ceding the rights of CERs or Project owner declaration (paragraph 8 of the eligibility criteria in the specific CPA)</p> <p>j) Calculation of Emission Reduction spread sheet</p> <p>k) E+Co internal term sheet</p> <p>l) Manufacturer's specifications in order to determine project operational lifetime</p> <p>m) Evidence of the Plant Load Factor determination</p>	<p>documents from a) to k)</p> <ul style="list-style-type: none"> • There is a difference in the annual electricity generation in the "Cuerpo studio fact San alejo.pdf" and the one declared in the specific CPA. • Please submit manufacturer's specifications of the technology selected. • Please submit evidence of the Plant Load factor (PLF). <p>Further response from PP:</p> <ul style="list-style-type: none"> • The San Alejo CPA has been corrected to reflect the same value as the feasibility study. • The PO has not finalized his decision regarding turbine manufacturer, there are therefore no manufacturer specifications available. However, the equipment selection will be in accordance with the feasibility study; that is to say one, dual-stream, turbine design unit of around 2.2 MW installed capacity. • The document "Memoria Técnica San Alejo" includes the technology and generation expectation. The document was prepared by a third party consulting company. 	
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21.			<p style="text-align: center;">CAR 21</p> <p>In the San Alejo CPA, please:</p> <ul style="list-style-type: none"> a) use decimal point for GPS coordinates b) Correct starting date of small-scale CPA in section A.4.2.1 c) The starting date of the crediting period in section A.4.3.1 is not clear d) Assess debundling according to EB54, annex 13 e) Define boundary of the project as per methodology paragraph 9 f) Revise EFgrid,CM,y parameter in section B.5.1 against PoA-DD g) Show chronogram of the project CDM consideration h) Table 10 is not correct. i) Specify parameter to be monitored and characteristics. Specify how the measures, records and cross-check will be done. 	<p style="text-align: center;">3.1.1</p>	<ul style="list-style-type: none"> a) The decimal point has been used. b) The starting date has been corrected. c) The starting date of the crediting period has been clarified. d) Debundling has been corrected in line with the requirements. e) The boundary definition has been clarified in section B.4. f) The EF calculation was corrected throughout the documentation. g) A prior consideration timeline has been included. h) Table 10 has been updated. i) The documents have been updated, the monitoring chapters have been updated accordingly. <p>Further requests from DOE:</p> <p>PP has made the requested changes to the specific CPA. However</p> <p>Point e) related to project boundary refers to "wind turbines". PP is requested to correct as needed</p> <p>Regarding point g), the timeline includes future dates which cannot be considered as previous consideration of the CDM. PP is</p>	<p>In the San Alejo CPA, the requested corrections from a) to i) were done.</p> <p>This CAR is CLOSED</p>
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					<p>requested to correct as needed.</p> <p>Format date in section A.4.3.1 in specific date is not consistent with Generic CPA.PP is requested to correct as needed</p> <p><u>Further response from PP:</u></p> <p>The reference to "wind turbines" has been removed, the Prior Consideration Timeline table has been updated to reflect only previous consideration items and the Specific CPA has been aligned with the Generic CPA as it relates to section 4.3.1</p>	
22.	X		<p>CAR 22</p> <p>Area of the reservoir:</p> <p>All the CPAs included in the PoA in future are run-of-river project without reservoir?</p> <p>Please include the analysis of the area, power density, etc. in PoA-DD, Generic CPA and specific CPA (the parameter of area shall be included in the CER calculation part or the monitoring part of PoA-DD, CPA-DD, etc.)</p>	PoA-DD p.2	<p>Run-of-the-river power plants by definition do not have a reservoir making it impossible to calculate power density (area of the reservoir equals 0). The PoA will include run-of-the-river power plants, no reservoir will be build to operate the projects.</p> <p><u>Further request from DOE:</u></p> <p>The PoA DD established a power density of no less than 4 W/m² as part of the eligibility criteria. PP shall include in the San Alejo CPA how the power density value was obtained and if the criterion is fulfilled.</p> <p>Furthermore, please assess each</p>	<p>The PoA-DD version 6 now establish as eligibility criterion that: <i>"Have a plant power density of no less than 4 W/m2; (in case hydro power plants with reservoir are included)"</i></p> <p>CLOSED</p> <p>San Alejo CPA-DD assessed each of the eligibility criteria in a tubular way on section B.2 an all the observations were addressed in the CPA-DD.</p> <p>CLOSED</p>

