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Validation Report

RIALMA COMPANHIA ENERGÉTICA III S.A.

VALIDATION OF THE CDM-PROJECT:
Rialma Companhia Energética III S/A. – Santa
Edwiges III Small Hydro Power Plant – Small
Scale CDM Project.

REPORT NO. 1106678

27 July, 2009

TÜV SÜD Industrie Service GmbH
Carbon Management Service
Westendstr. 199 - 80686 Munich – GERMANY

Report No.	Date of first issue	Revision No.	Date of this revision	Certificate No.
1106678	29-02-2008	2b	27-07-2009	-
Subject: Validation of a CDM Project				
Accredited TÜV SÜD Unit: TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 - 80686 Munich Federal Republic of Germany		TÜV SÜD Contract Partner: TÜV SÜD DO BRASIL – SERVIÇOS TÉCNICOS PARA A INDÚSTRIA E O MEIO AMBIENTE LTDA. Rua Henrique Monteiro n.90, 10.º andar ZIP 05423-020 - São Paulo Brazil		
Client: Rialma Companhia Energética III S.A. SAAN Quadra 03 lote 600 Brasília Distrito Federal ZIP 70632-300 Brazil		Project Site(s): Usina Santa Edwiges III Rodovia Go 108 km 08 Município de Mambai Goiás ZIP 73.950-000 Brazil GPS coordinates: power house: 14°22'16.3"S; 46°17'32.43"W dam: 14°22'18"S; 46°17'29"W 14°22'14"S; 46°17'28"W 14°22'16"S; 46°17'28.5"W		
Project Title: Rialma Companhia Energética III S/A. – Santa Edwiges III Small Hydro Power Plant – Small Scale CDM Project.				
Applied Methodology / Version: AMS – I.D - Renewable Energy Projects; Renewable electricity generation for a grid, Version 12, July 27 th , 2007).			Scope(s): 1 Technical area(s): 1.1	
First PDD Version: Date of issuance: 16-03-2007 Version No.: 2 Starting Date of GSP 23-03-2007		Final PDD version: Date of issuance: 01-06-2009 Version No.: 14.b		
Estimated Annual Emission Reduction:		24,001 tCO₂e		
Assessment Team Leader: Johann Thaler (TÜV SÜD DO BRASIL)		Further Assessment Team Members: Markus Knoedlseder (TÜV SÜD Industrie Service GmbH)		
Summary of the Validation Opinion:				
<input checked="" type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the project for registration by the CDM Executive Board in case letters of approval of all Parties involved will be available before the expiring date of the applied methodology(ies) or the applied methodology version respectively.				
<input type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have not provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. Hence TÜV SÜD will not recommend the project for registration by the CDM Executive Board and will inform the project participants and the CDM Executive Board on this decision.				

Abbreviations

ACM	Approved Consolidated Methodology
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CR	Clarification Request
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	Executive Board
EIA / EA	Environmental Impact Assessment / Environmental Assessment
ER	Emission reduction
GHG	Greenhouse gas(es)
IRR	Internal Rate of Return
KP	Kyoto Protocol
MP	Monitoring Plan
NGO	Non Governmental Organisation
ONS	National Dispatch Center (Operador Nacional do Sistema Eletrico)
PDD	Project Design Document
PP	Project Participant
TÜV SÜD	TÜV SÜD Industrie Service GmbH
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual

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1 INTRODUCTION

1.1 Objective

The validation objective is an independent assessment by a Third Party (Designated Operational Entity = DOE) of a proposed project activity against all defined criteria set for the registration under the Clean Development Mechanism (CDM). Validation is part of the CDM project cycle and will finally result in a conclusion by the executing DOE whether a project activity is valid and should be submitted for registration to the CDM-EB. The ultimate decision on the registration of a proposed project activity rests at the CDM Executive Board and the Parties involved.

The project activity discussed by this validation report has been submitted under the project title: Rialma Companhia Energética III S/A. – Santa Edwiges III Small Hydro Power Plant – Small Scale CDM Project

1.2 Scope

The scope of any assessment is defined by the underlying legislation, regulation and guidance given by relevant entities or authorities. In the case of CDM project activities the scope is set by:

- Ø The Kyoto Protocol, in particular § 12
- Ø Decision 2/CMP1 and Decision 3/CMP.1 (Marrakech Accords)
- Ø Further COP/MOP decisions with reference to the CDM (e.g. decisions 4 – 8/CMP.1)
- Ø Decisions by the EB published under <http://cdm.unfccc.int>
- Ø Specific guidance by the EB published under <http://cdm.unfccc.int>
- Ø Guidelines for Completing the Project Design Document (CDM-PDD), and the Proposed New Baseline and Monitoring Methodology (CDM-NM)
- Ø The applied approved methodology
- Ø The technical environment of the project (technical scope)
- Ø Internal and national standards on monitoring and QA/QC
- Ø Technical guideline and information on best practice

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

Once TÜV SÜD receives a first PDD version, it is made publicly available on the internet at TÜV SÜD's webpage as well as on the UNFCCC CDM-webpages for starting a 30 day global stakeholder consultation process (GSP). In case of any request a PDD might be revised (under certain conditions the GSP will be repeated) and the final PDD will form the basis for the final evaluation as presented by this report. Information on the first and on the final PDD version is presented at page 1.

The only purpose of a validation is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

2 METHODOLOGY

The project assessment aims at being a risk based approach and is based on the methodology developed in the Validation and Verification Manual initiative of Designated and Applicant Entities, which aims to harmonize the approach and quality of all such assessments.

In order to ensure transparency, a validation protocol was customised for the project. TÜV SÜD developed a “cook-book” for methodology-specific checklists and protocol based on the templates presented by the Validation and Verification Manual. The protocol shows, in a transparent manner, criteria (requirements), the discussion of each criterion by the assessment team and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements a CDM project 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 three tables. The different columns in these tables are described in the figure below.

The completed validation protocol is enclosed in Annex 1 to this report.

Validation Protocol Table 1: Conformity of Project Activity and PDD				
Checklist Topic / Question	Reference	Comments	PDD in GSP	Final PDD
<i>The checklist is organised in sections following the arrangement of the applied PDD version. Each section is then further subdivided. The lowest level constitutes a checklist question / criterion.</i>	<i>Gives reference to documents where the answer to the checklist question or item is found in case the comment refers to documents other than the PDD.</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. In some cases sub-checklist are applied indicating yes/no decisions on the compliance with the stated criterion. Any Request has to be substantiated within this column</i>	<i>Conclusions are presented based on the assessment of the first PDD version. This is either acceptable based on evidence provided (p), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification Request (CR) is used when the validation team has identified a need for further clarification.</i>	<i>Conclusions are presented in the same manner based on the assessment of the final PDD version.</i>

Validation Protocol Table 2: Resolution of Corrective Action and Clarification Requests

Clarifications and corrective action requests	Ref. to table 1	Summary of project owner response	Validation team conclusion
<i>If the conclusions from table 1 are either a Corrective Action Request or a Clarification Request, these should be listed in this section.</i>	<i>Reference to the checklist question number in Table 1 where the Corrective Action Request or Clarification Request is explained.</i>	<i>The responses given by the client or other 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 1, under "Final PDD".</i>

In case of a denial of the project activity more detailed information on this decision will be presented in table 3.

Validation Protocol Table 3: Unresolved Corrective Action and Clarification Requests		
Clarifications and corrective action requests	Id. of CAR/CR 1	Explanation of the Conclusion for Denial
<i>If the final conclusions from table 2 results in a denial the referenced request should be listed in this section.</i>	<i>Identifier of the Request.</i>	<i>This section should present a detail explanation, why the project is finally considered not to be in compliance with a criterion.</i>

2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectoral or national business environment TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV SÜD certification body “climate and energy”. The composition of an assessment team has to be approved by the Certification Body ensuring that the required skills are covered by the team. The Certification Body TÜV SÜD operates four qualification levels for team members that are assigned by formal appointment rules:

- Ø Assessment Team Leader (ATL)
- Ø Greenhouse Gas Auditor (GHG-A)
- Ø Greenhouse Gas Auditor Trainee (T)
- Ø Experts (E)

It is required that the sectoral scope linked to the methodology has to be covered by the assessment team.

The validation team was consisting of the following experts (the responsible Assessment Team Leader is written in bold letters):

Name	Qualification	Coverage of scope	Coverage of technical area	Host country experience
Johann Thaler	ATL	p	p	p
Markus Knoedlseder	ATL	p	p	p

Johann Thaler graduated as Master of environmental Economy at the University of Augsburg. During his study he got first experiences in environmental management systems. His master thesis was about a fuel switch program in Brazil as a CDM project. Based in Brazil he has been working for TÜV SÜD as a GHG auditor on freelance basis since March 2005. He attended and successfully finished a ISO 14001 Environmental Management Internal Auditing Training

Markus Knoedlseder is an auditor for climate change projects and GHG emission inventories at the department “Carbon Management Service” in the head office of TÜV SÜD Industrie Service GmbH, Munich. He has been involved in the topic of environmental auditing, baselining, monitoring and verification due to the requirements of the Kyoto Protocol since Oct. 2001. His main focus lies on renewable energies.

2.2 Review of Documents

The first PDD version submitted by the client and additional background documents related to the project design and baseline were reviewed as initial step of the validation process. A complete list of all documents and proofs reviewed is attached as annex 2 to this report.

2.3 Follow-up Interviews

On April 02, 2007 TÜV SÜD performed an interview on-site with project participants to confirm selected information and to resolve issues identified in the first document review. The table below provides a list of all persons interviewed in the context of the on-site visit.

Name	Organisation
Date: April 02, 2007 (On-site visit, headquarters Brasilia):	
Ricardo Malaquias Ferreira Civil Engineer/Contracts	Rialma Companhia Energetica III S/A
Ana Paula Beber Veiga Project analyst	Ecoinvest Carbon Brasil Ltda.

2.4 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to resolve the requests for corrective actions and clarifications and any other outstanding issues which needed to be clarified for TÜV SÜD's positive conclusion on the project design. The Corrective Action Requests and Clarification Requests raised by TÜV SÜD were resolved during communication between the client and TÜV SÜD. To guarantee the transparency of the validation process, the concerns raised and responses that have been given are summarised in chapter 3 below and documented in more detail in the validation protocol in annex 1.

2.5 Internal Quality Control

As final step of a validation the validation report and the protocol have to undergo an internal quality control procedure by the Certification Body "climate and energy", i.e. each report has to be approved either by the head of the certification body or his deputy. In case one of these two persons is part of the assessment team approval can only be given by the other one.

It rests at the decision of TÜV SÜD's Certification Body whether a project will be submitted for requesting registration by the EB or not.

3 SUMMARY OF FINDINGS

As informed above all findings are summarized in table 2 of the attached validation protocol.

History of the validation process

The audit team has been provided with a draft PDD in March 2007. Based on this documentation a document review and a fact finding mission in form of an on-site audit has taken place. Afterwards the client decided to revise the PDD according to the CARs and CRs indicated in the audit process. However, it was not possible to submit the PDD (applying version 10 of AMS I-D) for registration, as the methodology was revised in the meantime and the deadline of version 10 has been expired. A new GSP process was started on December 08, 2007 applying version 12 of AMS I-D. The final PDD version submitted in July 2008¹ serves as the basis for the assessment presented herewith. Changes are not considered to be significant with respect to the qualification of the project as a CDM project based on the two main objectives of the CDM to achieve a reduction of anthropogenic GHG emissions by sources and to contribute to sustainable development.

The only changes made in this version of the validation report compared to the one (version 2, dated 31/07/2008) referred to in the Brazilian Letter of Approval issued on August 6th, 2008 are related to the review requested by the CDM Team/UNFCCC Secretariat after the completeness check (request received on 04/12/2008) and the request for review and review process (requests received on 12/02/2009 and 26/03/2009 respectively).

Project description

The Rialma Companhia Energética III S/A. – Santa Edwiges III Small Hydro Power Plant – Small Scale CDM Project consists of a run-of-river small-hydro power plant with a total installed capacity of 11.6 MW and a small reservoir (0.64 km²) with minor environmental impacts.

The main objective of the project is to generate power from clean, renewable hydroelectric power and to supply it to the Brazilian South-Southeast-Midwest interconnected grid while contributing to the regional/local economic development. The project activity reduces emissions of greenhouse gas (GHG) by avoiding electricity generation by fossil fuel sources (and CO₂ emissions), which would be generating (and emitting) in the absence of the project.

Findings

In total the assessment team expressed 8 Clarification Requests and 68 Corrective Action Requests.

The key findings during the validation process were related to the provision of information which was missing or not updated, inconsistencies in the information within the PDD and between the PDD and other CDM related documents, to the IRR and benchmark calculation and the barrier and common practice analysis. Besides, parameters were missing or not complete.

Considering these findings the PDD version 2 has been revised and the actual PDD version 14.b is in compliance with the CDM requirements.

Baseline calculation

The emissions factor was updated in the PDD during the validation process due to the availability of new data. The new calculation sheet for 2006 has been submitted to the validation team. The

¹ In June 2009 version 14.b was submitted to the validation team related to the reviews requested by the CDM Team/UNFCCC Secretariat on February 12, 2009 and on March 26, 2009.

calculation of the emissions factor has been verified by the validation team. The validation team can confirm the ex-ante application of the project's emissions factor of 2006 which is 0.2826 tCO₂/MWh. The emission reduction calculation in the PDD was revised considering the change of the emissions factor

Project emissions do not have to be considered when determining the emission reductions of the proposed project activity as the power density of the project is bigger than 10 W/m². The calculation for the determination of emission reductions is correctly applied.

The baseline scenario is the continuation of the current situation of electricity supplied by large hydro and thermal power stations from the South-Southeast-Midwest Brazilian interconnected grid.

Additionality

The additionality of the project was checked carefully. In doing so the assessment team has put the main focus on the following issues.

The assessment team has reviewed the proof for the early consideration of the project. The consideration of CDM is evidenced by the contract between the CDM consultant Ecoinvest and Rialma in March 2006. This contract is clearly dated before the purchase contracts of generators (dated 01/08/2007) and turbines (dated 19/07/2007). The latter one is chosen as project's starting date as it is the first real action which is irreversible without big financial losses. The purchase contracts were submitted to the validation team and were verified by the same.

In step one of applying the tool for the demonstration and assessment of additionality (additionality tool) it is concluded that there exist alternatives to the proposed project activity, the additionality criteria is fulfilled. Step two of the additionality tool, the investment analysis (benchmark analysis), describes in detail that the proposed project is not financially attractive without CER revenues. The assessment team has checked all sources of the IRR calculation (see spreadsheet "Arquivo Economico-financeiro_v.2") as well as of the benchmark (WACC) calculation, as presented in Sub-steps 2b and 2c of the PDD. The validation team confirms that the assessment period of 15 years is appropriate and conservatively chosen in the project context and in accordance with paragraph 3 of the "*Guidance on the Assessment of investment analysis*". Besides, a fair value (residual value) is considered at the end of the assessment period as requested by the "*Guidance on the Assessment of investment analysis*". The IRR calculation spreadsheet provides as per paragraph 8 of the "*Guidance on the Assessment of investment analysis*" all formulae used in the analysis in a readable format and all relevant cells are viewable and unprotected. The validation team checked all formulae and the IRR calculation for correctness. All formulae are retraceable and applied without error. Concluding, the validation team deems the submitted IRR calculation file in compliance with paragraph 8 of the "*Guidance on the Assessment of investment analysis*".

The IRR (14.7 %) is clearly below the benchmark of 17.4 %. Referring to paragraph 17 of the "*Guidance on the Assessment of investment analysis*", a sensitivity analysis should be conducted in considering variables that constitute more than 20% of either total project costs or total project revenues.

Hence, increase in project revenues reflected in an increase of the tariff or electricity output as well as decrease in project costs, reflected in decrease in investment costs or decrease in operational and maintenance costs were considered in the sensitivity analysis for the given project activity. Also according to the guidance, "*variations in the sensitivity analysis should at least cover a range of +10% and -10%, unless this is not deemed appropriate in the context of the specific project circumstances*".

Regarding the decrease of operational and maintenance costs, the 10% of variation, as recommended by the guidance is correctly applied by the project participants. Even if reducing by 10% the operational and maintenance costs, the IRR is 16.05% and thus the benchmark is not reached. Regarding the increase of electricity output, this is not expected to happen because the electricity generation is based on the estimated generated electricity by ANEEL (ANEEL Resolution N° 28 dated October 23rd, 2007). This number is established based on hydrological data of the river, considering several years. In conclusion the energy generation of the plant is not expected to increase. This explanation deems credible and appropriate in the opinion of the DOE.

Regarding the sensitivity analysis of tariff, the validation team received upon request the invoices for electricity sale for January, February and March 2009 (the hydro power plant is operational since January 2009) and in all cases the tariff per MWh was below 145.70 R\$/MWh (where the IRR crosses the benchmark), namely 83.64 R\$/MWh and 140.00 R\$/MWh for January 2009 and 75.00 R\$/MWh for the period between 01/02/2009 and 31/03/2009. Even though there does not exist any long term Power Purchase Agreement (PPA) yet, but electricity is sold at the spot market, auction prices were assessed by the validation team. Auction prices are an appropriate indicator for long term contracts (Power Purchase Agreements). In the auction shortly before the project's starting date, namely 18/06/2007, the highest price paid to a small hydropower plant was 135 R\$/MWh. If the analysis is widened to include all energy contracted in auctions to be dispatched between 2008 and 2012, the conclusion is the same, the average prices for hydro power plants are between 106.95 R\$/MWh (2008) and 129.14 R\$/MWh (2012), thus clearly below 145.70 R\$/MWh. The respective documents for assessment have been submitted to the validation team. The validation team got sufficient evidence to conclude that a tariff price of above 145.70 is highly improbable and thus additionality of the given project activity is not jeopardized.

Regarding the sensitivity analysis of total investment, the validation team finally received the audited balance sheet of 2008 (IRL 63) from Deloitte Touche Tohmatsu, an external independent third party and furthermore some payments receipts from 2009 (IRL 61). It is confirmed by Deloitte that Rialma Companhia Energetica III S.A. is fully following the Brazilian accounting rules and that the balance from 31/12/2008 adequately represents the assets and cash flow of the company. By assessing the audited balance sheet and the payment receipts from 2009, the validation team concludes that real investment costs are already about 96.5% of the estimated ones in the IRR calculation spreadsheet, i.e. real investment costs are about 3.5% lower than the estimated ones. Thus it is shown, that real investment costs cannot be 7% lower (in this case the IRR would cross the WACC benchmark) than estimated investment costs and additionality of the given project activity is not jeopardized.