					<p>one of the eligibility criteria for San Alejo CPA in a tabular form.</p> <p><u>Further request from the PP:</u></p> <p>The documents were updated to clarify the applicability criteria and the surface area.</p>	
23.	X		<p>CAR 23</p> <p>De-bundling (sub-projects of the CPA or the CPA) and double counting:</p> <p>Please assess the non-double counting and de-bundling for the CPAs in the PoA according to the implementation and monitoring plan</p>	CPA-DD p.6	<p>The CPA and PoA DDs were corrected to include the missing information.</p> <p><u>Further request from the DOE:</u></p> <p>In the PoA-DD the debundling is mentioned as eligibility criterion, however assessment is not included any document as per "GUIDELINES ON ASSESSMENT OF DE-BUNDLING FOR SSC PROJECT ACTIVITIES".</p> <p>Please include for San Alejo how does paragraph 2 of the mentioned guideline is fulfilled.</p> <p>Furthermore, how the CME will ensure a non-double counting of each CPA. Asses for San Alejo.</p> <p><u>Further response from PP:</u></p> <p>Further information in line with the requirements of the de-bundling guidelines was included in the</p>	<p>San Alejo CPA-DD version 6 included in Section A.4.6 an explanation to confirm that the proposed small-scale CPA is not a de-bundled componet taking into account the "GUIDELINES ON ASSESSMENT OF DE-BUNDLING FOR SSC PROJECT ACTIVITIES".</p> <p>This CAR is CLOSED.</p>

					documentation.	
24.	X		CAR 24 Please explain the status of the utilization of the hydropower in the 4 countries in the baseline with evidence for the baseline scenario. The barrier of small hydro projects can be indicated in this part as an optional.	PoA-DD p.5	Guatemala has been deleted from the boundary, due to the problems to obtain LoA in the mentioned country. Utilization of Hydro in the other countries were included in the PoA DD.	Status of the utilization of the hydropower in the Host Countries is included in the PoA-DD section A.4.3. This CAR is CLOSED
25.	X		CAR 25 Please include the technical description with the key technical parameters in A.4. of CPA-DD, i.e. turbine and generator features, among others.	CPA-DD p.2	Further information on the key equipment was installed, based on the information of the document "Memoria Técnica San Alejo". The equipment has not been purchased yet, therefore the latest information provided by the consultant. Further request from DOE: The technical information is insufficient, the PP shall include all the specification of the generator as this element defined the install capacity of the plants and to be in line with the " <i>General guidelines for SSC CDM methodologies</i> " which stated that " <i>The rated/installed capacity for renewable electricity generating units that involve turbine-generator systems shall be based on the installed/rated capacity of generator.</i> "	The San Alejo CPA-DD stated the correct install capacity of the equipment at sections A.2 and A.4. <u>This CAR is CLOSED</u>

					<p>Please also see comments in the PoA-DD and in the San Alejo CPA</p> <p>Further response from PP:</p> <p>The description has been updated to be in line with the requirements. Further information on the installed capacity of the turbine and generator were clarified in the CPA-DD.</p>	
26.	x		<p>CAR 26</p> <p>Please check the guideline adaption request in the latest EB meetings. The effect date shall be checked.</p>	PoA guidelines	<p>The project documentation was updated; the latest applicable guidelines were applied.</p> <p>Further request from DOE:</p> <p>Para 74 of EB65: PoA-related PDDs uploaded for registration after 25 July 2012 must use the new PoA standard.</p> <p>Also, PP shall apply Project Standard – Section XI: Specific design requirements for program of activities and the Validation and Verification Standard – Section VIII / D: Specific validation requirements for Programme of activities/Component project activities</p> <p>Further response from PP:</p> <p>Changes on the applicability criteria were done to comply with the requirements of the mentioned standard.</p>	<p>The PoA-DD version 6 is accordingly to the Project Standard – Section XI and established a more clear eligibility criteria considering Section VIII of VVS</p> <p>This CAR is CLOSED.</p>