It can be concluded that even by applying the sensitivity analysis for the main input parameters, the project is financially unattractive without CER revenues and thus additional. The benchmark and the IRR calculation sheets have been uploaded together with the PDD.

The demonstration of additionality of the given project activity is based on step 2 (investment analysis), and the barrier analysis (Step 3) is just applied to further substantiate the additionality of the project. Even though the barrier analysis can not be demonstrated by concrete evidences, but by just anecdotal ones, the validation team can confirm due to sectoral and local expertise that barriers, such as institutional and investment barriers exist in Brazil (host country).

In step 4, common practice analysis, hydropower stations that became operational between 2005 and 2007 in the past three years in the same State (Goias) and in the same sub-system (South-Southeast-Midwest) in the range of 1 MW to 30 MW (definition of small hydro plants according to ANEEL resolution nr. 394, from December 4th, 1998) were assessed. The assessment shows that all four projects in the State of Goias receive incentives, two of them as PROINFA subsidies, two of them as CDM revenue. Regarding the interconnected grid "South-Southeast-Midwest", almost 75 % of the small hydro plants which became operational between 2005 and 2007 have enjoyed incentives from PROINFA or CDM.

To conclude the additionality assessment it can be stated that the proposed project activity is without doubt additional.

The project boundary, the project's starting date as well as the starting date of the crediting period are clearly defined in the last submitted PDD.

Monitoring

Monitoring consists of metering the net electricity generated and supplied to the grid. The emissions factor has been determined ex-ante for the whole crediting period and thus does not have to be monitored.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

TÜV SÜD published the project documents on UNFCCC website by installing a link to TÜV SÜD's own website and invited comments by Parties, stakeholders and non-governmental organisations during a period of 30 days.

The following table presents all key information on this process:

webpage: http://www.netinform.de/KE/Wegweiser/Ebene1_Projekte.aspx?Ebene1_ID=26&mode=1	
Starting date of the global stakeholder consultation process: 2007-03-23	
Comment submitted by: No comments	Issues raised: -
Response by TÜV SÜD: -	

5 VALIDATION OPINION

TÜV SÜD has performed a validation of the following proposed CDM project activity:

Rialma Companhia Energética III S/A. – Santa Edwiges III Small Hydro Power Plant – Small Scale CDM Project

The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the project for registration by the CDM Executive Board.

An analysis as provided by the applied methodology demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the final PDD version.

The validation is based on the information made available to us and the engagement conditions detailed in this report. The validation has been performed using a risk based approach as described above. The only purpose of this report is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

Munich, 27-07-2009



Thomas Kleiser
Head of the Certification Body "climate and
energy"
TÜV SÜD Industrie Service GmbH

Fortaleza, 27-07-2009



Johann Thaler
Assessment Team Leader

Validation of the CDM Project:

Rialma Companhia Energética III S/A. – Santa Edwiges III Small Hydro Power Plant – Small Scale CDM Project



Annex 1: Validation Protocol

Validation Protocol

Project Title: Rialma Companhia Energética III S/A. – Santa Edwiges III Small Hydro Power Plant – Small Scale CDM Project.

Date of Completion: 27/07/2009

Report N°: 1106678

Number of Pages: 46



Table 1a Conformity of Project Activity and PDD (First Global Stakeholder Consultation Process) (Please recognize that no final PDD has been submitted in this context due to the repetition of the GSP when applying a new revision of the methodology)				
CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
A. General description of small-scale project activity				
A.1. Title of the small-scale project activity				
A.1.1. Does the used project title clearly enable to identify the unique CDM activity?	2	Yes. The used project title clearly enables to identify the unique CDM activity.	p	
A.1.2. Are there any indication concerning the revision number and the date of the revision?	2	Yes. Version and its date of the PDD is given.	p	
A.1.3. Is this consistent with the time line of the project's history?	1,2	Yes. It is consistent with the time line of the project's history.	p	
A.2. Description of the small-scale project activity				
A.2.1. Is the description delivering a transparent overview of the project activities?	1,2	Yes. The description is delivering a transparent overview of the project activities.	p	
A.2.2. What proofs are available demonstrating that the project description is in compliance with the actual situation or planning?	1,2,2 3	-Aneel authorization N° 115, issued on April 05, 2001 has been presented to the validation team; -it has been presented one installation licence (which is according to Ricardo Malaquias Ferreira valid for the PCHs Santa Edwiges I, II and III). The only proof for that is, that all locations are indicated. However, this installation licence was valid only until 26.12.2006. It has been asked for a renewal of the installation licence for Santa Edwiges III, however it was only presented a letter by Rialma sent to the environmental authority of Goias. Ac-	CAR 1	

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(Please recognize that no final PDD has been submitted in this context due to the repetition of the GSP when applying a new revision of the methodology)

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
		<p>cording to Ricardo Malaquia Ferreira the environmental installation licence will be probably issued on May 2007.</p> <p><u>Corrective Action Request 1:</u></p> <p>It should be presented a valid environmental installation licence or at least a protocol (referring to process 5601.1717/2001-1) showing the request for renewal of the installation licence.</p>		
A.2.3. Is the information provided by these proofs consistent with the information provided by the PDD?	1,2,2 3	See A.2.2.	CAR 1	
A.2.4. Is all information presented consistent with details provided by further chapters of the PDD?	2	Yes. All information presented is consistent with details provided by further chapters of the PDD.	p	
A.2.5. Does the description of the technology to be applied provide sufficient and transparent input to evaluate its impact on the greenhouse gas balance?	1,2,4 ,7,10	<p>Yes. The description of the technology to be applied provide sufficient and transparent input to evaluate its impact on the greenhouse gas balance.</p> <p>Technical specifications of turbine and generators have been presented to the validation team. The nominal power of the turbines was indicated with each 5,827 KW. The nominal power of the generators was indicated with each 6,300 kVA.</p> <p>The project will use a ELO 8400 flow-meter. It will occur periodic calibration, however exact calibration information is not available yet.</p>	CAR 2	

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		<p><u>Corrective Action Request 2:</u></p> <p>1. Some more specifications of the generators should be indicated in the PDD like model (SPA 1250) and execution system: Brush-less. For turbines the nominal rotation and nominal outflow should be mentioned.</p> <p>2. Total installed power and annual average flow-rate of the river should be mentioned in the PDD at Table 2 “Specifications of the equipment”. Documented references should be indicated.</p> <p>3. The nominal power values for turbines and generators should be revised in the PDD by Ecoinvest. They should be consistent with the values indicated on-site: nominal power of turbines: 5,827 KW, nominal power for the generators: 6,300 kVA (see basic project document “Projeto basico”).</p> <p>4. Water head indicated in the PDD should be revised. The basic project document (“Projeto basico”) indicates 30,20m for gross waterfall and 29,00 m for net waterfall.</p> <p>5. Information about flow-meter (model: ELO 8400) should be mentioned. Calibration information should be indicated as far as available.</p>		
A.2.6. Is the brief explanation how the project will reduce greenhouse gas emission transparent and suitable?	2	Yes. The brief explanation how the project will reduce greenhouse gas emission is transparent and suitable.	p	

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A.3. Project participants				
A.3.1. Is the form required for the indication of project participants correctly applied?	2	Yes. The form required for the indication of project participants is correctly applied.	p	
A.3.2. Is the participation of the listed entities or Parties confirmed by each one of them?	1,2	Corrective Action Request 3: A declaration should be provided by the project participants, explaining that the listed project entities participate (voluntarily) in the project activity Santa Edwiges III .	CAR 3	
A.3.3. Is all information on participants / Parties provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?	1,2,8,11,12	Yes. All information regarding project participants is consistent. Rialma Companhia Energetica III S.A. is owner of the project. The transfer of the entity from Rialma Companhia Energetica S.A. to Rialma Companhia Energetica III S.A. is juridically documented (document has been presented to the validation team). It is still missing the change of the company title by ANEEL. This is scheduled to happen in April 2007. The change from Rialma S.A. – Centrais Eletricas Rio das Almas to Rialma Companhia Energetica S.A. has been documented by ANEEL resolution N°007, from January, 12, 2004.	p	
A.4. Technical description of the small-scale project activity				
<i>A.4.1. Location of the small-scale project activity</i>				
A.4.1.1. Does the information provided on the location of the project activity allow for a	1,2,9	The access to the project site is: Rodovia GO 108, km 08. It is not clear to the validation team if the GPS coordinates indi-	CR 1 CAR 4	

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clear identification of the site(s)?		<p>cated in the PDD are those of the project site or of any of the indicated cities.</p> <p><u>Clarification Request 1:</u></p> <p>It should be clarified if the given GPS coordinates are those of the project site, and if yes, clearly explained at which place of the project site those GPS coordinates were measured. It should be indicated 4-6 GPS coordinates which limit the project site.</p> <p><u>Corrective Action Request 4:</u></p> <p>The access to the project site (exact address) should be indicated in the PDD.</p>		
A.4.1.2. How is it ensured and/or demonstrated, that the project proponents can implement the project at this site (ownership, licenses, contracts etc.)?	1,2	<p><u>Corrective Action Request 5:</u></p> <p>It should be submitted a document evidencing the ownership of the project site or proving the right to realize the project activity at the project site.</p>	CAR 5	
A.4.2. Type and category(ies) and technology/measure of the small-scale project activity				
A.4.2.1. To which type(s) does the project activity belong to? Is the type correctly identified and indicated?	2	The project belongs to Type 1: Renewable energy projects The type is correctly identified and indicated.	p	
A.4.2.2. To which category (ies) does the project activity belong to? Is the category correctly identified and indicated?	2	Category I.D. – Renewable energy generation for a grid.	p	

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		The category is correctly identified and indicated.		
A.4.2.3. Does the technical design of the project activity reflect current good practices?	2	Yes.	p	
A.4.2.4. Does the implementation of the project activity require any technology transfer from Annex-I-countries to the host country (ies)?	1,2,4 ,7,10	It is no technology transfer from Annex-I-countries necessary.	p	
A.4.2.5. Is the technology implemented by the project activity environmentally safe?	1,2,4 ,7,10	The project technology is already used in other projects in the host country. It is regarded as environmentally safe.	p	
A.4.2.6. Is the information provided in compliance with actual situation or planning?	1,2,4 ,7,10	The information is provided in compliance with actual situation or planning.	p	
A.4.2.7. Does the project use state of the art technology and / or does the technology result in a significantly better performance than any commonly used technologies in the host country?	1,2,4 ,7,10	The project uses state of the art technology, already used in several other projects in the host country.	p	
A.4.2.8. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	1,2,4 ,7,10	No. The project technology will not be substituted by other or more efficient technologies within the project period.	p	
A.4.2.9. Does the project require extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period?	1,2	The project requires some initial training and maintenance efforts. However, such documentation is not available yet. However, training and maintenance documents may be provided for the projects of Santa Edwiges I + II. Such documents will give a good idea	CAR 6	

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		how training and maintenance will look like in the case of Santa Edwiges III. <u>Corrective Action Request 6:</u> Training and maintenance documents of already implemented projects Santa Edwiges I + II should be submitted to the validation team to get an idea how training and maintenance will look like in the case of Santa Edwiges III.		
A.4.2.10. Is information available on the demand and requirements for training and maintenance?	1,2	See A.4.2.9.	CAR 6	
A.4.2.11. Is a schedule available for the implementation of the project and are there any risks for delays?	1,2,6	There are two different time schedules available. One time schedule is elaborated for ANEEL (with more elasticity (more generous time frames) as otherwise risks of fines are high): commercial start of operation will be only November 2009. Another time schedule is elaborated for internal use, which is more realistic according to Ricardo Malaquias Ferreira to happen. That time schedule foresees the start of commercial operation in May 2008. <u>Corrective Action Request 7:</u> It should be submitted the time schedule for internal use to the validation team.	CAR 7	
A.4.3. Estimated amount of emission reductions over the chosen crediting period				
A.4.3.1. Is the form required for the indication of projected emission reductions correctly	2	Yes. The form required for the indication of projected emission	p	

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applied?		reductions is correctly applied.		
A.4.3.2. Are the figures provided consistent with other data presented in the PDD?	2	Yes. All figures are consistent with other data presented in the PDD. However, in Table 3 (A.4.3.) the total estimated emission reduction is indicated with 144,504 tCO ₂ . This is not correct if summing up the emission reductions of each year. It results in 144,501 tCO ₂ . Besides, if assuming 79,000 MWh (information obtained during the on-site visit) of generated electricity per year, annual estimation of emission reductions is 20,626 tCO ₂ . <u>Corrective Action Request 8:</u> Annual and total estimated emission reduction has to be revised in the PDD.	CAR 8	
A.4.3.3. Are the figures consistent with the small-scale criteria for the used Type?	2,18	Yes. The figures are consistent with the small-scale criteria for the used Type.	p	
A.4.4. Public funding of the small-scale project activity				
A.4.4.1. Is the information provided on public funding provided in compliance with the actual situation or planning as available by the project participants?	1,2	Yes. The information provided on public funding is in compliance with the actual situation or planning as available by the project participants. No public funding is involved.	p	
A.4.4.2. Is all information provided consistent with the details given in remaining chapters of the PDD (in particular annex 2)?	1,2	Yes. All information provided is consistent with the details given in remaining chapters of the PDD.	p	

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A.4.5. Confirmation that the small-scale project activity is not a debundled component of a large scale project activity														
A.4.5.1. Is there a registered small-scale CDM project activity or an application to register another small-scale CDM project activity: with the following characteristics:	1,2,9	<div>The SSC project activity is not a debundled component of a large scale project activity. The same two project participants are not involved in another CDM activity in the host country. Santa Edwiges III distance to S. Edwiges I is 12,2, km and to S. Edwiges II 10,6 km (as base are taken the dams of each hydropowerplant). Map about locations has been submitted to the validation team.</div> <table><tr><th>Debundling checklist</th><th>Yes / No</th></tr><tr><td>the same project participants?</td><td>No</td></tr><tr><td>In the same project category and technology/measure?</td><td>No</td></tr><tr><td>Registered within previous two years? Or in registration process?</td><td>No</td></tr><tr><td>Whose boundary is within 1 km of the project boundary of the small scale project activity under consideration?</td><td>No</td></tr></table>	Debundling checklist	Yes / No	the same project participants?	No	In the same project category and technology/measure?	No	Registered within previous two years? Or in registration process?	No	Whose boundary is within 1 km of the project boundary of the small scale project activity under consideration?	No	p	
Debundling checklist	Yes / No													
the same project participants?	No													
In the same project category and technology/measure?	No													
Registered within previous two years? Or in registration process?	No													
Whose boundary is within 1 km of the project boundary of the small scale project activity under consideration?	No													
A.4.5.2. If the answer to all the above question is 'Yes' then does the total size of the small scale project activity combined with previously registered small scale CDM project activity exceeds the limits of small scale CDM project activities?	---	Not applicable, See A.4.5.1.	p											

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD								
B. Application of a baseline and monitoring methodology												
B.1. Title and reference of the approved baseline and monitoring methodology applied to the small-scale project activity												
B.1.1.1.Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	2,18	Everything indicated.	p									
B.1.1.2.Is the applied version the most recent one and / or is this version still applicable?	2,18	The methodology I.D, version 10 from December, 23, 2006 is the most recent version.	p									
B.2. Justification of the choice of the project category												
B.2.1. Is the applied methodology considered the most appropriate one?	2,18	Yes. The applied methodology is considered to be the most appropriate one.	p									
B.2.1.1. Criterion 1: This category comprises renewable energy generation units, such as photovoltaics, hydro, tidal/wave, wind, geothermal and renewable biomass, that supply electricity to and/or displace electricity from an electricity distribution system that is or would have been supplied by at least one fossil fuel fired generating unit.	1,2	<table><tr><td>Applicability checklist</td><td>Yes / No / NA</td></tr><tr><td>Criterion discussed in the PDD?</td><td>No</td></tr><tr><td>Compliance provable?</td><td>No</td></tr><tr><td>Compliance verified?</td><td>No</td></tr></table> <p>Corrective Action Request 9: The PDD should discuss in B.2. criterion 1: it should include information that the project activity comprises a small hydro renewable energy generation unit.</p>	Applicability checklist	Yes / No / NA	Criterion discussed in the PDD?	No	Compliance provable?	No	Compliance verified?	No	CAR 9	
Applicability checklist	Yes / No / NA											
Criterion discussed in the PDD?	No											
Compliance provable?	No											
Compliance verified?	No											

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B.2.1.2. Criterion 2: If the unit added has both renewable and non-renewable components (e.g.. a wind/diesel unit), the eligibility limit of 15MW for a small-scale CDM project activity applies only to the renewable component. If the unit added co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15MW.	---	Not applicable <table><tr><td>Applicability checklist</td><td>Yes / No / NA</td></tr><tr><td>Criterion discussed in the PDD?</td><td>NA</td></tr><tr><td>Compliance provable?</td><td>NA</td></tr><tr><td>Compliance verified?</td><td>NA</td></tr></table>	Applicability checklist	Yes / No / NA	Criterion discussed in the PDD?	NA	Compliance provable?	NA	Compliance verified?	NA	p	
Applicability checklist	Yes / No / NA											
Criterion discussed in the PDD?	NA											
Compliance provable?	NA											
Compliance verified?	NA											
B.2.1.3. Criterion 3:Biomass combined heat and power (co-generation) systems that supply electricity to and/or displace electricity from a grid are included in this category. To qualify under this category, the sum of all forms of energy output shall not exceed 45 Mwthermal e.g. for a biomass based cogenerating system the rating for all the boilers combined shall not exceed 45 Mwthermal.	---	Not applicable <table><tr><td>Applicability checklist</td><td>Yes / No / NA</td></tr><tr><td>Criterion discussed in the PDD?</td><td>NA</td></tr><tr><td>Compliance provable?</td><td>NA</td></tr><tr><td>Compliance verified?</td><td>NA</td></tr></table>	Applicability checklist	Yes / No / NA	Criterion discussed in the PDD?	NA	Compliance provable?	NA	Compliance verified?	NA	p	
Applicability checklist	Yes / No / NA											
Criterion discussed in the PDD?	NA											
Compliance provable?	NA											
Compliance verified?	NA											
B.2.1.4. Criterion 4: In the case of project activities that involve the addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units	---	Not applicable <table><tr><td>Applicability checklist</td><td>Yes / No / NA</td></tr><tr><td>Criterion discussed in the PDD?</td><td>NA</td></tr><tr><td>Compliance provable?</td><td>NA</td></tr><tr><td>Compliance verified?</td><td>NA</td></tr></table>	Applicability checklist	Yes / No / NA	Criterion discussed in the PDD?	NA	Compliance provable?	NA	Compliance verified?	NA	p	
Applicability checklist	Yes / No / NA											
Criterion discussed in the PDD?	NA											
Compliance provable?	NA											
Compliance verified?	NA											

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added by the project should be lower than 15 MW and should be physically distinct1 from the existing units.												
B.2.1.5. Criterion 5: Project activities that seek to retrofit or modify an existing facility for renewable energy generation are included in this category. To qualify as a small scale project, the total output of the modified or retrofitted unit shall not exceed the limit of 15 MW.	---	Not applicable <table border="1"><tr><td>Applicability checklist</td><td>Yes / No / NA</td></tr><tr><td>Criterion discussed in the PDD?</td><td>NA</td></tr><tr><td>Compliance provable?</td><td>NA</td></tr><tr><td>Compliance verified?</td><td>NA</td></tr></table>	Applicability checklist	Yes / No / NA	Criterion discussed in the PDD?	NA	Compliance provable?	NA	Compliance verified?	NA	p	
Applicability checklist	Yes / No / NA											
Criterion discussed in the PDD?	NA											
Compliance provable?	NA											
Compliance verified?	NA											
B.3. Description of the project boundary												
B.3.1. Does the project boundary include physical, geographical site where the project activity takes place?	1,2	The project boundary includes the physical, geographical site where the project activity takes place and the South-Southeast-Midwest interconnected subsystem of the Brazilian grid See A.4.1.1.	CR 1									
B.3.2. Do the spatial and technological boundaries as verified on-site comply with the discussion provided by / indication included to the PDD?	1,2	Yes. The spatial and technological boundaries as verified on-site comply with the discussion provided by the PDD.	p									

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B.4. Description of baseline and its development				
B.4.1. Have all technically feasible baseline scenario alternatives to the project activity been identified and discussed by the PDD? Why can this list be considered as being complete?	1,2, 18, 24	<p>In B.5. the PDD discuss the alternatives of the project activity. The PDD indicates that “From the project owner’s perspective, the alternative to the project activity is the continuation of the current situation, i.e., the investment of surplus capital in the financial market”.</p> <p>However, during the on-site visit Ricardo Malaquias Ferreira (Rialma) confirmed that the real focus for Rialma are investments in small hydro power plants. The financial market is rather not of interest due to low payback.</p> <p><u>Corrective Action Request 10:</u></p> <p>The alternatives indicated in the PDD should be revised by the project participants. Only realistic alternatives should be mentioned. Are investments in the financial market a real alternative for Rialma Companhia Energetica III S.A.?</p>	CAR 10	
B.4.2. Does the project identify correctly and excludes those options not in line with regulatory or legal requirements?	1,2, 18, 24	See B.4.1.	CAR 10	
B.4.3. Have applicable regulatory or legal requirements been identified?	1,2, 18, 24	No regulatory or legal requirements have been identified.	p	

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B.4.4. Does the PDD identify the most likely baseline scenario in absence of the project activity?	1,2, 18, 24	The PDD does not explicitly mention the most likely baseline scenario. <u>Corrective Action Request 11:</u> The PDD should explicitly mention the most likely baseline scenario and provide evidences why that baseline scenario should be the most probable one (see B.4.5.)	CAR 11	
B.4.5. Is this identification supported by official and/or verifiable documents (e.g. studies, web pages, certificates, etc)?	1,2, 18, 24	See B.4.4.	CAR 11	
B.4.6. Is the identified baseline scenario in line with regulatory or legal requirements?	1,2, 18, 24	See B.4.4.	CAR 11	
B.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered small-scale CDM project activity:				
B.5.1. In case of applying step 2 / investment analysis of the additionality tool: Is the analysis method identified appropriately (step 2a)?	---	Not applied, thus not relevant.	p	
B.5.2. In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than CDM in-	---	Not applicable.	p	

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come?				
B.5.3. In case of Option II (investment comparison analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	---	Not applicable	p	
B.5.4. In case of Option III (benchmark analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	---	Not applicable.	p	
B.5.5. In case of Option II or Option III: Is the calculation of financial figures for this indicator correctly done for all alternatives and the project activity?	---	Not applicable	p	
B.5.6. In case of Option II or Option III: Is the analysis presented in a transparent manner including publicly available proofs for the utilized data?	---	Not applicable	p	
B.5.7. In case of applying step 3 (barrier analysis) of the additionality tool: Is a complete list of barriers developed that prevent the different alternatives to occur?	1,2, 18, 24	See B.5.8.	CAR 12-16 CR 2	
B.5.8. In case of applying step 3 (barrier analysis): Is transparent and documented evi-	1,2, 18,	Corrective Action Request 12: During the on-site interview Ricardo Malaquias Ferreira (Rialma)	CAR 12-16	

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dence provided on the existence and significance of these barriers?	24, 25	<p>confirmed that the project activity Santa Edwiges III has been realised as well without CER credits. However, it would have been more time consuming and would have involved more guarantees by the bank to get financing. This information should be considered when discuss additionality of Santa Edwiges III.</p> <p><u>Corrective Action Request 13:</u></p> <p>If the ROE of the project activity is compared with an investment in Brazilian government bonds (which is not very logical according to the information obtained on-site, see B.4.1.), the exact SELIC rate should be mentioned at the time when it was decided to invest into Santa Edwiges III and a logical and a realistic comparison between investment in SELIC and the project activity should be made.</p> <p>It is not clear to the validation team why an ROE of 15,50 % would consist an investment barrier while an ROE including CER revenues of 17,13 % would not consist such a barrier. (Compare it with the project “Garganta da Jarraca SHP – Atiaia Energia S.A. Project Activity” which is under review by the EB).</p> <p><u>Corrective Action Request 14:</u></p> <p>The additionality discussion has to be based on stronger evidences, as e.g. a confirmation of the debtors (BNDES and/or others) proving that the revenues from CERs are crucial for their</p>	CR 2 CR 3	

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		<p>decision to give loans. The project participants may also switch over to step 2 “Investment analysis” of the additionality tool, in order to clearly demonstrate the additionality of the project .</p> <p>Table 6 of the PDD is not updated for the minimum level of the SELIC rate.</p> <p><u>Corrective Action Request 15:</u></p> <p>The minimum level of the SELIC rate should be updated in the PDD.</p> <p><u>Corrective Action Request 16:</u></p> <p>The calculation spreadsheets for “ROE calculation” and the “sensitivity analysis calculation” should be submitted to the validation team.</p> <p><u>Clarification Request 2:</u></p> <p>The project participants should explain to the validation team - how they support CER prices of USD 10. Respective evidences (documents) should be submitted to the validation team.</p> <p><u>Clarification Request 3:</u></p> <p>The ROE calculation with CER credits includes CER credits beyond 2012, the end of the first commitment period of the Kyoto</p>		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
		Protocol. Is this realistic due to price insecurity of CER credits and does it not contradict the principle of conservativeness? Project participants should be conservative in their calculations and justifications.		
B.5.9. In case of applying step 3 (barrier analysis): Is it transparently shown that the execution of at least one of the alternatives is not prevented by the identified barriers?	1,2, 18, 24, 25	See B.4.1. and B.5.8.	CAR 10 CAR 12-16 CR 2	
B.5.10. Have other activities in the host country / region similar to the project activity been identified and are these activities appropriately analyzed by the PDD (step 4a)?	1,2, 18, 24	<p>The PDD indicates that “most of the developers that funded their projects outside of Proinfa have taken CDM as decisive factor for completing their projects”. Further on it indicates “that the vast majority of similar projects are participating in the Proinfa Program”. This statements are quite vague in the opinion of the validation team.</p> <p><u>Corrective Action Request 17:</u></p> <p>The project participants should evidence the statements given in the PDD that “most of the developers that funded their projects outside of Proinfa have taken CDM as decisive factor for completing their projects” and “that the vast majority of similar projects are participating in the Proinfa Program”. Besides, it would be very helpful to quantify how many similar activities within the Proinfa, like CDM and without CDM and Proinfa have been realized.</p>	CAR 17	

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B.5.11. If similar activities are occurring: Is it demonstrated that in spite of these similarities the project activity would not be implemented without the CDM component (step 4b)?	1,2, 18, 24	See B.5.10.	CAR 17	
B.5.12. Is it appropriately explained how the approval of the project activity will help to overcome the economic and financial hurdles or other identified barriers (step 5)?	1,2, 18, 24	Step 5 of the additionality tool is not mentioned at all. <u>Corrective Action Request 18:</u> Step 5 of the additionality tool should be mentioned with its respective explanation.	CAR 18	
If the additionality tool has not been used please answer B.5.13 to B.5.18				
B.5.13. If the starting date of the project activity is before the date of validation, is evidence available to prove that incentive from the CDM was seriously considered in the decision to proceed with the project activity?	---	B.5.13 to B.5.18 not applicable as additionality tool is used.	p	
B.5.14. Is a complete list of barriers developed that prevents the project activity to occur?	---	N/A	p	
B.5.15. Does this list include at least one of the following barriers?	---	N/A	p	
		Barrier	Discussed?	Verifiable?
		Investment		

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		Technological				
		Due to prevailing practice				
		Other				
B.5.16. Does the discussion sufficiently take into account relevant national and/or sectoral policies?	---	N/A			p	
B.5.17. Is transparent and documented evidence provided on the existence and significance of these barriers?	---	N/A			p	
B.5.18. Is it appropriately explained how the approval of the project activity will help to overcome the identified barriers?	---	N/A			p	
B.6. Emissions reductions						
B.6.1. Explanation of methodological choices						
B.6.1.1.Is it explained how the procedures provided in the methodology are applied by the proposed project activity?	1,2, 17 18, 19	The procedures provided in the methodology are applied by the proposed project activity. However, it is not mentioned the power density of the project. <u>Corrective Action Request 19:</u> It should be calculated and mentioned the exact power density of			CAR 19	

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD						
		Santa Edwiges III project.								
B.6.1.2.Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?	2,17, 18, 19	Yes.	p							
B.6.1.3.Determination of project emissions (Comment on any line answered “No”)										
a. Component 1: emissions from use of fossil fuel	1,2, 17 18, 19	There will be no use of fossil fuels, thus no emissions from use of fossil fuel. <table><tr><td>Project emission checklist</td><td>Yes / No</td></tr><tr><td>Component discussed in the PDD?</td><td>NA</td></tr><tr><td>Formulae correctly applied?</td><td>NA</td></tr></table> Corrective Action Request 20: Even if no project emissions are expected from the project activity, it is recommended to mention that fact in the PDD.	Project emission checklist	Yes / No	Component discussed in the PDD?	NA	Formulae correctly applied?	NA	CAR 20	
Project emission checklist	Yes / No									
Component discussed in the PDD?	NA									
Formulae correctly applied?	NA									
B.6.1.4.Are the formulae required for the determination of baseline emissions correctly presented, enabling a complete identification of parameters to be used and / or monitored?	1,2, 17, 18, 19	Yes. The formulae required for the determination of baseline emissions are correctly presented.	p							
B.6.1.5.Are the formulae required for the determination of leakage emissions cor-	---	The project activity does not cause any leakage emissions, thus B.6.1.5. not applicable.	p							

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rectly presented, enabling a complete identification of parameter to be used and / or monitored?				
B.6.1.6.Are the formulae required for the determination of emission reductions correctly presented?	1,2, 17, 18, 19	Yes. The formulae required for the determination of emission reductions are correctly presented.	p	
B.6.2. Data and parameters that are available at validation				
B.6.2.1.Is the list of parameters presented in chapter B.6.2 considered to be complete with regard to the requirements of the applied methodology?	1,2, 17, 18, 19	No. The list of parameters presented in chapter B.6.2. is not considered to be complete. The parameter “Surface area at full reservoir area” is not included in the PDD. <u>Corrective Action Request 21:</u> The parameter “Surface area at full reservoir area” with its necessary explications has to be included as one of the parameters that are available at validation. <u>Corrective Action Request 22:</u> If the emissions grid factor is calculated ex-ante (see B.6.2.3.) all parameters necessary for the calculation of the emissions grid factor have to be included at B.6.2.	CAR 21 CAR 22	
B.6.2.2.Comment on any line answered with “No”				
B.6.2.3.Parameter Title:	---	Not applicable as no retrofit or modification project	p	

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prior to retrofit (applicable only for retrofit and modification activities)		Data Checklist	Yes / No		
		Title in line with methodology?			
		Data unit correctly expressed?			
		Appropriate description of parameter?			
		Source clearly referenced?			
		Correct value provided?			
		Has this value been verified?			
		Choice of data correctly justified?			
		Measurement method correctly described?			
B.6.2.3. Parameter Title: Emission factor of the grid (CM)	1,2, 17, 18, 19	<u>Corrective Action Request 23:</u> It has to be mentioned if the emissions factor of the grid is calculated ex-ante or ex-post (yearly updated). In the case of ex-post the parameter has to appear under B.7.1. "Data and parameters to be monitored". <u>Corrective Action Request 24:</u> The parameter title should be indicated as according to the methodology ACM0002, version 6.		CAR 23 CAR 24	

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(Please recognize that no final PDD has been submitted in this context due to the repetition of the GSP when applying a new revision of the methodology)																						
CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
		<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes		
Data Checklist	Yes / No																					
Title in line with methodology?	No																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	Yes																					
B.6.2.4. Parameter Title: Operating margin (OM) emission factor of the grid	1,2, 17, 18, 19	<u>Corrective Action Request 25:</u> The parameter “Operating margin (OM) emission factor of the grid” has to be mentioned (either at B.6.2. or at B.7.1. depending if the emissions grid factor is calculated ex-ante or ex-post yearly updated) with all its necessary explanations according to the methodology ACM0002, version 6.	CAR 25																			

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		Data Checklist	Yes / No		
		Title in line with methodology?	No		
		Data unit correctly expressed?	No		
		Appropriate description?	No		
		Source clearly referenced?	No		
		Correct value provided?	No		
		Has this value been verified?	No		
		Choice of data correctly justified?	No		
		Measurement method correctly described?	No		
B.6.2.5. Parameter Title: Build margin (BM) emission factor of the grid	1,2, 17, 18, 19	Corrective Action Request 26: The parameter “Build margin (BM) emission factor of the grid” has to be mentioned (either at B.6.2. or at B.7.1. depending if the emissions grid factor is calculated ex-ante or ex-post yearly updated) with all its necessary explanations according to the methodology ACM0002, version 6.		CAR 26	
		Data Checklist	Yes / No		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP
		Title in line with methodology?	No	
		Data unit correctly expressed?	No	
		Appropriate description of parameter?	No	
		Source clearly referenced?	No	
		Correct value provided?	No	
		Has this value been verified?	No	
		Choice of data correctly justified?	No	
		Measurement method correctly described?	No	
B.6.2.6. Parameter Title: fuel consumption of each power source	1,2, 17, 18, 19	<u>Corrective Action Request 27:</u> The parameter “fuel consumption of each power source” has to be mentioned (either at B.6.2. or at B.7.1. depending if the emissions grid factor is calculated ex-ante or ex-post yearly updated) with all its necessary explanations according to the methodology ACM0002, version 6.		CAR 27
		Data Checklist	Yes / No	

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		Title in line with methodology?	No		
		Data unit correctly expressed?	No		
		Appropriate description of parameter?	No		
		Source clearly referenced?	No		
		Correct value provided?	No		
		Has this value been verified?	No		
		Choice of data correctly justified?	No		
		Measurement method correctly described?	No		
B.6.2.7. Parameter Title: emission coefficient of each fuel	1,2, 17, 18, 19	<u>Corrective Action Request 28:</u> The parameter “emission coefficient of each fuel” has to be mentioned (either at B.6.2. or at B.7.1. depending if the emissions grid factor is calculated ex-ante or ex-post yearly updated) with all its necessary explanations according to the methodology ACM0002, version 6.		CAR 28	
		Data Checklist	Yes / No		

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		Title in line with methodology?	No		
		Data unit correctly expressed?	No		
		Appropriate description of parameter?	No		
		Source clearly referenced?	No		
		Correct value provided?	No		
		Has this value been verified?	No		
		Choice of data correctly justified?	No		
		Measurement method correctly described?	No		
B.6.2.8. Parameter Title: electricity generation of each power source	1,2, 17, 18, 19	<u>Corrective Action Request 29:</u> The parameter “electricity generation of each power source” has to be mentioned (either at B.6.2. or at B.7.1. depending if the emissions grid factor is calculated ex-ante or ex-post yearly updated) with all its necessary explanations according to the methodology ACM0002, version 6.		CAR 29	
		Data Checklist	Yes / No		

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		Title in line with methodology?	No		
		Data unit correctly expressed?	No		
		Appropriate description of parameter?	No		
		Source clearly referenced?	No		
		Correct value provided?	No		
		Has this value been verified?	No		
		Choice of data correctly justified?	No		
		Measurement method correctly described?	No		
B.6.2.9. Parameter Title: surface area of full reservoir level (for new hydroelectric activities only)	1,2,7 17, 18, 19	Documented information was provided on-site that the reservoir has a surface area of 0.64 km ² . See B.6.2.1.		CAR 21	
		Data Checklist	Yes / No		
		Title in line with methodology?	No		
		Data unit correctly expressed?	No		
		Appropriate description of parameter?	No		

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		Source clearly referenced?	No		
		Correct value provided?	No		
		Has this value been verified?	No		
		Choice of data correctly justified?	No		
		Measurement method correctly described?	No		
B.6.2.10. Parameter Title: fraction of time with low costs /must run plant at the margin (for simple adjusted OM only)	1,2, 17, 18, 19	<u>Corrective Action Request 30:</u> The parameter “fraction of time with low costs/must run plant at the margin” has to be mentioned (either at B.6.2. or at B.7.1. depending if the emissions grid factor is calculated ex-ante or ex-post yearly updated) with all its necessary explanations according to the methodology ACM0002, version 6.		CAR 30	
		Data Checklist	Yes / No		
		Title in line with methodology?	No		
		Data unit correctly expressed?	No		
		Appropriate description of parameter?	No		