27.	X	<p>CAR 27 Regarding the MoC: a) Please corroborate if the used template is the latest version available for VVM. b) Please revise the annex1 according to MoC p.5. c) Please delete the middle name of the represented person of the PO, check the address, and the phone number; d) Mr. Giles didn't signed section 03: Statement on agreement e) The represented person of the buyer, the phone number, etc. The template should not be modified, sections in blank should remain the same</p>	<p>PoA-DD p.24/ MoC</p>	<p>The latest version of the MoC, attached to the response, comply with the corrections required.</p> <p><u>Further request from DOE:</u> a) The latest version of the template was used. However some sections are missing and other details were observed and they are described below. b) Still there are difference between Annex 1 of PoA-DD and MoC p.5 c) There is no consistency between address of Anaconda Carbon in Annex I and the MoC. Middle name still appears d) Ok, MoC updated e) The MoC is not filled correctly f) Annex 2 is missing</p> <p><u>Further response from PP:</u> The latest version of the MoC is attached; the information is completely in line with the PoA-DD.</p> <p><u>Further request from DOE:</u> There are minor inconsistencies between the MoC and the PoA-DD in the phone and fax numbers please see comments in the PoA-DD</p>	<p>All the inconsistencies between PoA-DD and MoC were addressed by PP and both documents contain the same information.</p> <p><u>This CAR is CLOSED.</u></p>
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					Further response from PP: The PoA-DD has been corrected to be completely in line with the MoC.	
28.	X		CAR 28 Please indicate the central point of GPS coordinate of the PoA project with 4 decimals in A.4.1.2. for each country A set of map shall be indicated in A.4.1.2 for the project physical/geographical boundary.	PoA-DD p.4	The PoA DD has been modified to include a list of coordinates for the geographic center point of each country included in the boundary. Further request from DOE: The PP shall use a Cartesian coordinates with four decimals. Further response from PP: The coordinates were corrected as per the request of the DOE.	The PoA-DD on page 4 indicated the geographical center of the countries included in the boundary in the Cartesian coordinates with four decimals. This CAR is CLOSED
29.	X		CAR 29 a) Please check the PoA guideline (EB63 annex3 paragraph 13 and EB 63 annex2 or their updating version) and methodology. All the eligibility/applicability criteria shall be included in the analysis of A.4.2.2., the link to E.2 shall be indicated understandably.	PoA-DD p.4	a) The eligibility criteria were updated to comply with the requirements of EB63 Annex 2 and 3. b) Clarification was included. Further request from DOE: a) Para 74 of EB65: PoA-related PDDs uploaded for registration after 25 July 2012 must use the new PoA standard. Also, PP shall apply Project Standard – Section XI: Specific design requirements for program of activities and the Validation and Verification Standard – Section VIII	The last version of PoA-DD version 6 included all the observations related with the eligibility criteria and now they are more clear. Also, in the San Alejo CPA-DD took into account the observations regarding the eligibility criteria and it is clear that this first CPA complies with the eligibility criteria established in the PoA-DD. This CAR is CLOSED

				<p>/ D: Specific validation requirements for Programme of activities/Component project activities</p> <p>Please ensure compliance with the following:</p> <p>EB63 Annex 3 = EB70 Annex 5: <i>Standard for development of eligibility criteria for the inclusion of project activity as a CPA under PoA.</i></p> <p>EB63 Annex 2: <i>Standard for demonstration of additionality of GHG Emission Reduction achieved by a PoA</i></p> <p>b) The latest version of the PoA-DD version 5 states in section A.4.2.2 that: "A CPA may however involve the addition of renewable energy generation capacity to existing units. The units added by the project should be equal or lower than 15 MW and should be physically distinct from the existing units" Therefore option b) shall be mentioned in section E.2 but it still is missing.</p> <p>Eligibility criteria shall be consistent to methodology applicability.</p> <p>Please see comments on PoA-DD and San Alejo CPA.</p>	
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					<p>Further response from the PP:</p> <p>a) The eligibility criteria was updated in line with the requirements. The sampling is not applicable, as it mentioned in section E.7.2 that all CPAs will be verified without the application of sampling.</p> <p>b) The applicability was updated to comply with the methodology.</p>	
30.			<p>CAR 30</p> <p>a) The starting date of PoA shall be a future date or the registered date (not the contract/agreement date for the program, this milestone can be included in the timeline. GSP is another key date for the PoA, please notice this.). It is the starting date of the crediting period of the PoA. Please revise accordingly.</p> <p>b) The starting date of the crediting date of the 1st CPA is the PoA registered date or a later date (as your indication, because the project was not start construction in Jun. 2012., and as the project may be not implementation, when the PoA registered). It is not applicable the inclusion. You can indicate the starting date of the crediting period in the same day of the PoA. Please</p>	PoA-DD/ CPA-DD	<p>a) The starting date of the PoA has been corrected accordingly following the request. The date was updated to 01/12/2012. The start date of the GSP of the PoA was included in the CPA DD.</p> <p>b) The starting date of the CPA was corrected.</p> <p>c) The dates were corrected accordingly.</p> <p>d) The Project is still trying to get financial support; therefore the Project has not started yet. New expectation was included in the CPA DD.</p> <p>Further request from DOE:</p> <p>a) The starting date of the PoA-DD shall be corrected to a more</p>	<p>In PoA-DD start date of PoA was established as 13/04/2011 the date when PoA-DD was published for first time for GSP. For the San Alejo CPA, the start date was established as 1/12/2013 the expected date of purchasing the turbine, this is in line with the CDM Project Standard (Version 2.0) EB70 Annex 2 paragraph 162, which stated that:</p> <p><i>"162. The coordinating /managing entity shall confirm that the start date of any proposed CPA is on or after the start date of the PoA"</i></p> <p>This CAR is CLOSED.</p>

			<p>check and do the self-study for the starting date in PoA.</p> <p>c) Please update the starting date of the estimated crediting period to a suitable date.</p> <p>d) Please provide evidence of the starting date of San Alejo CPA.</p>		<p>realistic date.</p> <p>b) The PP stated a more realistic starting date for the San Alejo CPA, please provide implementation timeline</p> <p>c) Please ensure consistency to the implementation timeline.</p> <p>d) Implementation timeline is requested.</p> <p><u>Further response from PP:</u></p> <p>a) A new time schedule was provided by the PP and is supplied to the DOE.</p> <p>b) The dates were updated.</p> <p>c) The dates were updated.</p> <p>d) Implementation timeline is provided to the DOE.</p> <p><u>Further request from DOE:</u></p> <p>The starting date of the PoA-DD was established as 1st December 2012 as expected registration of the PoA, however it is not realistic. For San Alejo CPA in the timeline provided it seems that the starting date is also 1st December 2012, date is not consistent to the delivered evidence of the timeline.</p> <p><u>Further response from PP:</u></p>	
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					<p>Both dates were corrected; the date of registration of the PoA was changed to 15/12/012, which can be expected also as the date of submission of the documents to the UNFCCC.</p> <p>The starting date of the CPA was updated to 01/12/2012</p> <p>Further request from DOE:</p> <p>On EB70 has been updated the Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities and the CDM Project Standard. PP shall correct the starting date accordingly.</p> <p>Further response from PP:</p> <p>The PoA-DD, Generic CPA-DD and San Alejo CPA-DD have been updated according to EB70</p>	
31.	x		<p>CAR 31</p> <p>Please indicate law documents of the legally required of the environmental impact assessment, please include sources of reference.</p>	PoA-DD p.7	<p>More specific references have been included in the San Alejo CPA. Reference document also provided.</p> <p>Further minor request from DOE:</p> <p>In San Alejo CPA page 19 Section D.2, PP made a reference to</p>	<p>The Decree 70-2007 established at page 12 the following Project distinguish criteria with their environment requirement:</p> <p>Projects with an installed capacity ranging 0-3 MW require an environmental authorization; those above 3</p>