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		Source clearly referenced?	No		
		Correct value provided?	No		
		Has this value been verified?	No		
		Choice of data correctly justified?	No		
		Measurement method correctly described?	No		
B.6.2.11. Parameter Title: electricity imports	1,2, 17, 18, 19	<u>Corrective Action Request 31:</u> The parameter “electricity imports” has to be mentioned (either at B.6.2. or at B.7.1. depending if the emissions grid factor is calculated ex-ante or ex-post yearly updated) with all its necessary explanations according to the methodology ACM0002, version 6.		CAR 31	
		Data Checklist	Yes / No		
		Title in line with methodology?	No		
		Data unit correctly expressed?	No		
		Appropriate description of parameter?	No		
		Source clearly referenced?	No		

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		Correct value provided?	No	
		Has this value been verified?	No	
		Choice of data correctly justified?	No	
		Measurement method correctly described?	No	
B.6.2.12. Parameter Title: CO ₂ emission coefficient of fuels used in connected grids	---	Not applicable as the South-Southeast-Midwest interconnected subsystem of the Brazilian grid is considered as project boundary.		p
		Data Checklist	Yes / No	
		Title in line with methodology?		
		Data unit correctly expressed?		
		Appropriate description of parameter?		
		Source clearly referenced?		
		Correct value provided?		
		Has this value been verified?		
		Choice of data correctly justified?		
		Measurement method correctly described?		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
B.6.3. Ex-ante calculation of emission reductions				
B.6.3.1. Is the projection based on the same procedures as used for future monitoring?	1,2, 17, 18, 19	Yes. The projection is based on the same procedures as used for future monitoring.	p	
B.6.3.2. Are the GHG calculations documented in a complete and transparent manner?	1,2, 17, 18, 19	Project emissions are not mentioned (including formula), even if those are zero. <u>Corrective Action Request 32:</u> Power density calculation should be mentioned and project emissions formula indicated, even if those project emissions result zero in the project activity.	CAR 32	
B.6.3.3. If there is more than one component of the project activity, then, are emission reduction calculations provided separately for each component?	---	Not applicable, as the project activity consists only of one component.	p	

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B.6.3.4. Is the data provided in this section consistent with data as presented in other chapters of the PDD?	1,2, 17, 18, 19	See B.6.3.2.	p	
B.6.4. Summary of the ex-ante estimation of emission reductions				
B.6.4.1. Will the project result in fewer GHG emissions than the baseline scenario?	1,2, 17, 18, 19	Yes. The project will result in fewer GHG emissions than in the baseline scenario.	p	
B.6.4.2. Is the form/table required for the indication of projected emission reductions correctly applied?	1,2, 17, 18, 19	Yes. The table required for the indication of projected emission reductions is correctly applied.	p	
B.6.4.3. If the project activity involves more than one component, is separate table included for each of the component.	---	Not applicable.	p	
B.6.4.4. Do these values comply with small-scale criteria for every year?	1,2, 17, 18,	Yes.	p	

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD	
	19				
B.6.4.5.Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	1,2,6	See C.1.1.	CR 5		
B.6.4.6.Is the data provided in this section in consistency with data as presented in other chapters of the PDD?	2	See A.4.3.2.	CAR 8		
B.7. Application of the monitoring methodology and description of the monitoring plan					
B.7.1. Data and parameters monitored					
B.7.1.1.Is the list of parameters presented in chapter B.7.1 considered to be complete with regard to the requirements of the applied methodology?	1,2, 17, 18, 19	<u>Corrective Action Request 33:</u> If the emissions grid factor is yearly updated ex-post (see B.6.2.3.) all parameters necessary for the calculation of the emissions grid factor have to be included at “B.7.1., Data and parameters monitored”.	CAR 33		
B.7.1.2.Comment on any line answered with “No”					
b. Parameter Title: Electricity generated by the renewable technology	1,2, 17, 18, 19	It has been informed on-site that the hydro-plant will generate 79,000 MWh per year. <u>Corrective Action Request 34:</u> It should be mentioned the value of 79,000 MWh as the quantity of electricity generated.	CAR 34 CAR 35 CR 4		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																								
		<p><u>Corrective Action Request 35:</u></p> <p>“EGy” should be added at the title of the parameter “electricity generated by the renewable technology”.</p> <p><u>Clarification Request 4:</u></p> <p>Regarding the description of the measurement method, the following phrase is not to understand due to poor English: “This parameter is measured each 15 minutes measurement and it is monthly recorded.” The phrase should be revised.</p> <table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided for estimation?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>On-site information</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr><tr><td>Correct reference to standards?</td><td>N/A</td></tr><tr><td>Indication of accuracy provided?</td><td>Yes</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	No	Has this value been verified?	On-site information	Measurement method correctly described?	No	Correct reference to standards?	N/A	Indication of accuracy provided?	Yes	QA/QC procedures described?	Yes	QA/QC procedures appropriate?	Yes		
Monitoring Checklist	Yes / No																											
Title in line with methodology?	No																											
Data unit correctly expressed?	Yes																											
Appropriate description of parameter?	Yes																											
Source clearly referenced?	Yes																											
Correct value provided for estimation?	No																											
Has this value been verified?	On-site information																											
Measurement method correctly described?	No																											
Correct reference to standards?	N/A																											
Indication of accuracy provided?	Yes																											
QA/QC procedures described?	Yes																											
QA/QC procedures appropriate?	Yes																											

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																								
c. Amount of biomass input (if applicable)	---	Not applicable, as no biomass input. <table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided for estimation?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr><tr><td>Correct reference to standards?</td><td></td></tr><tr><td>Indication of accuracy provided?</td><td></td></tr><tr><td>QA/QC procedures described?</td><td></td></tr><tr><td>QA/QC procedures appropriate?</td><td></td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided for estimation?		Has this value been verified?		Measurement method correctly described?		Correct reference to standards?		Indication of accuracy provided?		QA/QC procedures described?		QA/QC procedures appropriate?		p	
Monitoring Checklist	Yes / No																											
Title in line with methodology?																												
Data unit correctly expressed?																												
Appropriate description of parameter?																												
Source clearly referenced?																												
Correct value provided for estimation?																												
Has this value been verified?																												
Measurement method correctly described?																												
Correct reference to standards?																												
Indication of accuracy provided?																												
QA/QC procedures described?																												
QA/QC procedures appropriate?																												
d. Amount of fossil fuel (if applicable)	---	Not applicable, as no use of fossil fuel. <table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		p																	
Monitoring Checklist	Yes / No																											
Title in line with methodology?																												
Data unit correctly expressed?																												
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		Source clearly referenced?			
		Correct value provided for estimation?			
		Has this value been verified?			
		Measurement method correctly described?			
		Correct reference to standards?			
		Indication of accuracy provided?			
		QA/QC procedures described?			
		QA/QC procedures appropriate?			
B.7.2. Description of the monitoring plan					
B.7.2.1.Is the operational and management structure clearly described and in compliance with the envisioned situation?	1,2	It should be provided more monitoring information. <u>Corrective Action Request 36:</u> The following monitoring information obtained on-site should be provided in the PDD: <ul style="list-style-type: none">Always at least one operator will be supervising the process. There will be two flow-meters (one principal, one as back-up) installed (periodically calibrated) of type ELO 8400Back-up of data through various computers;Indicate information that concessionary will be only determined at the second semester of 2007 and that calibration		CAR 36	

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		requirements will be only available with purchase of the flow-meters.		
B.7.2.2.Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	1,2	Yes. Rialma Companhia Energética III S.A. is responsible for project management, registration, monitoring, measurement and reporting.	p	
B.7.2.3.Does the monitoring plan provide current good monitoring practice?	1,2	See B.7.2.1.	CAR 36	
B.7.2.4.If applicable: Does annex 4 provide useful information enabling a better understanding of the envisioned monitoring provisions?	1,2	No information provided in Annex 4. See B.7.2.1.	CAR 36	
B.8. Date of completion of the application of the baseline study and monitoring methodology an the name of the responsible person(s)/entity(ies)				
B.8.1.1.Is there any indication of a date when the baseline was determined?	2	Yes. The baseline was completed on May, 26, 2006.	p	
B.8.1.2.Has dd/mm/yyyy format been used to indicate the date.	2	Yes. The right format is given.	p	
B.8.1.3.Is this consistent with the time line of the PDD history?	2	Yes. It is consistent with the time line of the PDD history.	p	

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B.8.1.4. Is the information on the person(s) / entity (ies) responsible for the application of the baseline and monitoring methodology provided consistent with the actual situation?	2	Yes.	p	
B.8.1.5. Is information provided whether this person / entity is also considered a project participant?	2	Yes. The entity who was responsible for the determination of the baseline is considered as project participant.	p	
C.				
C.1. Duration of the project activity				
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	1,2,6	Clarification Request 5: The project participants should information about the exact project start, as on-site the validation team has received some different information to that given in the PDD.	CR 5	
C.2. Choice of the crediting period and related information				
C.2.1. Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?	1,2,6	Corrective Action Request 37: According information found on-site Rialma S.A. wants to change the begin of the crediting period to May, 2008. Ecoinvest should consider that information in the PDD.	CAR 37	
C.2.2. Has dd/mm/yyyy format been used to	2	Yes. The format used is correct.	p	

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indicate the start date of the crediting period.				
D. Environmental impacts				
D.1. If required by the host Party, documentation on the analysis of the environmental impacts of the project activity:				
D.1.1. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, has an EIA been approved? If yes answer also D.1.2 to D.1.4	1,2,5,13,14,15,16	An Environmental Impact Assessment is required by the legislation of Goiás. Such a EIA has been presented to the validation team. In the EIA (2001) appears the installed capacity with 6,5 MW (page 54); 2005 research showed that the capacity may be increased. Consequently, the capacity to be installed is planned with 11 MW. If comparing with project Santa Edwiges I, where the EIA (2001) mentions a capacity to be installed of 10,0 MW, but the final authorized installed capacity by ANEEL has been 13,4 MW (See Despacho N° 94, 18.01.2007) one may conclude that the same will happen with Santa Edwiges III. Santa Edwiges I possesses all necessary environmental licences. The first operational licence has been issued with the capacity installed of 10,0 MW, after having received the authorization of ANEEL the operational licence have been requested to be modified by the environmental authority. The second operational licence states the value of 13,4 MW.	p	
D.1.2. Has the analysis of the environmental impacts of the project activity been sufficiently	1,2	See D.2.1.	CAR	

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described?			39	
D.1.3. Will the project create any adverse environmental effects?	1,2	As the reservoir is very small (only 0,64 km ²) the environmental impact is quite small. Deforestation is about the size of the reservoir and the power house; an artificial channel does not have to be constructed, as the natural river flow may be used.	p	
D.1.4. Were transboundary environmental impacts identified in the analysis?	1,2	No transboundary environmental impacts are expected with the project activity. <u>Corrective Action Request 38:</u> The PDD should mention that no transboundary environmental impacts are expected with the project activity.	p	
D.2. If environmental impacts are considered significant by the project participants or the host Party, please provide conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party				
D.2.1. Have the identified environmental impacts been addressed in the project design sufficiently?	1,2	No. The PDD does not mention that the project activity has no adverse environmental effects. <u>Corrective Action Request 39:</u> The PDD should confirm the information obtained on-site that the project will not create any major adverse environmental effects. It should indicate minor environmental impacts, See D.1.3. <u>Corrective Action Request 40::</u>	CAR 39 CAR 40	

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		The project participants should submit the “research paper prepared by the Santa Edwiges III Small Hydro Power Plant Project analyzing the environmental impact of the plant in the region” to the validation team (See E.3. PDD).		
D.2.2. Does the project comply with environmental legislation in the host country?	1,2, 23	See A.2.2.	CAR 1	
E. Stakeholders' comments				
E.1. Brief description how comments by local stakeholders have been invited and compiled				
E.1.1. Have relevant stakeholders been consulted?	1,2	Yes. Relevant stakeholders have been consulted. However, the validation team has not received all invitation letters yet. <u>Corrective Action Request 41:</u> Ecoinvest should submit all invitation letters to the validation team.	CAR 41	
E.1.2. Have appropriate media been used to invite comments by local stakeholders?	1,2	The letters have been sent by postal to the stakeholders.	p	
E.1.3. If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	1,2	The Brazilian DNA gives guidance how the local stakeholder process has to be conducted. The validation team may confirm that the process has been performed as required.	p	

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E.1.4. Is the undertaken stakeholder process that was carried out described in a complete and transparent manner?	1,2	Yes. The undertaken stakeholder process is described in a complete and transparent manner.	p	
E.2.Summary of the comments received				
E.2.1. Is a summary of the received stakeholder comments provided?	1,2	Yes.	p	
E.3.Report on how due account was taken of any comments received				
E.3.1. Has due account been taken of any stakeholder comments received?	1,2	Only positive comments have been received. No negative comments.	p	
F. Annexes 1 - 4				
F.1.Annex 1: Contact Information				
F.1.1. Is the information provided consistent with the one given under section A.3?	2	Yes. The information provided in Annex 1 is consistent with the one given under section A.3.	p	
F.1.2. Is the information on all private participants and directly involved Parties presented?	2	Yes. All information on all project participants is presented.	p	
F.2.Annex 2: Information regarding public funding				
F.2.1. Is the information provided on the inclusion of public funding (if any) in consistency with the actual situation presented by	2	Yes. All information is consistent.	p	

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the project participants?				
F.2.2. If necessary: Is an affirmation available that any such funding from Annex-I- countries does not result in a diversion of ODA?	---	Not applicable, as no funding involved.	p	
F.3. Annex 3: Baseline information				
F.3.1. If additional background information on baseline data is provided: Is this information consistent with data presented by other sections of the PDD?	---	Not applicable, as no additional information provided.	p	
F.3.2. Is the data provided verifiable? Has sufficient evidence been provided to the validation team?	---	Not applicable, See F.3.1.	p	
F.3.3. Does the additional information substantiate / support statements given in other sections of the PDD?	---	Not applicable, See F.3.1.	p	
F.4. Annex 4: Monitoring information				
F.4.1. If additional background information on monitoring is provided: Is this information consistent with data presented in other sections of the PDD?	---	Not applicable, as no additional information provided.	p	
F.4.2. Is the information provided verifi-	---	Not applicable, See F.4.1.	p	

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able? Has sufficient evidence been provided to the validation team?				
F.4.3. Do the additional information and / or documented procedures substantiate / support statements given in other sections of the PDD?	---	Not applicable, See F.4.1.	p	

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Table 1b Conformity of Project Activity and PDD (Second Global Stakeholder Consultation Process)				
CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
A. General description of small-scale project activity				
A.1. Title of the small-scale project activity				
A.1.1. Does the used project title clearly enable to identify the unique CDM activity?	42	Yes. The used project title clearly enables to identify the unique CDM activity.	p	p
A.1.2. Are there any indication concerning the revision number and the date of the revision?	42	Yes. Version and its date of the PDD is given.	p	p
A.1.3. Is this consistent with the time line of the project's history?	1,42	Yes. It is consistent with the time line of the project's history.	p	p
A.2. Description of the small-scale project activity				
A.2.1. Is the description delivering a transparent overview of the project activities?	1,42	Yes. The description is delivering a transparent overview of the project activities.	p	p
A.2.2. What proofs are available demonstrating that the project description is in compliance with the actual situation or planning?	1,3,31,40,42	<p>-Aneel authorization N° 115, issued on April 05, 2001 has been presented to the validation team;</p> <p>-ANEEL Resolution nº. 2386, from 27.07.2007 (installed capacity 11,6 MW and size of reservoir 0,6439 km2)</p> <p>-Installation license N° 258/2007"LI_SEIII from 10.08.2007. This Installation license refers to an installed capacity of 6.5 MW. However, it was already asked by RIALMA (see letter on October 10, 2007) for the retification of this License to an installed capacity of 11.6 MW. The receipt of that letter was already confirmed by the environmental authority AGMA.</p> <p>As the size of the reservoir will not change due to the increase of the installed capacity and ANEEL has already authorized the ca-</p>	p	p

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		capacity increase, the validation team accepts the given installation license for validation purposes.		
A.2.3. Is the information provided by these proofs consistent with the information provided by the PDD?	1,3, 31, 40, 42	Yes. The information provided by these proofs is consistent with the information provided by the PDD. It was requested to increase the installed capacity in the Installation license. See information in A.2.2.	p	p
A.2.4. Is all information presented consistent with details provided by further chapters of the PDD?	42	Yes. All information presented is consistent with details provided by further chapters of the PDD.	p	p
A.2.5. Does the description of the technology to be applied provide sufficient and transparent input to evaluate its impact on the greenhouse gas balance?	1,42, 4,7, 10	Yes. The description of the technology to be applied provide sufficient and transparent input to evaluate its impact on the greenhouse gas balance.	p	p
A.2.6. Is the brief explanation how the project will reduce greenhouse gas emission transparent and suitable?	42	Yes. The brief explanation how the project will reduce greenhouse gas emission is transparent and suitable.	p	p
A.3. Project participants				
A.3.1. Is the form required for the indication of project participants correctly applied?	42	Yes. The form required for the indication of project participants is correctly applied.	p	p
A.3.2. Is the participation of the listed entities or Parties confirmed by each one of them?	1,42, 39	The participation of the listed entities is confirmed by each of them.	p	p
A.3.3. Is all information on participants / Parties provided in consistency with details provided by further chapters of the PDD (in par-	1,42, 8,11,	Yes. All information regarding project participants is consistent. Rialma Companhia Energetica III S.A. is owner of the project. The transfer of the entity from Rialma Companhia Energetica S.A. to	p	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
tical annex 1)?	12	Rialma Companhia Energetica III S.A. is juridically documented (document has been presented to the validation team). It is still missing the change of the company title by ANEEL. This is scheduled to happen in April 2007. The change from Rialma S.A. – Centrais Eletricas Rio das Almas to Rialma Companhia Energetica S.A. has been documented by ANEEL resolution N°007, from January, 12, 2004.		
A.4. Technical description of the small-scale project activity				
<i>A.4.1. Location of the small-scale project activity</i>				
A.4.1.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)?	1,42, 9	Yes. The information provided on the location of the project activity allows for a clear identification of the site. GPS coordinates of dam and powerhouse are given.	p	p
A.4.1.2. How is it ensured and/or demonstrated, that the project proponents can implement the project at this site (ownership, licenses, contracts etc.)?	1,42, 26, 35	The documents Escritura SE III Juarez" and "contrato social Rialma III" evidence the ownership of the land where the project activity will be implemented.	p	p
<i>A.4.2. Type and category(ies) and technology/measure of the small-scale project activity</i>				
A.4.2.1. To which type(s) does the project activity belong to? Is the type correctly identified and indicated?	42	The project belongs to Type 1: Renewable energy projects The type is correctly identified and indicated.	p	p
A.4.2.2. To which category (ies) does the project activity belong to? Is the category correctly identified and indicated?	42	Category I.D. – Renewable energy generation for a grid. The category is correctly identified and indicated.	p	p