					<p>Decree 70-2007 web page, but in the text it is mentioned as Decree 07-2007, this shall be revised, also please include license date and reference number</p> <p>Further response from PP: The described chapters were corrected. OK, DONE at Section D.2 page 21</p>	<p>MW but below 15 MW require a complete Qualitative Environmental Diagnostic and; those above 15 MW require a full Environmental Impact Assessment.</p> <p>This is mentioned in San Alejo CPA-DD.</p> <p>This CAR is CLOSED</p>
32.	X		<p>CAR 32 The stakeholder comments in the PoA level was done or not? Please check the mark after the sentence</p>	PoA-DD p.11	<p>The mark was revised and corrected accordingly. The local stakeholder consultation will be done at CPA level, but there were presentations performed at PoA level also. But in order to be sure all neighbors are consulted, the LSC will be done at CPA Level</p>	<p>The last version of PoA DD included the mark at Local stakeholder consultation is done at SSC-CPA level.</p> <p>This CAR is CLOSED.</p>
33.	X		<p>CAR 33 Please indicate the baseline scenario in E.4: the EF_{CM}. Etc.</p>	PoA-DD p. 11	<p>Further information was included to describe the baseline of the program.</p> <p>Further request from DOE: Even that PP updated this section and all related with the baseline scenario, it is not clear how was calculated the OM for Honduras and Nicaragua. PP shall be more clear in the explanation of how was calculated the OM, BM and the EF_{CM} for all the countries that are considered in the PoA-DD.</p>	<p>The PoA – DD version 6 describe more in detail the assumptions to calculate the OM in the different countries that are include in the boundary and stated clearly the procedure that was followed according to the <i>“Tool to calculate the emission factor for an electricity system version 2.2.1”</i>.</p> <p>This CAR is CLOSED.</p>

					Further response from PP: Further information on the OM method was included; also the BM calculations were explained with more detail.	
34.	X		CAR 34 Regarding additionality assessment: a) Please check the guideline referred in approach 2 is the newest or not. If not, please updating according to the newest and clearly indicate the version of the guideline. b) How a CPA's additionality will be analyzed according to approach 2? each of the barrier analysis indicated in PoA-DD (E5.1, 5.2)/generic CPA-DD is too summary. How the CPA was analyzed in its additionality according to different barriers? Each of the barrier analysis was chosen freely? The template/genetic CPA can work in the additionality part? Please delineate the approach 2 understandable And, why the real CPA1 did not use approach 1 (less than 5 MW), but use approach 2? Anyway, the financial barrier analysis of the CPA1 shall be	PoA-DD p.11, 12	a) Guidelines used are up to date. b) The POA DD Section E 5.1.5.2 has been updated and expanded to clarify Approach 2. The San Alejo CPA (CPA 1) used Approach 2 instead of Approach 1 because it was determined this was the most conservative method to demonstrate additionality given the definitions and guidelines available at the time, especially as they relate to documentation required to demonstrate that the selected geographic area meets the poverty requirements established for Approach 1. These standards have since been relaxed, but Approach 2 remains the most conservative and documented approach to establish additionality for this project. Further request from DOE:	Additionality assessment is complete in the PDD This CAR is CLOSED.

			<p>further assessed, please provide all the economic evidence.</p>	<p>a) As the Project Standard should be used since 25 July 2012 for validation of PoA; now PP shall use Guidelines on the demonstration of additionality of small-scale project activities version 9 of EB68 annex27. <i>Previously known as Attachment A of Appendix B to simplified modalities and procedures of small scale CDM project activities.</i> Also, the "GUIDELINES FOR DEMONSTRATING ADDITIONALITY OF MICROSCALE PROJECT ACTIVITIES" (Version 04.0) EB 68 Annex 26, shall be used.</p> <p>b) For San Alejo CPA, please be more specific on the followed approach and include its justification. Also please refer to commentaries in the San Alejo CPA.</p> <p>The additionality analysis needs to be assessed with more detail.</p> <p><u>Further response from PP:</u></p> <p>a) The rules on additioanlity have been applied in the document.</p> <p>b) The additionality of San</p>	
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				<p>Alejo has been updated to be more specific.</p> <p><u>Further request from DOE 2:</u></p> <p>Terms of the financial proposal shall be described in more detail according to the Financing Terms from E+Co. The Terms of the financing in the delivered evidences are robust and clear and this terms are not reflected in the additionality assessment of San Alejo CPA.</p> <p><u>Further response from PP (2):</u></p> <p>The terms description was updated in the CPA-DD.</p> <p><u>Further request from DOE (3):</u></p> <p>a) There are few minors errors in the PoA-DD regarding the version number of the Guideline, this shall revised.</p> <p>b) The description of financial barriers of San Alejo CPA still need to be described with more detail.</p> <p><u>Further responses from PP (3):</u></p> <p>The minors errors were addressed and the San Alejo CPA-DD revised.</p>	
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35.	X		CAR 35 Regarding the EF calculation: a) Please include all the non-monitored parameters in E.6.3 according to the request of the EF tool. b) Please confirm that the Emission Factors were calculated with the most updated data available at the moment of the validation commencement. Please confirm for each Host Country	PoA-DD p.21 / EF sheet	<p>a- The parameters were included in line with the tool.</p> <p>b- The confirmation was included for each of the countries included in the boundary.</p> <p>Further request from DOE:</p> <p>a) Parameters are included in section E.6.3 However, in the PoA DD is not clear if simple OM will be use for Nicaragua and Honduras, this shall be revised by PP.</p> <p>b) Ok, The PP used the most updated data available at the moment of start the validation</p> <p>Further response from PP:</p> <p>a) The PoA DD was updated to clarify the calculation method of the OM.</p>	<p>Section E.6.1 on the latest version of PoA-DD version 7 is explained with more detail for each country and it is clear which method was chosen to make the calculation of the OM, BM and EF.</p> <p>This CAR is CLOSED.</p>
36.	X		CAR 36 Generic and Specific CPA: Please update the non-monitoring parameters according to CAR above. Please indicate the monitored parameters according to the DD's template. The meters location of the CPA shall be indicated.	Generic and Specific CPA-DD	<p>The CPA DD was updated to include all parameters available at validation.</p> <p>The template of the DD was corrected to comply with the form.</p> <p>Further information on the meter was included.</p>	<p>The Generic and Specific CPA-DD contains and indicates the non-monitoring and monitored parameters as per the DD's template.</p> <p>For San Alejo CPA, the location of the meters is indicated in the CPA-DD.</p> <p>This CAR is CLOSED.</p>

				<p><u>Further request from DOE:</u></p> <p>The updated specific CPA-DD, San Alejo CPA, contained the same parameters as the PoA-DD in section B.6.1</p> <p>The latest version of San Alejo CPA DD follows the DD's template and includes all the monitored parameters.</p> <p>The meters location and specifications are indicated in the generic and San Alejo CPA-DD and for each CPA they will be filled.</p> <p>However, the updated generic CPA-DD did not include all the parameters as PoA-DD in the monitoring plan. Even that the generic CPA-DD follows the DD's some monitored parameters are missing.</p> <p><u>Further response from PP:</u></p> <p>The generic CPA DD has been updated following the requirements.</p> <p><u>Further request from DOE:</u></p> <p>Tables with data and parameters fixed ex-ante and to be monitored</p>	
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					<p>in the generic CPA-DD still are missing in section B.5, please update as per the PoA-DD.</p> <p>Further response from PP:</p> <p>The generic CPA-DD was corrected to include the dates</p>	
37.	X		<p>CAR 37 Regarding the delivered LoAs: a) The LoA from the Netherlands is including only Honduras as Host Country. b) Please submit to the DOE the communication between Nicaragua DNA and the PP in order to obtain the LoA, i.e. e-mail showing Letter delivery is available.</p>		<p>The LoA from Netherlands was corrected to include all countries of the boundary.</p> <p>The communication to obtain the LoA of Nicaragua is provided to the DOE.</p> <p>Further request from DOE:</p> <p>a) The LoA submitted to the DOE from PP still only mentioned Honduras.</p> <p>b) CLOSED, the e-mail communication from DNA of Nicaragua was provided as evidence from PP to DOE.</p> <p>Further response from PP:</p> <p>Netherlands has issued a new LoA, including all countriesd in the Boundary (Consta Rica, Honduras and Nicaragua).</p>	<p>New LoA from Netherland dated on 22 August 2012 was submitted to DOE and it included all the countries of the PoA.</p> <p>This CAR is CLOSED.</p>
38.			<p>CAR 38 Regarding specific CPA, San Alejo:</p>		<p>The mentioned document is the latest "written" document</p>	<p>All the observations were addressed in the San Alejo</p>