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A.4.2.3. Does the technical design of the project activity reflect current good practices?	42	Yes.	p	p
A.4.2.4. Does the implementation of the project activity require any technology transfer from Annex-I-countries to the host country (ies)?	1,42, 4,7, 10	It is no technology transfer from Annex-I-countries necessary.	p	p
A.4.2.5. Is the technology implemented by the project activity environmentally safe?	1,42, 4,7, 10	The project technology is already used in other projects in the host country. It is regarded as environmentally safe.	p	p
A.4.2.6. Is the information provided in compliance with actual situation or planning?	1,42, 4,7, 10	The information is provided in compliance with actual situation or planning.	p	p
A.4.2.7. Does the project use state of the art technology and / or does the technology result in a significantly better performance than any commonly used technologies in the host country?	1,42, 4,7, 10	The project uses state of the art technology, already used in several other projects in the host country.	p	p
A.4.2.8. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	1,42, 4,7, 10	No. The project technology will not be substituted by other or more efficient technologies within the project period.	p	p
A.4.2.9. Does the project require extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period?	1,42	The project requires some initial training and maintenance efforts. However, such documentation is not available yet, as the hydro-plant has not entered into operation yet. However, training and maintenance documents may be provided for the projects of Santa Edwiges I + II. Such documents will give	p	p

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		a good idea how training and maintenance will look like in the case of Santa Edwiges III. The DOE accepts it for validation purposes.		
A.4.2.10. Is information available on the demand and requirements for training and maintenance?	1,42	Yes. Information is available on the demand and requirements for training and maintenance efforts from the hydro-plants S. Edwiges I + II. Demand and requirements for training and maintenance will be very similar for hydro-plant S. Edwiges III.	p	p
A.4.2.11. Is a schedule available for the implementation of the project and are there any risks for delays?	1,42, 6	A time schedule was presented during the on-site audit. However, it is not included in the PDD. <u>Corrective Action Request 51:</u> A time schedule for the implementation of the project activity should be included in the PDD.	CAR 51	p
A.4.3. Estimated amount of emission reductions over the chosen crediting period				
A.4.3.1. Is the form required for the indication of projected emission reductions correctly applied?	42	Yes. The form required for the indication of projected emission reductions is correctly applied.	p	p
A.4.3.2. Are the figures provided consistent with other data presented in the PDD?	42	Yes. The figures provided are consistent with other data presented in the PDD.	p	p
A.4.3.3. Are the figures consistent with the small-scale criteria for the used Type?	42, 43	Yes. The figures are consistent with the small-scale criteria for the used Type.	p	p
A.4.4. Public funding of the small-scale project activity				
A.4.4.1. Is the information provided on public funding provided in compliance with the ac-	1,42	Yes. The information provided on public funding is in compliance with the actual situation or planning as available by the project	p	p

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tual situation or planning as available by the project participants?		participants. No public funding is involved.												
A.4.4.2. Is all information provided consistent with the details given in remaining chapters of the PDD (in particular annex 2)?	1,42	Yes. All information provided is consistent with the details given in remaining chapters of the PDD.	p	p										
A.4.5. Confirmation that the small-scale project activity is not a debundled component of a large scale project activity														
A.4.5.1. Is there a registered small-scale CDM project activity or an application to register another small-scale CDM project activity: with the following characteristics:	1,42, 9	<div>The SSC project activity is not a debundled component of a large scale project activity. The same two project participants are not involved in another CDM activity in the host country.</div> <div>Santa Edwiges III distance to S. Edwiges I is 12,2, km and to S. Edwiges II 10,6 km (as base are taken the dams of each hydro-powerplant). Map about locations has been submitted to the validation team.</div> <table><tr><td>Debundling checklist</td><td>Yes / No</td></tr><tr><td>the same project participants?</td><td>No</td></tr><tr><td>In the same project category and technology/measure?</td><td>No</td></tr><tr><td>Registered within previous two years? Or in registration process?</td><td>No</td></tr><tr><td>Whose boundary is within 1 km of the project boundary of the small scale project activity under consideration?</td><td>No</td></tr></table>	Debundling checklist	Yes / No	the same project participants?	No	In the same project category and technology/measure?	No	Registered within previous two years? Or in registration process?	No	Whose boundary is within 1 km of the project boundary of the small scale project activity under consideration?	No	p	p
Debundling checklist	Yes / No													
the same project participants?	No													
In the same project category and technology/measure?	No													
Registered within previous two years? Or in registration process?	No													
Whose boundary is within 1 km of the project boundary of the small scale project activity under consideration?	No													
A.4.5.2. If the answer to all the above question is ‘Yes’ then does the total size of the small scale project activity combined with pre-	---	Not applicable, See A.4.5.1.	p	p										

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viously registered small scale CDM project activity exceeds the limits of small scale CDM project activities?												
B. Application of a baseline and monitoring methodology												
B.1. Title and reference of the approved baseline and monitoring methodology applied to the small-scale project activity												
B.1.1.1.Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	42, 43	Everything indicated. Version 12 of AMS I.D. is used. However, the title of the methodology in the PDD is not exactly described as per the methodology. <u>Corrective Action Request 52:</u> The title of the methodology in the PDD should be exactly as per the methodology: “Grid connected renewable electricity generation”.	CAR 52	p								
B.1.1.2.Is the applied version the most recent one and / or is this version still applicable?	42, 43	Version 12 (July 27 th , 2007) of methodology I.D has been the most recent one at the time of GSP uploading of the PDD.	p	p								
B.2. Justification of the choice of the project category												
B.2.1. Is the applied methodology considered the most appropriate one?	42, 43	Yes. The applied methodology is considered to be the most appropriate one.	p	p								
B.2.1.1. Criterion 1: This category comprises renewable energy generation units, such as photovoltaics, hydro, tidal/wave, wind, geothermal and renewable biomass, that supply electricity to and/or displace electricity from an electricity	1,42	<table><tr><th>Applicability checklist</th><th>Yes / No / NA</th></tr><tr><td>Criterion discussed in the PDD?</td><td>No</td></tr><tr><td>Compliance provable?</td><td>No</td></tr><tr><td>Compliance verified?</td><td>No</td></tr></table>	Applicability checklist	Yes / No / NA	Criterion discussed in the PDD?	No	Compliance provable?	No	Compliance verified?	No	CAR 53	p
Applicability checklist	Yes / No / NA											
Criterion discussed in the PDD?	No											
Compliance provable?	No											
Compliance verified?	No											

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distribution system that is or would have been supplied by at least one fossil fuel fired generating unit.		<u>Corrective Action Request 53:</u> It should be clearly mentioned in B.2. of the PDD that electricity will be supplied to the South/Southeast/Midwest grid system. Thus, it will displace electricity generated by more and more thermal power plants.										
B.2.1.2. Criterion 2: If the unit added has both renewable and non-renewable components (e.g.. a wind/diesel unit), the eligibility limit of 15MW for a small-scale CDM project activity applies only to the renewable component. If the unit added co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15MW.	---	Not applicable <table><tr><td>Applicability checklist</td><td>Yes / No / NA</td></tr><tr><td>Criterion discussed in the PDD?</td><td>NA</td></tr><tr><td>Compliance provable?</td><td>NA</td></tr><tr><td>Compliance verified?</td><td>NA</td></tr></table>	Applicability checklist	Yes / No / NA	Criterion discussed in the PDD?	NA	Compliance provable?	NA	Compliance verified?	NA	p	p
Applicability checklist	Yes / No / NA											
Criterion discussed in the PDD?	NA											
Compliance provable?	NA											
Compliance verified?	NA											
B.2.1.3. Criterion 3: Combined heat and power (co-generation) systems that supply electricity to and/or displace electricity from a grid are not included in this category.	1,42	<table><tr><td>Applicability checklist</td><td>Yes / No / NA</td></tr><tr><td>Criterion discussed in the PDD?</td><td>No</td></tr><tr><td>Compliance provable?</td><td>No</td></tr><tr><td>Compliance verified?</td><td>No</td></tr></table> <u>Corrective Action Request 54:</u> B.2. of the PDD should inform that the project activity does not consist of a combined heat and power (co-generation) system.	Applicability checklist	Yes / No / NA	Criterion discussed in the PDD?	No	Compliance provable?	No	Compliance verified?	No	CAR 54	p
Applicability checklist	Yes / No / NA											
Criterion discussed in the PDD?	No											
Compliance provable?	No											
Compliance verified?	No											
B.2.1.4. Criterion 4: In the case of project ac-	---	Not applicable	p	p								

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tivities that involve the addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct from the existing units.			Applicability checklist			
			Criterion discussed in the PDD?			
			Compliance provable?			
			Compliance verified?			
B.2.1.5. Criterion 5: Project activities that seek to retrofit or modify an existing facility for renewable energy generation are included in this category. To qualify as a small scale project, the total output of the modified or retrofitted unit shall not exceed the limit of 15 MW.		---	Not applicable		p	p
			Applicability checklist			
			Criterion discussed in the PDD?			
			Compliance provable?			
			Compliance verified?			
B.2.1.6. If the project is under a programme of activities, have all the applicability criteria and additional requirements been considered according to the methodology?		---	Not applicable, as the project is not a programme under a programme of activities.		p	p
B.3. Description of the project boundary						
B.3.1.	Does the project boundary include physical, geographical site where the project activity takes place?	1,42	The project boundary includes the physical, geographical site where the project activity takes place and the South-Southeast-Midwest interconnected subsystem of the Brazilian grid		p	p

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B.3.2. Do the spatial and technological boundaries as verified on-site comply with the discussion provided by / indication included to the PDD?	1,42	Yes. The spatial and technological boundaries as verified on-site comply with the discussion provided by the PDD.	p	p
B.4. Description of baseline and its development				
B.4.1. Have all technically feasible baseline scenario alternatives to the project activity been identified and discussed by the PDD? Why can this list be considered as being complete?	1,42, 43, 24	In B.5. the PDD discuss the alternatives of the project activity. However, it should be clarified why alternatives like “the construction of fossil fuel thermal power plants” and “the construction of other renewable power plants” have not been considered. Clarification Request 7: The project participants should justify why alternatives like “the construction of fossil fuel thermal power plants” and “the construction of other renewable power plants” have not been considered in B.4. of the PDD. The PDD should inform.	CR 7	p
B.4.2. Does the project identify correctly and excludes those options not in line with regulatory or legal requirements?	1,42, 43, 24	See B.4.1.	CR 7	p
B.4.3. Have applicable regulatory or legal requirements been identified?	1,42, 43, 24	See B.4.1.	CR 7	p
B.4.4. Does the PDD identify the most likely baseline scenario in absence of the project activity?	1,42, 43,	The PDD identifies the most likely baseline scenario in absence of the project activity. This is the continuation of the current situation of electricity supplied by large hydro and thermal power stations.	p	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
	24			
B.4.5. Is this identification supported by official and/or verifiable documents (e.g. studies, web pages, certificates, etc)?	1,42, 32	Yes. The documents “Comentários Sobre o 4º Leilão de Energia Elétrica” and “Só energia térmica a óleo é vendida em leilão” prove that thermal power plants play a significant role in the Brazilian electricity mix.	p	p
B.4.6. Is the identified baseline scenario in line with regulatory or legal requirements?	1,42, 43, 24	Yes. The identified baseline scenario is in line with regulatory or legal requirements.	p	p
B.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered small-scale CDM project activity:				
If the additionality tool has been used please answer B.5.1 to B.5.13				
B.5.1. Has CDM been considered before the starting date of the project activity? What kind of evidences are available?	1,24, 42,	<u>Corrective Action Request 55:</u> 1. Project participants are requested to submit an evidence that CDM has been considered before purchase of the main equipment (turbines, generators). 2. The purchase contract has to be submitted to the validation team.	CAR 55	p
B.5.2. In case of applying step 2 / investment analysis of the additionality tool: Is the analysis method identified appropriately (step 2a)?	1,24, 27, 28, 36, 37, 42,	<u>Corrective Action Request 56:</u> It has to be explained in the PDD why the benchmark analysis is applied and not the simple cost analysis or investment comparison analysis.	CAR 56	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
B.5.3. In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than CDM income?	1,24, 27, 28, 36, 37, 42,	Not applicable.	p	p
B.5.4. In case of Option II (investment comparison analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	1,24, 27, 28, 36, 37, 42	Not applicable.	p	p
B.5.5. In case of Option III (benchmark analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	1,24, 27, 28, 36, 37, 42,	<p>The IRR is applied as financial indicator. The IRR calculation has been verified and is correct. However, it is not clear why the IRR calculation has been conducted for only 12 years.</p> <p>Clarification Request 8:</p> <p>Project participants should justify why the IRR calculation was done for only and exactly 12 years. The crediting period is 3 x 7 years and the operational lifetime 30 years, i.e. IRR calculation should be actually done for at least 21 years.</p> <p>Corrective Action Request 57:</p> <p>Regarding the WACC formula (with real numbers): $WACC = [(17.5\% \times (1 - 17\%) \times 67.51\% + (23.3\%p.a. \times 32.49\%)] = 17.4\%p.a.$</p>	CR 8 CAR 57	p

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B.5.6. In case of Option II or Option III: Is the calculation of financial figures for this indicator correctly done for all alternatives and the project activity?	1,24, 27, 28, 36, 37, 42,	See B.5.5.	CR 8 CAR 57	p
B.5.7. In case of Option II or Option III: Is the analysis presented in a transparent manner including publicly available proofs for the utilized data?	1,24, 27, 28, 36, 37, 42,	Yes. The analysis is presented in a transparent manner including publicly available proofs for the utilized data.	p	p
B.5.8. In case of applying step 3 (barrier analysis) of the additionality tool: Is a complete list of barriers developed that prevent the different alternatives to occur?	1,24, 27, 28, 36, 37, 42,	<p>The PDD mentions investment and institutional barriers.</p> <p><u>Corrective Action Request 58:</u></p> <p>1. Investment barriers as defined per the additionality tool have not been existent in Brazil at the time of investment decision of S. Edwiges III. Private capital is available in domestic markets, even though access to funds is difficult. Brazil's credit rating was upgraded and is quite high nowadays.</p> <p>Besides, it is not the reality that all similar activities have only been implemented with grants or other non-commercial financial terms. Thus, the investment barrier analysis should be taken out or updated in a way that it reflects the reality. In the latter case clear evidences of investment barriers should be submitted to the validation team.</p>	CAR 58	p

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		2. Institutional barriers should be updated as they refer to the time between 1995-2004. Please refer to the time when the real investment decision took place (we may consider it, when the purchase contracts of the main equipment were signed). It should be evidenced that at the time of the purchase contracts high volatility of electricity prices was given.		
B.5.9. In case of applying step 3 (barrier analysis): Is transparent and documented evidence provided on the existence and significance of these barriers?	1,24, 27, 28, 36, 37, 42,	B.5.8.	CAR 58	p
B.5.10. In case of applying step 3 (barrier analysis): Is it transparently shown that the execution of at least one of the alternatives is not prevented by the identified barriers?	1,24, 27, 28, 36, 37, 42,	Sub-step 3b) shows that the identified barriers do not prevent the continuation of the current situation (status-quo), that means electricity supplied by large hydro and thermal power plants of the S-SE-CO grid.	p	p
B.5.11. Have other activities in the host country / region similar to the project activity been identified and are these activities appropriately analyzed by the PDD (step 4a)?	1,24, 27, 28, 36, 37, 38	Corrective Action Request 59: 1. The common practice analysis may not be accepted as it is conducted, as it considers only small hydro plants from 2004 in the analysis. The additionality tool clearly mentions that the analysis should include activities implemented or currently underway that are similar to the project activity, and that means all activities and not only for some years.	CAR 59	p

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	42,	2. Besides, it is recommended to project participants to conduct the common practice analysis for the region (State or grid region) where the project activity takes place. The choice for a certain region should be justified. 3. 4a) and 4) should be answered separately.		
B.5.12. If similar activities are occurring: Is it demonstrated that in spite of these similarities the project activity would not be implemented without the CDM component (step 4b)? How?	1,24, 27, 28, 36, 37, 38 42,	See B.5.11.	CAR 59	p
B.5.13. Is it appropriately explained how the approval of the project activity will help to overcome the economic and financial hurdles or other identified barriers?	1,24, 42	Project participants decided not to explain how the approval of the project activity will help to overcome the economic and financial hurdles or identified barriers. As this step is not obligatory anymore according to the additional-ity tool, the validation team may accept it.	p	p
If the additionality tool has not been used please answer B.5.14 to B.5.19				
B.5.14. If the starting date of the project activity is before the date of validation, is evidence available to prove that incentive from the CDM was seriously considered in the decision to proceed with the project activity?	---	B.5.13 to B.5.18 not applicable as additionality tool is used.	p	p

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B.5.15.	Is a complete list of barriers developed that prevents the project activity to occur?	---	N/A			p	p
B.5.16.	Does this list include at least one of the following barriers?	---	N/A			p	p
			Barrier	Discussed?	Verifiable?		
			Investment				
			Technological				
			Due to prevailing practice				
			Other				
B.5.17.	Does the discussion sufficiently take into account relevant national and/or sectoral policies?	---	N/A			p	p
B.5.18.	Is transparent and documented evidence provided on the existence and significance of these barriers?	---	N/A			p	p
B.5.19.	Is it appropriately explained how the approval of the project activity will help to overcome the identified barriers?	---	N/A			p	p
B.6. Emissions reductions							
B.6.1. Explanation of methodological choices							
B.6.1.1.	Is it explained how the procedures provided in the methodology are applied by the proposed project activity?	1,42, 17 43,	The procedures provided in the methodology are applied by the proposed project activity.			p	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD						
	19									
B.6.1.2. Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?	42, 17, 43, 19	Yes.	p	p						
Determination of project emissions (Comment on any line answered “No”)										
B.6.1.3. Component 1: emissions from use of fossil fuel		<div>Corrective Action Request 60: The PDD should explicitly mention that there are no emissions from use of fossil fuels.</div> <table><tr><td>Project emission checklist</td><td>Yes / No</td></tr><tr><td>Component discussed in the PDD?</td><td>No</td></tr><tr><td>Formulae correctly applied?</td><td>No</td></tr></table>	Project emission checklist	Yes / No	Component discussed in the PDD?	No	Formulae correctly applied?	No	CAR 60	p
Project emission checklist	Yes / No									
Component discussed in the PDD?	No									
Formulae correctly applied?	No									
B.6.1.4. Are the formulae required for the determination of baseline emissions correctly presented, enabling a complete identification of parameters to be used and / or monitored?	1,42, 17, 43, 19	Yes. The formulae required for the determination of baseline emissions are correctly presented.	p	p						
B.6.1.5. Are the formulae required for the determination of leakage emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	---	The project activity does not cause any leakage emissions, thus B.6.1.5. not applicable.	p	p						

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																		
B.6.1.6. Are the formulae required for the determination of emission reductions correctly presented?	1,42, 17, 43, 19	Yes. The formulae required for the determination of emission reductions are correctly presented.	p	p																		
B.6.2. Data and parameters that are available at validation																						
B.6.2.1. Is the list of parameters presented in chapter B.6.2 considered to be complete with regard to the requirements of the applied methodology?	1,19, 42, 43	The list of parameters presented in chapter B.6.2. is considered to be complete.	p	p																		
Comment on any line answered with “No”. Add additional parameters used for the calculation of the grid factors if necessary.																						
B.6.2.2. Parameter Title: Annual electricity supplied to the grid prior to retrofit (applicable only for retrofit and modification activities)	1,19, 42, 43	Not applicable. <table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr><tr><td>Choice of data correctly justified?</td><td></td></tr><tr><td>Measurement method correctly described?</td><td></td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided?		Has this value been verified?		Choice of data correctly justified?		Measurement method correctly described?		p	p
Data Checklist	Yes / No																					
Title in line with methodology?																						
Data unit correctly expressed?																						
Appropriate description of parameter?																						
Source clearly referenced?																						
Correct value provided?																						
Has this value been verified?																						
Choice of data correctly justified?																						
Measurement method correctly described?																						

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP	Final PDD																		
B.6.2.3. Parameter Title: Emission factor of the grid (CM)	1,19, 42, 43	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>		Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	p	p
Data Checklist	Yes / No																						
Title in line with methodology?	Yes																						
Data unit correctly expressed?	Yes																						
Appropriate description of parameter?	Yes																						
Source clearly referenced?	Yes																						
Correct value provided?	Yes																						
Has this value been verified?	Yes																						
Choice of data correctly justified?	Yes																						
Measurement method correctly described?	Yes																						
B.6.2.4. Parameter Title: Operating margin (OM) emission factor of the grid	1,19, 42, 43	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr></table>		Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description?	Yes	Source clearly referenced?	Yes	p	p								
Data Checklist	Yes / No																						
Title in line with methodology?	Yes																						
Data unit correctly expressed?	Yes																						
Appropriate description?	Yes																						
Source clearly referenced?	Yes																						

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP	Final PDD																		
		Correct value provided?	Yes																				
		Has this value been verified?	Yes																				
		Choice of data correctly justified?	Yes																				
		Measurement method correctly described?	Yes																				
B.6.2.5. Parameter Title: Build margin (BM) emission factor of the grid	1,19, 42, 43	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>		Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	p	p
Data Checklist	Yes / No																						
Title in line with methodology?	Yes																						
Data unit correctly expressed?	Yes																						
Appropriate description of parameter?	Yes																						
Source clearly referenced?	Yes																						
Correct value provided?	Yes																						
Has this value been verified?	Yes																						
Choice of data correctly justified?	Yes																						
Measurement method correctly described?	Yes																						
B.6.2.6. Parameter Title: fuel consumption of each power source	1,19, 42,			p	p																		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP	Final PDD
	43	Data Checklist	Yes / No		
		Title in line with methodology?	Yes		
		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	Yes		
		Source clearly referenced?	Yes		
		Correct value provided?	Yes		
		Has this value been verified?	Yes		
		Choice of data correctly justified?	Yes		
		Measurement method correctly described?	Yes		
B.6.2.7. Parameter Title: emission coefficient of each fuel	1,19, 42, 43	Data Checklist	Yes / No	p	p
		Title in line with methodology?	Yes		
		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	Yes		
		Source clearly referenced?	Yes		
		Correct value provided?	Yes		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP	Final PDD
		Has this value been verified?	Yes		
		Choice of data correctly justified?	Yes		
		Measurement method correctly described?	Yes		
B.6.2.8. Parameter Title: electricity generation of each power source	1,19, 42, 43	Data Checklist	Yes / No	p	p
		Title in line with methodology?	Yes		
		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	Yes		
		Source clearly referenced?	Yes		
		Correct value provided?	Yes		
		Has this value been verified?	Yes		
		Choice of data correctly justified?	Yes		
		Measurement method correctly described?	Yes		
B.6.2.9. Parameter Title: surface area of full reservoir level (for new hydroelectric activities only)	1,19, 42, 43	Data Checklist	Yes / No	p	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP	Final PDD																
		Title in line with methodology?	Yes																		
		Data unit correctly expressed?	Yes																		
		Appropriate description of parameter?	Yes																		
		Source clearly referenced?	Yes																		
		Correct value provided?	Yes																		
		Has this value been verified?	Yes																		
		Choice of data correctly justified?	Yes																		
		Measurement method correctly described?	Yes																		
B.6.2.10. Parameter Title: fraction of time with low costs /must run plant at the margin (for simple adjusted OM only)	1,19, 42, 43	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr></table>		Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	p	p
Data Checklist	Yes / No																				
Title in line with methodology?	Yes																				
Data unit correctly expressed?	Yes																				
Appropriate description of parameter?	Yes																				
Source clearly referenced?	Yes																				
Correct value provided?	Yes																				
Has this value been verified?	Yes																				
Choice of data correctly justified?	Yes																				

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PPD in GSP	Final PDD																		
		<table><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>		Measurement method correctly described?	Yes																		
Measurement method correctly described?	Yes																						
B.6.2.11. Parameter Title: electricity imports	1,19, 42, 43	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>		Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	p	p
Data Checklist	Yes / No																						
Title in line with methodology?	Yes																						
Data unit correctly expressed?	Yes																						
Appropriate description of parameter?	Yes																						
Source clearly referenced?	Yes																						
Correct value provided?	Yes																						
Has this value been verified?	Yes																						
Choice of data correctly justified?	Yes																						
Measurement method correctly described?	Yes																						
B.6.2.12. Parameter Title: CO ₂ emission coefficient of fuels used in connected grids	1,42, 17, 43, 19	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr></table>		Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	p	p												
Data Checklist	Yes / No																						
Title in line with methodology?	Yes																						
Data unit correctly expressed?	Yes																						

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		Appropriate description of parameter?		Yes		
		Source clearly referenced?		Yes		
		Correct value provided?		Yes		
		Has this value been verified?		Yes		
		Choice of data correctly justified?		Yes		
		Measurement method correctly described?		Yes		
B.6.3. Ex-ante calculation of emission reductions						
B.6.3.1. Is the projection based on the same procedures as used for future monitoring? What kind of procedure is used?	1,42, 17, 43, 19	Yes. The projection is based on the same procedures as used for future monitoring.			p	p
B.6.3.2. Are the GHG calculations documented in a complete and transparent manner?	1,42, 17, 43, 19	Yes. The GHG calculations are documented in a complete and transparent manner.			p	p
B.6.3.3. If there is more than one component of the project activity, then, are emission reduc-	---	Not applicable, as the project activity consists only of one compo-			p	p
		nent.				

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
tion calculations provided separately for each component?				
B.6.3.4. Is the data provided in this section consistent with data as presented in other chapters of the PDD?	1,42, 17, 43, 19	Yes. Data provided in this section is consistent with data as presented in other chapters of the PDD.	p	p
B.6.4. Summary of the ex-ante estimation of emission reductions				
B.6.4.1. Will the project result in fewer GHG emissions than the baseline scenario?	1,42, 17, 43, 19	Yes. The project will result in fewer GHG emissions than in the baseline scenario.	p	p
B.6.4.2. Is the form/table required for the indication of projected emission reductions correctly applied?	1,42, 17, 43, 19	Yes. The table required for the indication of projected emission reductions is correctly applied.	p	p
B.6.4.3. If the project activity involves more than one component, is separate table included for each of the component.	---	Not applicable.	p	p
B.6.4.4. Do these values comply with small-scale criteria for every year?	1,42, 17, 43, 19	Yes.	p	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
B.6.4.5. Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	1,6, 29, 42	Yes. The projection is in line with the envisioned time schedule for the project's implementation and the indicated crediting period.	p	p
B.6.4.6. Is the data provided in this section in consistency with data as presented in other chapters of the PDD?	42	Yes. The data provided in this section is in consistency with data as presented in other chapters of the PDD.	p	p
B.7. Application of the monitoring methodology and description of the monitoring plan				
B.7.1. Data and parameters monitored				
B.7.1.1. Is the list of parameters presented in chapter B.7.1 considered to be complete with regard to the requirements of the applied methodology?	1,42, 17, 43 19	The list of parameters presented in chapter B.7.1. is considered to be complete.	p	p
Comment on any line answered with "No"				
I. Parameter Title: Electricity generated by the renewable technology	1,42, 43	<u>Corrective Action Request 61:</u> Regarding the parameter "Electricity generated by the renewable technology": 1. The description should provide information whether the parameter refers to net (after having discounted internal consumption) or gross electricity generated. How is internal electricity consumption considered in the calculation? 2. The value has been changed from 79,063 MWh to 83,376 MWh. It should be explained why this modification and submitted evidence about the applied figure and it should be proven that the capacity factor is 0.82.	CAR 61	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD																								
		<div>3. The parameter should refer to standards.</div> <div>4. Accuracy of the flow meters should be exactly indicated.</div> <div>5. QA/QC procedures should be explained in more detail: Is there intended to do cross-checking via invoices?</div> <table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided for estimation?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr><tr><td>Correct reference to standards?</td><td>No</td></tr><tr><td>Indication of accuracy provided?</td><td>No</td></tr><tr><td>QA/QC procedures described?</td><td>No</td></tr><tr><td>QA/QC procedures appropriate?</td><td>No</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	No	Source clearly referenced?	Yes	Correct value provided for estimation?	No	Has this value been verified?	No	Measurement method correctly described?	Yes	Correct reference to standards?	No	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No		
Monitoring Checklist	Yes / No																											
Title in line with methodology?	Yes																											
Data unit correctly expressed?	Yes																											
Appropriate description of parameter?	No																											
Source clearly referenced?	Yes																											
Correct value provided for estimation?	No																											
Has this value been verified?	No																											
Measurement method correctly described?	Yes																											
Correct reference to standards?	No																											
Indication of accuracy provided?	No																											
QA/QC procedures described?	No																											
QA/QC procedures appropriate?	No																											
II. Amount of biomass input (if applicable)	----	<div>Not applicable.</div> <table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td></td></tr><tr><td>Data unit correctly expressed?</td><td></td></tr><tr><td>Appropriate description of parameter?</td><td></td></tr><tr><td>Source clearly referenced?</td><td></td></tr><tr><td>Correct value provided for estimation?</td><td></td></tr><tr><td>Has this value been verified?</td><td></td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?		Data unit correctly expressed?		Appropriate description of parameter?		Source clearly referenced?		Correct value provided for estimation?		Has this value been verified?		p	p										
Monitoring Checklist	Yes / No																											
Title in line with methodology?																												
Data unit correctly expressed?																												
Appropriate description of parameter?																												
Source clearly referenced?																												
Correct value provided for estimation?																												
Has this value been verified?																												

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS			PPD in GSP
		Measurement method correctly described?			
		Correct reference to standards?			
		Indication of accuracy provided?			
		QA/QC procedures described?			
		QA/QC procedures appropriate?			
III. Amount of fossil fuel (if applicable)	-----	Not applicable.			p
		Monitoring Checklist	Yes / No		
		Title in line with methodology?			
		Data unit correctly expressed?			
		Appropriate description of parameter?			
		Source clearly referenced?			
		Correct value provided for estimation?			
		Has this value been verified?			
		Measurement method correctly described?			
		Correct reference to standards?			
		Indication of accuracy provided?			
		QA/QC procedures described?			
		QA/QC procedures appropriate?			
B.7.2. Description of the monitoring plan					
B.7.2.1. Is the operational and management structure clearly described and in compliance	1,42	Corrective Action Request 62: There should be included a diagram (organigram) of the opera-			CAR 62

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with the envisioned situation?		tional and management structure of the project activity.		
B.7.2.2. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	1,42	Yes. Yes. Rialma Companhia Energética III S.A. is responsible for project management, registration, monitoring, measurement and reporting. However, archiving and back-up procedures are not explained in detail. <u>Corrective Action Request 63:</u> Project participants are requested to indicate archiving and back-up procedures in detail in Annex 4 of the PDD.	CAR 63	p
B.7.2.3. Does the monitoring plan provide current good monitoring practice?	1,42	See B.7.2.1. and B.7.2.2.	CAR 62 CAR 63	p
B.7.2.4. If applicable: Does annex 4 provide useful information enabling a better understanding of the envisioned monitoring provisions?	1,42	Annex 4 provides useful information enabling a better understanding of the envisioned monitoring provisions. However, see B.7.2.1. and B.7.2.2.	CAR 62 CAR 63	p
B.8. Date of completion of the application of the baseline study and monitoring methodology an the name of the responsible person(s)/entity(ies)				
B.8.1.1. Is there any indication of a date when the baseline was determined?	42	Yes. The baseline was completed on May, 26, 2006.	p	p
B.8.1.2. Has dd/mm/yyyy format been used to indicate the date.	42	Yes. The right format is given.	p	p

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B.8.1.3. Is this consistent with the time line of the PDD history?	42	Yes. It is consistent with the time line of the PDD history.	p	p
B.8.1.4. Is the information on the person(s) / entity (ies) responsible for the application of the baseline and monitoring methodology provided consistent with the actual situation?	42	Yes.	p	p
B.8.1.5. Is information provided whether this person / entity is also considered a project participant?	42	Yes. The entity who was responsible for the determination of the baseline is considered as project participant.	p	p
C. Duration of the project activity / crediting period				
C.1. Duration of the project activity				
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable? Is it the earliest date of construction, implementation or real action?	1,42	The project's starting date has been changed in the PDD (version 8) by the project participants. <u>Corrective Action Request 64:</u> It should be provided evidence for the project's starting date (10/01/2007).	CAR 64	p
C.2. Choice of the crediting period and related information				
C.2.1. Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?	1,42	The assumed crediting time is clearly defined and reasonable. It is applied a renewable crediting period of 7 years.	p	p
C.2.2. Has dd/mm/yyyy format been used to indicate the start date of the crediting period.	42	Yes. It has been chosen 01/07/2008 as start of the crediting period.	p	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
D. Environmental impacts				
D.1. If required by the host Party, documentation on the analysis of the environmental impacts of the project activity:				
D.1.1. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, has an EIA been approved? If yes answer also D.1.2 to D.1.4	1,42, 5,7, 14, 16, 31	An Environmental Impact Assessment is required by the legislation of Goiás. Such a EIA has been presented to the validation team. In the EIA (2001) appears the installed capacity with 6,5 MW (page 54); 2005 research showed that the capacity may be increased. In the meantime ANEEL has already authorized an increase of the installed capacity to 11.6 MW (modification of the basic project where it is stated with 6,5 MW) and size of the reservoir of 0.6439 km ² (Resolution n°. 2386, from 27.07.2007).	p	p
D.1.2. Has the analysis of the environmental impacts of the project activity been sufficiently described?	1,7, 42	The impacts are not described in the PDD yet. <u>Corrective Action Request 65:</u> The PDD should mention the main environmental impacts (resulting from the EIA) due to the project activity.	CAR 65	p
D.1.3. Will the project create any adverse environmental effects?	1,7, 42	The project will not create any adverse environmental effects.	p	p
D.1.4. Were transboundary environmental impacts identified in the analysis?	1,7, 42,	There are no transboundary environmental impacts involved with the project activity.	p	p
D.2. If environmental impacts are considered significant by the project participants or the host Party, please provide conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party				
D.2.1. Have the identified environmental impacts	1,7,	See D.1.2.	CAR	p

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been addressed in the project design sufficiently?	42		65	
D.2.2. Does the project comply with environmental legislation in the host country?	1,7, 40 42	The project complies with the environmental legislation in the host country. It was presented the installation license N° 258/2007“LI_SEIII from 10.08.2007. This Installation license refers to an installed capacity of 6.5 MW. However, it was already asked by RIALMA (see letter on October 10, 2007) for the retification of this License to an installed capacity of 11.6 MW. The receipt of that letter was already confirmed by the environmental authority AGMA.	p	p
E. Stakeholders' comments				
E.1. Brief description how comments by local stakeholders have been invited and compiled				
E.1.1. Have relevant stakeholders been consulted?	1,42, 44	Yes. Relevant stakeholders have been consulted. All invitation letters have been presented to the validation team.	p	p
E.1.2. Have appropriate media been used to invite comments by local stakeholders?	1,42, 44	The letters have been sent by postal to the stakeholders.	p	p
E.1.3. If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	1,42, 44	The Brazilian DNA gives guidance how the local stakeholder process has to be conducted. The validation team confirms that the process has been performed as required.	p	p
E.1.4. Is the undertaken stakeholder process that was carried out described in a complete and transparent manner?	1,42, 44	Yes. The undertaken stakeholder process is described in a complete and transparent manner.	p	p

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
E.2.Summary of the comments received				
E.2.1. Is a summary of the received stakeholder comments provided?	1,42	Yes.	p	p
E.3.Report on how due account was taken of any comments received				
E.3.1. Has due account been taken of any stakeholder comments received?	1,42	Only positive comments have been received. No negative comments.	p	p
F. Annexes 1 - 4				
F.1.Annex 1: Contact Information				
F.1.1. Is the information provided consistent with the one given under section A.3?	42	Yes. The information provided in Annex 1 is consistent with the one given under section A.3.	p	p
F.1.2. Is the information on all private participants and directly involved Parties presented?	42	Yes. All information on all project participants is presented.	p	p
F.2.Annex 2: Information regarding public funding				
F.2.1. Is the information provided on the inclusion of public funding (if any) in consistency with the actual situation presented by the project participants?	42	Yes. All information is consistent.	p	p
F.2.2. If necessary: Is an affirmation available that any such funding from Annex-I-countries does not result in a diversion of ODA?	---	Not applicable, as no funding involved.	p	p
F.3.Annex 3: Baseline information				
F.3.1. If additional background information on base-	---	Not applicable, as no additional information provided.	p	p