			<p>a) The file: “MemoriaTecnica San Alejo – Final” states that the installed capacity of the turbine is 2,307 kW and the overall power of the system is 2,189 kW. Please be consistent with the CPA-DD</p> <p>b) Power density calculation shall be showed in the CPA-DD</p> <p>c) PLF stated in the file: “MemoriaTecnica San Alejo – Final” is not consistent to CPA-DD (i.e. 50% vs. 48.29%)</p>	<p>prepared by the consultants. Due to the problems to obtain financing, the project development is delayed, given the consultants more time and data to update the installed capacity and the electricity generation. The turbines were not bought yet, so the value used is the latest provided by the consultants supporting the development of the project.</p> <p><u>Further request from DOE:</u></p> <p>a) The CDM Project Standard stated that:</p> <p><i>“In connection with paragraph 81 above and the scope of the maximum output capacity of 15 MW, project participants shall consider the following:</i></p> <p><i>(a) Regarding .maximum output, .output is the installed/rated capacity as indicated by the manufacturer of the equipment or plant, irrespective of the actual load factor of the plant. The installed/rated capacity for renewable electricity generating units that involve turbine-generator systems shall be based on the installed/rated capacity of the generator;</i></p> <p><i>(b) Regarding the .appropriate</i></p>	<p>CPA-DD.</p> <p>This CAR is CLOSED</p>
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				<p><i>equivalent. of 15 MW, decision 17/CP.7, paragraph 6(c)(i), refers to MW, but project participants may refer to MW(p)13, MW(e) or MW(th). As MW(e) is the most common denomination, MW is defined as MW(e), and otherwise an appropriate conversion factor is to be applied;"</i></p> <p>The mentioned FSR established several nominal capacity of generator such as 2211 kW. Sections A.2 and A.4 shall be reviewed.</p> <p>Please see comments in the San Alejo CPA-DD</p> <p>b) The FSR for San Alejo mentioned a derivate dam; the calculus of power density shall use the superficial area of this dam. The calculus is still missing. Please see comments in San Alejo CPA.</p> <p>c) On Section B.5.2 installed capacity and PLF are not consistent to document delivered "Memoria técnica San Alejo – Final".</p> <p><u>Further response from the PP:</u></p>	
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					<ul style="list-style-type: none"> a) The installed capacity of the generator has been included. b) The installed capacity was corrected to be in line with the technical document. c) The power density applies for reservoirs. The project does not include a reservoir, and there is no provision on area of a reservoir in the technical document. The run off river projects cannot store energy in forms of reservoirs; the generation depends on the flow directly. The small dams are build to assure constant water flow in the turbines, but do not comply with the meaning of reservoir to generate electricity in peak period. d) The installed capacity and the PLF as per the document have been corrected. 	
39.			CAR 39 In the file: "CME_Operational_Manual_for_Guacamaya"; the following is missing: <ul style="list-style-type: none"> (i) organization chart, (ii) responsibility of each position (iii) training provisions, (iv) document control, (v) procedures for internal technical 		<p>The CME Manual was corrected accordingly.</p> <ul style="list-style-type: none"> i) The chart is included in chapter 5. ii) The responsibility is included in chapter 5. iii) Training is included in chapter 9. Training of the CME was included in chapter 4. 	<p>The latest version of Coordinating/ Managing Entity Operational Manual for Guacamaya includes the missing statements.</p> <p>This CAR is CLOSED</p>

			<p>review of CPA inclusion,</p> <p>(vi) procedures for avoiding double counting,</p> <p>(vii) Non-conformity and corrective & preventive actions,</p> <p>(viii) Internal Audit Review,</p> <p>(ix) Management Review.</p> <p>It is also not clear who is the Monitoring Entity.</p>		<p>iv) Document control is included in chapter 3.</p> <p>v) The information is included in chapter 4.</p> <p>vi) Further information included in chapter 6.</p> <p>vii)viii)ix) the information was included in chapter 13</p> <p>The monitoring entity is defined in page 7, in general it refers to the CME, but could be another entity that takes care of the consulting work in generating the monitoring reports.</p>	
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Table 3: List of forward action requests (FARs)**Validation / Verification Manual**

(37) The DOE shall raise a forward action request (FAR) 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.

FAR number	Reference	Summary of project owner response	Validation team conclusion
NO FAR was found or raised.			