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Table 1b Conformity of Project Activity and PDD (Second Global Stakeholder Consultation Process)				
CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PPD in GSP	Final PDD
line data is provided: Is this information consistent with data presented by other sections of the PDD?				
F.3.2. Is the data provided verifiable? Has sufficient evidence been provided to the validation team?	---	Not applicable, See F.3.1.	p	p
F.3.3. Does the additional information substantiate / support statements given in other sections of the PDD?	---	Not applicable, See F.3.1.	p	p
F.4. Annex 4: Monitoring information				
F.4.1. If additional background information on monitoring is provided: Is this information consistent with data presented in other sections of the PDD?	1,42	Yes. The information provided in Annex 4 is consistent with the information provided in B.7.2. of the PDD.	p	p
F.4.2. Is the information provided verifiable? Has sufficient evidence been provided to the validation team?	1,42	<u>Corrective Action Request 66:</u> A monitoring manual or any other written document explaining how monitoring will look like, who is responsible for what and which monitoring instruments will be used, should be submitted to the validation team.	CAR 66	p
F.4.3. Do the additional information and / or documented procedures substantiate / support statements given in other sections of the PDD?	1,42	The information provided in Annex 4 substantiates the information given in other sections of the PDD. However, see B.7.2.1., B.7.2.2. and F.4.2..	CAR 62 CAR 63 CAR 66	p

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Table 2 Resolution of Corrective Action and Clarification Requests

Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team Conclusion
<u>Corrective Action Requests</u>			
<u>Corrective Action Request 1:</u> It should be presented a valid environmental installation licence or at least a protocol (referring to process 5601.1717/2001-1) showing the request for renewal of the installation licence.	Table 1a, A.2.2.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 2:</u> 1. Some more specifications of the generators should be indicated in the PDD like model (SPA 1250) and execution system: Brushless. For turbines the nominal rotation and nominal outflow should be mentioned. 2. Total installed power and annual average flow-rate of the river should be mentioned in the PDD at Table 2 “Specifications of the equipment”. Documented references should be indicated. 3. The nominal power values for turbines and generators should be revised in the PDD by Ecoinvest. They should be consistent with the values indicated on-site: nominal power of turbines: 5,827 KW, nominal power for the generators: 6,300 kVA (see basic project document “Projeto basico”).	Table 1a, A.2.5.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p

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4. Water head indicated in the PDD should be revised. The basic project document ("Projeto basico") indicates 30,20m for gross waterfall and 29,00 m for net waterfall. 5. Information about flow-meter (model: ELO 8400) should be mentioned. Calibration information should be indicated as far as available.			
<u>Corrective Action Request 3:</u> A declaration should be provided by the project participants, explaining that the listed project entities participate (voluntarily) in the project activity Santa Edwiges III	Table 1a, A.3.2.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 4:</u> The access to the project site (exact address) should be indicated in the PDD.	Table 1a, A.4.1.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 5:</u> It should be submitted a document evidencing the ownership of the project site or proving the right to realize the project activity at the project site.	Table 1a, A.4.1.2.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 6:</u> Training and maintenance documents of already implemented projects Santa Edwiges I	Table 1a, A.4.2.9.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue

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+ II should be submitted to the validation team to get an idea how training and maintenance will look like in the case of Santa Edwiges III.			will be indicated in Table 1b. p
<u>Corrective Action Request 7:</u> It should be submitted the time schedule for internal use to the validation team.	Table 1a, A.4.2.11.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 8:</u> Annual and total estimated emission reduction has to be revised in the PDD.	Table 1a, A.4.3.2.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 9:</u> The PDD should discuss in B.2. criterion 1: it should include information that the project activity comprises a small hydro renewable energy generation unit.	Table 1a, B.2.1.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 10:</u> The alternatives indicated in the PDD should be revised by the project participants. Only realistic alternatives should be mentioned. Are investments in the financial market a real alternative for Rialma Companhia Energetica III S.A.?	Table 1a, B.4.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p

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<u>Corrective Action Request 11:</u> The PDD should explicitly mention the most likely baseline scenario and provide evidences why that baseline scenario should be the most probable one (see B.4.5.)	Table 1a, B.4.4.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 12:</u> During the on-site interview Ricardo Malaquias Ferreira (Rialma) confirmed that the project activity Santa Edwiges III has been realised as well without CER credits. However, it would have been more time consuming and would have involved more guarantees by the bank to get financing. This information should be considered when discuss additionality of Santa Edwiges III.	Table 1a, B.5.8.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 13:</u> If the ROE of the project activity is compared with an investment in Brazilian government bonds (which is not very logical according to the information obtained on-site, see B.4.1.), the exact SELIC rate should be mentioned at the time when it was decided to invest into Santa Edwiges III and a logical and a realistic comparison between investment in SELIC and the project activity should be made.	Table 1a, B.5.8.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 14:</u> The additionality discussion has to be based on stronger evidences, as e.g. a confirmation of the debtors (BNDES and/or others) prov-	Table 1a, B.5.8.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue

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ing that the revenues from CERs are crucial for their decision to give loans. The project participants may also switch over to step 2 “Investment analysis” of the additionality tool, in order to clearly demonstrate the additionality of the project.			will be indicated in Table 1b. p
<u>Corrective Action Request 15:</u> The minimum level of the SELIC rate should be updated in the PDD.	Table 1a, B.5.8.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 16:</u> The calculation spreadsheets for “ROE calculation” and the “sensitivity analysis calculation” should be submitted to the validation team.	Table 1a, B.5.8.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 17:</u> The project participants should evidence the statements given in the PDD that “most of the developers that funded their projects outside of Proinfa have taken CDM as decisive factor for completing their projects” and “that the vast majority of similar projects are participating in the Proinfa Program”. Besides, it would be very helpful to quantify how many similar activities within the Proinfa, like CDM and without CDM and Proinfa have been realized.	Table 1a, B.5.10.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 18:</u>	Table 1a,	The project proponents submitted a revised PDD apply-	The revised PDD is respond-

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Step 5 of the additionality tool should be mentioned with its respective explanation.	B.5.12.	ing AMS I-D., version 12 and responding to the requests raised under Table 1a.	ing to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 19:</u> It should be calculated and mentioned the exact power density of Santa Edwiges III project.	Table 1a, B.6.1.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 20:</u> Even if no project emissions are expected from the project activity, it is recommended to mention that fact in the PDD.	Table 1a, B.6.1.3.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 21:</u> The parameter “Surface area at full reservoir level” with its necessary explications has to be included as one of the parameters that are available at validation.	Table 1a, B.6.2.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 22:</u> If the emissions grid factor is calculated ex-ante (see B.6.2.3.) all parameters necessary for the calculation of the emissions grid factor have to be included at B.6.2.	Table 1a, B.6.2.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p

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<u>Corrective Action Request 23:</u> It has to be mentioned if the emissions factor of the grid is calculated ex-ante or ex-post (yearly updated). In the case of ex-post the parameter has to appear under B.7.1. "Data and parameters to be monitored".	Table 1a, B.6.2.3.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 24:</u> The parameter title should be indicated as according to the methodology ACM0002, version 6.	Table 1a, B.6.2.3.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 25:</u> The parameter "Operating margin (OM) emission factor of the grid" has to be mentioned (either at B.6.2. or at B.7.1. depending if the emissions grid factor is calculated ex-ante or ex-post yearly updated) with all its necessary explanations according to the methodology ACM0002, version 6.	Table 1a, B.6.2.4.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 26:</u> The parameter "Build margin (BM) emission factor of the grid" has to be mentioned (either at B.6.2. or at B.7.1. depending if the emissions grid factor is calculated ex-ante or ex-post yearly updated) with all its necessary explanations according to the methodology ACM0002, version 6.	Table 1a, B.6.2.5.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 27:</u>	Table 1a,	The project proponents submitted a revised PDD apply-	The revised PDD is respond-

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The parameter “fuel consumption of each power source” has to be mentioned (either at B.6.2. or at B.7.1. depending if the emissions grid factor is calculated ex-ante or ex-post yearly updated) with all its necessary explanations according to the methodology ACM0002, version 6.	B.6.2.6.	ing AMS I-D., version 12 and responding to the requests raised under Table 1a.	ing to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 28:</u> The parameter “emission coefficient of each fuel” has to be mentioned (either at B.6.2. or at B.7.1. depending if the emissions grid factor is calculated ex-ante or ex-post yearly updated) with all its necessary explanations according to the methodology ACM0002, version 6.	Table 1a, B.6.2.7.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 29:</u> The parameter “electricity generation of each power source” has to be mentioned (either at B.6.2. or at B.7.1. depending if the emissions grid factor is calculated ex-ante or ex-post yearly updated) with all its necessary explanations according to the methodology ACM0002, version 6.	Table 1a, B.6.2.8.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 30:</u> The parameter “fraction of time with low costs/must run plant at the margin” has to be mentioned (either at B.6.2. or at B.7.1. depending if the emissions grid factor is calculated ex-ante or ex-post yearly updated) with all its necessary explanations according to	Table 1a, B.6.2.10.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p

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the methodology ACM0002, version 6.			
<u>Corrective Action Request 31:</u> The parameter “electricity imports” has to be mentioned (either at B.6.2. or at B.7.1. depending if the emissions grid factor is calculated ex-ante or ex-post yearly updated) with all its necessary explanations according to the methodology ACM0002, version 6.	Table 1a, B.6.2.11.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 32:</u> Power density calculation should be mentioned and project emissions formula indicated, even if those project emissions result zero in the project activity.	Table 1a, B.6.3.2.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 33:</u> If the emissions grid factor is yearly updated ex-post (see B.6.2.3.) all parameters necessary for the calculation of the emissions grid factor have to be included at “B.7.1., Data and parameters monitored”.	Table 1a, B.7.1.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 34:</u> It should be mentioned the value of 79,000 MWh as the quantity of electricity generated.	Table 1a, B.7.1.2.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 35:</u> “EGy” should be added at the title of the parameter “electricity generated by the renew-	Table 1a, B.7.1.2.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new

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able technology”.			issue or still unresolved issue will be indicated in Table 1b. p
<p><u>Corrective Action Request 36:</u></p> <p>The following monitoring information obtained on-site should be provided in the PDD:</p> <ul style="list-style-type: none"> Always at least one operator will be supervising the process. There will be two flow-meters (one principal, one as back-up) installed (periodically calibrated) of type ELO 8400 Back-up of data through various computers; <p>Indicate information that concessionary will be only determined at the second semester of 2007 and that calibration requirements will be only available with purchase of the flow-meters.</p>	Table 1a, B.7.2.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<p><u>Corrective Action Request 37:</u></p> <p>According information found on-site Rialma S.A. wants to change the begin of the crediting period to May, 2008. Ecoinvest should consider that information in the PDD.</p>	Table 1a, C.2.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<p><u>Corrective Action Request 38:</u></p> <p>The PDD should mention that no trans-boundary environmental impacts are expected with the project activity.</p>	Table 1a, D.1.4.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b.

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			p
<u>Corrective Action Request 39:</u> The PDD should confirm the information obtained on-site that the project will not create any major adverse environmental effects. It should indicate minor environmental impacts, See D.1.3.	Table 1a, D.2.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 40:</u> The project participants should submit the “research paper prepared by the Santa Edwiges III Small Hydro Power Plant Project analyzing the environmental impact of the plant in the region” to the validation team (See E.3. PDD).	Table 1a, D.2.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 41:</u> Ecoinvest should submit all invitation letters to the validation team.	Table 1a, E.1.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 42 (Answer 11.07.2007):</u> Regarding B.6.1.: <ol style="list-style-type: none"> 1. The text refers to equation 4 instead of equation 5. PPs are requested to correct. 2. The emissions factor for non-low cost/must run resources (equation 6) is not correct in the opinion of the 	Table 1a	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p

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<p>validation team.</p> <p>3. Equations 6,7,8,9 of the PDD (version 3) are not correct. Please refer to the last submitted PDD of the Interlagos project.</p> <p>4. The parameter $EF_{CO_2,i}$ and $OXID_i$ refer to the IPCC guidelines of 1996. PPs should use the most updated reference, namely the IPCC guidelines of 2006.</p>			
<p><u>Corrective Action Request 43 (Answer 11.07.2007):</u></p> <p>PPs should use the most recent calculated emissions factor. The validation team accepts the EF of 2005 only as long as the new EF for 2006 is not available at the time of submission of the project documents to the DNA.</p>	Table 1a	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	<p>The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b.</p> <p>p</p>
<p><u>Corrective Action Request 44 (Answer 11.07.2007):</u></p> <p>Regarding WACC:</p> <p>It makes no sense to the validation team to use the “Interbank Deposit Certificate” as benchmark, as the “Interbank Deposit Certificates” are papers with extremely short maturity (most of the time one day), whereas the project activity consists of a very long maturity. PPs are requested to choose an appropriate benchmark and should submit the calculation of that benchmark to the validation</p>	Table 1a	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	<p>The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b.</p> <p>p</p>

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team.			
<p><u>Corrective Action Request 45 (Answer 11.07.2007):</u></p> <p>Regarding sensitivity analysis:</p> <p>If bearing the sensitivity analysis in mind and the fact that the project IRR (as financial indicator) remains higher than the benchmark (WACC) if increasing the project revenues or reducing the project costs, then additionality of the project activity is rather doubtful and not guaranteed in the opinion of the validation team (see additionality tool, version 3, sub-step 2d)</p> <p>PPs are requested to provide stronger arguments in order to clearly demonstrate that the project is additional.</p>	Table 1a	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<p><u>Corrective Action Request 46 (Answer 11.07.2007):</u></p> <p>The statement “The fact that IRR with CERs will be almost the benchmark.” does not make sense to the validation team, as the IRR with CERs (16,40 %) is considerably higher than the benchmark (14,41 %).</p> <p>PPs are requested to correct the information.</p>	Table 1a	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<p><u>Corrective Action Request 47 (Answer 11.07.2007):</u></p> <p>The value of EGy indicated in the PDD is different to the value calculated in the excel sheet “Arquivo Economico-Financeiro” (Table</p>	Table 1a	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b.

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Producao). Assuming that the value in the excel sheet is correct, PPs are requested to revise the number in the PDD and adjust the CER calculations.			p
<u>Corrective Action Request 48 (Answer 11.07.2007):</u> Regarding excel-sheet sensitivity analysis: The value for CER credits for the 1st and the 8 th year is not exactly correctly determined. PPs are requested to correct, including the IRR with CER credits.	Table 1a	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
<u>Corrective Action Request 49 (Answer 11.07.2007):</u> The investment barriers mentioned in PDD, version 3, are not very convincing to the validation team. The additionality tool (version 3) mentions under investment barriers: “Investment barriers, other than the economic/financial barriers in Step 2 above , inter alia: For alternatives undertaken and operated by private entities: Similar activities have only been implemented with grants or other non-commercial finance terms. <u>Similar activities are defined as activities that rely on a broadly similar technology or practices</u> , are of a similar scale, take place in a comparable environment with respect to regulatory framework. No private capital is available from domestic or international capital markets due to real or perceived risks associated with investment in the country where the proposed CDM project activity is to be implemented, as demonstrated by the credit rating of the	Table 1a	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p

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<p>country or other country investments reports of reputed origin.”</p> <p>There exist probably quite a lots of hydroplants in Brazil of similar scale (comparable environment with respect to regulatory framework) to that of S. Edwiges III SHP which are implemented without grants. Brazils international rating is good enough nowadays for getting international loans, which indicates that there is no financial barrier in the market. Project participants are requested to revise their barrier analysis.</p>			
<p><u>Corrective Action Request 50 (Answer 15.09.2007):</u></p> <p>The following part of the PDD (B.6.1.) should be updated:</p> <ul style="list-style-type: none"> ✓ “Data from 120 power plants, comprising 63.6 GW installed capacity and around 828 TWh electricity generation over the 3-year period”. The figures refer to the EF calculation (2003-2004-2005) and not to the applied calculation (2004-2005-2006). ✓ “The aggregated hourly dispatch data got from ONS was used to determine the lambda factor for each of the years with data available (2003, 2004 and 2005)”. 	Table 1a	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	<p>The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b.</p> <p>p</p>
<p><u>Corrective Action Request 51:</u></p> <p>A time schedule for the implementation of the project activity should be included in the</p>	Table 1b, A.4.2.11.	The tentative schedule was included in Annex 5 of the PDD. The bibliography used was altered to Annex 6.	<p>Answer 08.01.2008:</p> <p>A project implementation schedule has been included as Annex 5 in the last submit-</p>

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PDD.			ted PDD. CAR 51 is considered to be p
<u>Corrective Action Request 52:</u> The title of the methodology in the PDD should be exactly as per the methodology: “Grid connected renewable electricity generation”.	Table 1b, B.1.1.1.	The title of the methodology was amended in the ninth version of the PDD.	Answer 08.01.2008: The title of the methodology has been correctly indicated in the last submitted PDD. CAR 52 is considered to be resolved. p
<u>Corrective Action Request 53:</u> It should be clearly mentioned in B.2. of the PDD that electricity will be supplied to the South/Southeast/Midwest grid system. Thus, it will displace electricity generated by more and more thermal power plants.	Table 1b, B.2.1.1.	The requested information was added in section B.2. of the ninth version of the PDD.	Answer 08.01.2008: Information has been added in B.2. of the last submitted PDD. CAR 53 is considered to be resolved. p
<u>Corrective Action Request 54:</u> B.2. of the PDD should inform that the project activity does not consist of a combined heat and power (co-generation) system.	Table 1b, B.2.1.3.	The requested information was added in section B.2. of the ninth version of the PDD.	Answer 08.01.2008: The information that the project activity does not consist of a combined heat and power (co-generation) system has been included in the last submitted PDD. CAR 54 is considered to be resolved. p
<u>Corrective Action Request 55:</u> 1. Project participants are requested to submit an evidence that CDM has been considered before purchase of the main equipment	Table 1b, B.5.1.	1. The main equipments of the plant were bought in July and August, 2007. At that time, Rialma Companhia Energética III S/A had already a contract signed with the consultant, Ecoinvest Carbon Brasil Ltda, dated March, 2006. Please see the attached files:	Answer 08.01.2008: Some of the Purchase contracts of the main equipment and contract signed with the consultant Ecoinvest Carbon

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(turbines, generators). 2. The purchase contract has to be submitted to the validation team.		<ul style="list-style-type: none"> - SEIII_Contrato WEG; - SEIII_Contrato Gans; and, - SEIII_EcoC contrato <p>2. Copies of the purchase contract as listed in the item above are submitted to the DOE.</p> <p>Answer 10.01.2008</p> <p>Please see attached the turbine's purchase contract.</p>	<p>Brasil Ltda. have been submitted to the validation team. However, there is missing the purchase contract for the turbines.</p> <p>Answer 10.01.2008:</p> <p>The purchase contract for the turbines has been submitted to the validation team.</p> <p>CAR 55 is considered to be resolved. p</p>
<p><u>Corrective Action Request 56:</u></p> <p>It has to be explained in the PDD why the benchmark analysis is applied and not the simple cost analysis or investment comparison analysis.</p>	Table 1b, B.5.2.	<p>The tool for demonstration and assessment of additionality provides the option to choose between three analysis methods. Once the project activity generates other financial benefit other than CDM related income (electricity) Option I could not be chosen. Option III was chosen because it was more appropriate considering that there are no other options of investment from the project owner perspective.</p> <p>Please note that the version of the "Tool for demonstration and assessment of additionality" was updated.</p>	<p>Answer 08.01.2008:</p> <p>Requested information has been provided in the last submitted PDD.</p> <p>CAR 56 is considered to be resolved. p</p>
<p><u>Corrective Action Request 57:</u></p> <p>Regarding the WACC formula (with real numbers): $WACC = [(17.5\% \times (1 - 17\%) \times 67.51\% + (23.3\%p.a. \times 67.51\%)] = 17.4\%p.a.$ The figure in green is not correct. Please correct.</p>	Table 1b, B.5.5.	The indicated value was amended. Please refer to the ninth version of the PDD.	<p>Answer 08.01.2008:</p> <p>Correction has been provided in the last submitted PDD.</p> <p>CAR 57 is considered to be resolved. p</p>
<u>Corrective Action Request 58:</u>	Table 1b,	1. The investment analysis was taken out of the PDD,	Answer 08.01.2008:

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<p>1. Investment barriers as defined per the additivity tool have not been existent in Brazil at the time of investment decision of S. Edwiges III. Private capital is available in domestic markets, even though access to funds is difficult. Brazil's credit rating was upgraded and is quite high nowadays.</p> <p>Besides, it is not the reality that all similar activities have only been implemented with grants or other non-commercial financial terms. Thus, the investment barrier analysis should be taken out or updated in a way that it reflects the reality. In the latter case clear evidences of investment barriers should be submitted to the validation team.</p> <p>2. Institutional barriers should be updated as they refer to the time between 1995-2004. Please refer to the time when the real investment decision took place (we may consider it, when the purchase contracts of the main equipment were signed). It should be evidenced that at the time of the purchase contracts high volatility of electricity prices was given.</p>	<p>B.5.8.</p>	<p>but the item "<i>Completion and Credit Risk</i>" is maintained in the ninth version of the PDD. The difficulty in obtaining financing can be demonstrated once till the moment Rialma has not signed the financing contract.</p> <p>2. The equipments of the plant were bought in the middle of 2007 (for details please refer to CAR 5). The prices from the period previously mentioned until 2007 were up-dated. As it can be seen, the high volatility of electricity prices can still be observed and represents an important barrier to the investment decision.</p> <p>Answer 10.01.2008</p> <p>The affirmation was excluded of the PDD. Although is worth mention that the creation of Proinfa really <i>is a strong indication that without a financial support, investments in alternative sources of energy for power generation ambit would not be made otherwise.</i></p> <p>This can be evidenced analyzing the minimum attractiveness tax indicated by the government for the projects willing to participate on the program as stated in step 2 of the PDD.</p> <p>Answer 14.01.2008</p> <p>The PDD was revised. Please refer to the eleventh version.</p>	<p>1. The main part of the investment barrier was taken out, however it is still mentioned "Lack of investment sources to finance the private sector in the country, and the high costs of the available alternatives. The creation of Proinfa is a strong indication that without a financial support, investments in alternative sources of energy for power generation ambit would not be made otherwise". There is not such a lack of investment sources to finance the private sector in Brazil nowadays. Why there are not mentioned only the completion and credit risks and the institutional barriers?</p> <p>2. Institutional barriers may be accepted like this. p</p>
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			<p>Answer 08.01.2008:</p> <p>In the introduction of 3a) it is talked about “Regulatory uncertainty, once a completely new power sector regulation is under development since January 2002” and besides institutional barriers. What is the difference between both? Later on, only institutional barriers are explained.</p> <p>Project participants are requested to revise.</p> <p>Answer 16.01.2008:</p> <p>Information has been revised in the last submitted PDD.</p> <p>CAR 58 is considered to be resolved. p</p>
<p><u>Corrective Action Request 59:</u></p> <p>1. The common practice analysis may not be accepted as it is conducted, as it considers only small hydro plants from 2004 in the analysis. The additionality tool clearly mentions that the analysis should include activities implemented or currently underway that are similar to the project activity, and that means all activities and not only for some years.</p> <p>2. Besides, it is recommended to project participants to conduct the common practice</p>	<p>Table 1b, B.5.11.</p>	<p>1. To assess the common practice analysis project participants chose the option of including activities that are currently underway. PPs understand that activities “currently underway” means small hydro being constructed and that will become operational in the following years. In addition, we understand that the default time period to compare scenarios is three years. It is not reasonable to compare a plant that is being constructed now with another built last century, once the environment for business are completely different.</p> <p>In this sense, it was analysed SHPPs from 2004 on to have a figure of what is happening in the market in the</p>	<p>Answer 08.01.2008:</p> <p>The common practice analysis still refers to whole Brazil. Please limit the analysis to the S-SE-CO grid and then to the State of Goiás. Please mention all hydro-electric power plants of Goiás of the last years and explain in the PDD why not all existing power plants are included in the analysis (cause of a different business environment</p>

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<p>analysis for the region (State or grid region) where the project activity takes place. The choice for a certain region should be justified.</p> <p>3. 4a) and 4) should be answered separately.</p>		<p>last few years.</p> <p>2. The common practice analysis was altered. Please refer to section B.5. of the ninth version of the PDD.</p> <p>Answer 10.01.2008</p> <p>According to the “Tool for demonstration and assessment of additionality” <i>projects are considered similar if they are in the same country/region and/or rely on a broadly similar technology, are of a similar scale, and take place in a comparable environment with respect to regulatory framework, investment climate, access to technology, access to financing, etc.</i></p> <p>Considering the above, all information related to the country will not be excluded from the PDD. In addition to this analyses the state of Goiás was also covered in sub-step 4a:</p> <p><i>Considering the state of Goiás only, among the 4 SHPPs that started operations in the period from 2005 to 2007, all of them received incentives representing 100% of the installed capacity.</i></p> <p>The name of the plants can be seen in table 5 of the PDD.</p> <p>Data referring to the sub-system as well as a comment why not all existing power plants were included in the analysis were added in the tenth version of the PDD.</p> <p>Answer 14.01.2008</p> <ul style="list-style-type: none"> - The political and economic characteristic of Brazil has changed a lot in the past few years. Santa Edwiges III is yet under construction. Therefore it is not reasonable to consider SHPPs constructed in the past five years or more. Brazil has long suffered 	<p>as you said).</p> <p>Answer 10.01.2008:</p> <p>-It has not been explained in the PDD yet why only for the last 3 years hydro-plants have been included in the common practice analysis and not for more years. If the reason is a different business environment, then project participants are requested to evidence that by references and/or documents.</p> <p>-Besides, it should be explicitly mentioned in the text (apart from table 6) the 4 hydro-plants of Goiás and indicate the incentives of each one (PROINFA or CDM). Finally, this is the core part of the common practice analysis.</p> <p>Answer 16.01.2008:</p> <ol style="list-style-type: none"> 1. There have not been submitted evidences/documents yet proving that the business and political environment has changed a lot between the years be-
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		<p>with inflation, for instance, which had only become stable recently. As the DOE said in CAR 8 “<i>Brazil’s credit rating was upgraded</i>” and this represents a recent environment.</p> <ul style="list-style-type: none"> - The name of the plants were included in the PDD. Please refer to the eleventh version of the PDD. <p>Answer 16.01.2008</p> <ul style="list-style-type: none"> - The main reason to consider in the common practice analysis the SHHPs which became operational from 2005 on is the regulatory framework. As stated in the PDD, in March 2004 a new model for the electricity sector was approved by the Congress. The document which contains the information mentioned in the PDD is referenced in the document. Additionally an excerpt of this text is attached. - The analysis won’t be altered because PPs consider reasonable to start it in 2005. It must be taken into account that the new model was approved only in 2004 and could only influence plants that became operational in 2005. <p>Finally, the inflation rate is important once it can influence in the investment decision.</p> <p>Answer 23.01.2008</p> <p>The consequences of this new model are summarized in the introduction of step 3a, principally in the paragraph right before the investment barrier. The uncertainty generated by the described new model for the electricity sector obviously discourages new investments in the sector. In this sense PPs believe that the PDD do not need to be amended.</p> <p>As stated before it must be taken into account that the</p>	<p>fore 2005 and after 2005 (this is the year when the project participants begin to consider similar project activities). Please submit such evidences to the validation team and reference them in the PDD.</p> <p>2. The PDD states “Moreover, it has to mentioned also that the sector regulation it still under implementation and this affects projects that were developed or are still being developed in the country.” If those hydro plants are considered in the common practice analysis which are affected by the sector regulation, then project participants have to consider all hydro plants (under construction or in operation) since January 2002, as ac-</p>
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		<p>new model was approved only in 2004 and could only influence plants that became operational in 2005. This is why the analysis only takes into account the plants from 2005 on.</p> <p>PPs altered the Common Practice analysis and in the twelfth version the new model of sector regulation is what makes the environment business different from the previous years. Hence, the inflation is no longer an important figure in the analysis.</p> <p>In spite of it, the high inflation influences the feasibility analysis of the projects. This is because the high volatility of the prices included in the cash flow (e.g. equipment's price, salary of employees, construction materials, etc) makes difficult to estimate the IRR of the project longer periods as it can be done nowadays. Hence, in the period, it can be said that the decisions of investments was riskier.</p> <p>This is a typical situation of countries that faces problems with high inflation and PPs considers that there is no need to explain this in the PDD. In this sense the PDD will not be amended.</p>	<p>According to the PDD (mentioned earlier) at that time the sector regulation began. Besides, it has to be explained what effects high and low inflation on potential hydro power projects has.</p> <p>Answer 18.01.2008:</p> <p>It has not been concretely summarized yet in chapter 4 (Common practice analysis) which consequences the new model for the electricity sector that was approved by the Congress have been brought to electricity projects (mainly investments in hydro-power plants) from 2004. Information is still very vague and may not be accepted by the validation team. It should be very clear why from 2005 the business environment was different. As already mentioned, effects of high and low inflation on investment projects after 2004 have to be explained in more detail.</p> <p>Answer 23.01.2008:</p>
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			After having analysed the common practice analysis once again, the validation team came to the conclusion that the information provided in the last submitted PDD is enough to understand the new business environment. CAR 59 is considered to be resolved. p
<u>Corrective Action Request 60:</u> The PDD should explicitly mention that there are no emissions from use of fossil fuels.	Table 1b, B.6.1.3.	The requested information was mentioned in section B.6.1. Please refer to the ninth version of the PDD.	Answer 08.01.2008: Information has been included in the last submitted PDD. CAR 60 is considered to be resolved. p
<u>Corrective Action Request 61:</u> Regarding the parameter “Electricity generated by the renewable technology”: 1. The description should provide information whether the parameter refers to net (after having discounted internal consumption) or gross electricity generated. How is internal electricity consumption considered in the calculation? 2. The value has been changed from 79,063 MWh to 83,376 MWh. It should be explained why this modification and submitted evidence about the applied figure and it should be proven that the capacity factor is 0.82.	Table 1b, B.7.1.1.1.	1. The mentioned parameter was corrected in the ninth version of the PDD. It corresponds to the net electricity generated by the plant. The internal consumption is estimated to be 3,480 kWh/month. Please see attached the revised spreadsheet with the CER's calculation (<i>SEIII_CERs calculation_v.3</i>). 2. The ANEEL ordinance nº28 issued on 23 rd October, 2007 (attached) established the assured capacity of Santa Edwiges III as being 9.7MW. Hence the value of the parameter is 84,972 and will be changes. The capacity factor of the plant can be calculated dividing the value stipulated by this ordinance by the installed capacity of the plant, as follows: $\text{Capacity factor} = 9,7 \text{ MW} / 11,6 \text{ MW} = 0.84$	Answer 08.01.2008: 1. Internal consumption has been considered and only the amount of net electricity supplied to the grid has been considered for the calculation of emission reductions. 2. It is retraceable how the capacity factor and net electricity supplied to the grid were determined.

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<p>3. The parameter should refer to standards.</p> <p>4. Accuracy of the flow meters should be exactly indicated.</p> <p>5. QA/QC procedures should be explained in more detail: Is there intended to do cross-checking via invoices?</p>		<p>3. The meters installed in the plant are in accordance with the models stipulated by the Electricity Regulatory Agency (ANEEL) and the National Electric System Operator (ONS).</p> <p>4. The meters planned to be installed at SHHP Santa Edwiges III corresponds to the 0.2 ANSI's accuracy class.</p> <p>5. The QA/QC procedures were detailed in section B.7.1. Please refer to the ninth version of the PDD.</p>	<p>3. Answer may be accepted.</p> <p>4. Accuracy has been included.</p> <p>5. Cross-checking procedures have been explained.</p> <p>CAR 61 is considered to be resolved. p</p>
<p><u>Corrective Action Request 62:</u></p> <p>There should be included a diagram (organigram) of the operational and management structure of the project activity.</p>	<p>Table 1b, B.7.2.1.</p>	<p>The organogram is attached.</p> <p>Answer 10.01.2008</p> <p>The organogram will not be included in the PDD because project participants do not consider this information relevant. Moreover this is not a CDM pre-requisite nor even is stated in the methodology or in any other related document that this is necessary.</p> <p>Moreover, the related activities of the people mentioned in the document can be comprehended once their job title is mentioned.</p> <p>Answer 14.01.2008</p> <p>The SHHPs is still under construction. In this sense it was not established until this moment the personal in charge of the CDM project while the plant is operating. For the mean time the person in charge of the CDM project is Ricardo Malaquias who participated in the site visit. Project participants asks to the DOE consider to audit if there is an established organogram related to the CDM activities while the verification of the projects occurs in the future.</p> <p>Answer 16.01.2007</p>	<p>Answer 08.01.2008:</p> <p>The organigram has to refer to CDM related activities, i.e. it has to be explained who in the organigram is responsible for what. Besides, it has still to be included in the PDD.</p> <p>Answer 10.01.2008:</p> <p>The organizational structure of the CDM project activity should be clear. This requires a clear illustration of the allocation of tasks and responsibilities of CDM activities. Once more project participants are requested to illustrate in B.7.2. (monitoring plan) of the PDD how the organizational structure and the allocation of CDM related tasks and responsibilities of the proposed CDM project</p>

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		<p>The organogram was included in the PDD. The person in charge of managing the CDM related activities is Ricardo Malaquias Ferreira. He is the commercial manager of the company.</p> <p>The plant operator is going to transmit the energy generation information to Ricardo who will retransmit to the consultant in the verification moment.</p>	<p>activity is organized.</p> <p>Answer 16.01.2008:</p> <p>The organizational structure has to be clearly described already at validation. How would it possible to verify something at verification that had not existed yet at validation. Once more, the validation team kindly ask to include an organigram about the organizational structure into the PDD.</p> <p>Answer 18.01.2008:</p> <p>An organigram of the organizational company structure has been included in Annex 4 of the last submitted PDD.</p> <p>CAR 62 is considered to be resolved. p</p>
<p><u>Corrective Action Request 63:</u></p> <p>Project participants are requested to indicate archiving and back-up procedures in detail in Annex 4 of the PDD.</p>	<p>Table 1b, B.7.2.2.</p>	<p>As mentioned in the PDD, “<i>the information sent by the plant operators will be consolidated on a monthly basis and the central office will be the responsible to correctly save the information and retransmit to the energy distribution company. As a result, the generation information may be accessed and stored through at least two computers: the plant computer and the central office computer</i>”.</p> <p>There will be back-up procedures to ensure that the information will be properly archived during the crediting</p>	<p>Answer 08.01.2008:</p> <p>Please specify the back-up and archiving procedures. What media are used for back-up?</p> <p>Answer 10.01.2008:</p> <p>Back-up procedures were specified in Annex 4.</p> <p>CAR 63 is considered to be resolved. p</p>

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		<p>period plus two years.</p> <p>Answer 10.01.2008</p> <p>The PDD was amended and the back-up and archiving procedure were specified.</p>	
<p><u>Corrective Action Request 64:</u></p> <p>It should be provided evidence for the project's starting date (10/01/2007).</p>	<p>Table 1b, C.1.1.</p>	<p>The evidence of the starting date of the project activity is the letter addressed to AGMA – the state Environmental Agency) – asking for the renewal of the construction license (previously sent to DOE). According to the country environmental legislation the project owner can start the construction of the plant only after obtaining this license.</p> <p>Answer 10.01.2008</p> <p>The starting date of the construction was right after the issuance of the construction license which was August, 10th, 2007. The starting date of the project activity was corrected to this date as asked by the DOE. An evidence is the construction license itself which was previously sent to the DOE.</p> <p>Answer 09.01.2009:</p> <p>According to the review requested by the CDM Team/UNFCCC Secretariat after the completeness check (request received on 09/12/2008), the project's starting date was reviewed and according to the recommendation given by the DOE, the date of the turbines purchase agreement (19/07/2007), which is prior to the date of the issuance of the construction license, was finally chosen.</p>	<p>Answer 08.01.2008:</p> <p>According to the EB, project start is defined as starting date of the construction or real action. The letter to AGMA may not be considered as one of the both. Please revise the project's starting date and indicate the construction's starting date as project start. Evidence should be provided.</p> <p>Answer 10.01.2008:</p> <p>The validation team accepts the issuance date of the