Appendix B

CERTIFICATES OF COMPETENCE

Qualification

Avendaño Reyes, Guadalupe /

Emission Trading**United Nations Framework Convention on Climate Change**Auditor No.:
(AuditorenRegNr)Appointed:
(Zugelassen)☒ jaQualification Level:
(Qualifikationsstufe)

Lead Auditor

External:
(Externer)☐ jaAdd. reviewer:
(Zusätzlicher Prüfer)☐ yesEAC Scopes:
(EAC Branchen)CDM 01 - Energy industries (renewable - / non-renewable sources)
CDM 13 - Waste handling and disposalAdd. qualification:
(zus. Qualifikation)First Appointment:
(Erstberufung)

04/03/2010

Valid to:
(Gültig bis)

03/03/2013

Remarks:

Valid for TA 1.2, 13.1

Languages:

Spanish
English**Experience Exchange**

Date

Location

Remarks

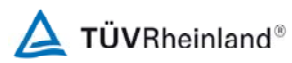
Accreditation(s)

MonitoringLatest Monitoring:
(letzte Beurteilung)Next Monitoring:
(nächste Beurteilung)

Remarks:

[View / Edit Monitoring](#)**History of scope allocation**

Validation Report



Date: 2010-03-05
Change: EAC CDM, CDM, CDM added
By: Manfred Brinkmann
Reason:

History

Created:	28/01/2010 08:30:36 a.m.	Luis Javier Cerecedo/Mex/TUV
Modified:	04/02/2011 11:52:14 a.m. ZE9	Manfred Brinkmann/Jpn/TUV
	04/02/2011 11:51:58 a.m. ZE9	Manfred Brinkmann/Jpn/TUV
	04/02/2011 11:49:32 a.m. ZE9	Manfred Brinkmann/Jpn/TUV
	14/09/2010 03:59:20 p.m. ZE9	Manfred Brinkmann/Jpn/TUV

Qualification

Li, Lixin /

Emission Trading

United Nations Framework Convention on Climate Change

Auditor No.:
(AuditorenRegNr)Appointed:
(Zugelassen)☒ yesQualification Level:
(Qualifikationsstufe)

Lead Auditor

External:
(Externer)☐ yesAdd. reviewer:
(Zusätzlicher Prüfer)☒ yesEAC Scopes:
(EAC Branchen)

CDM 01 - Energy industries (renewable - / non-renewable sources)
 CDM 03 - Energy demand
 CDM 02 - Energy distribution
 CDM 04 - Manufacturing industries

Add. qualification:
(zus. Qualifikation)First Appointment:
(Erstberufung)

06/09/2010

Valid to:
(Gültig bis)

05/09/2013

Remarks:

Appointed as Technical Reviewer for TA 1.1, 1.2, 2.1, 2.2, 3.1
 TA 4.5

Languages:

Experience Exchange

Date

Location

Remarks

Accreditation(s)

2010-12-21 Beijing

United Nations Framework Convention on Climate Change

GC CDM Auditor Experience Exchange, Beijing, 2010-12-21to23

Monitoring

Latest Monitoring:
(letzte Beurteilung)Next Monitoring:
(nächste Beurteilung)

Remarks:

History of scope allocation

Date:	2012-03-10
Change:	EAC CDM, CDM added
By:	Praveen Urs
Reason:	
Date:	
Change:	
By:	
Reason:	
Date:	
Change:	
By:	
Reason:	
Date:	2010-11-08
Change:	EAC CDM, CDM added
By:	Manfred Brinkmann
Reason:	Appointed as Technical Reviewer for

History

Created:	13/08/2010 11:09:24 a.m. ZE8	Lixin Li/Bj/Chn/TUV
Modified:	06/07/2012 04:55:01 p.m. ZE8	Praveen Urs/Chn/TUV
	10/03/2012 08:33:44 p.m. ZE8	Praveen Urs/Chn/TUV
	12/02/2012 06:12:39 p.m. ZE8	Praveen Urs/Chn/TUV
	15/11/2010 04:02:03 p.m. ZE8	
	15/11/2010 04:01:56 p.m. ZE8	
	08/11/2010 09:36:09 a.m. ZE9	
	08/11/2010 09:28:17 a.m. ZE9	
	08/11/2010 09:28:07 a.m. ZE9	
	08/11/2010 09:27:39 a.m. ZE9	
	13/08/2010 11:09:41 a.m. ZE8	

Export to ICMS

Last Export: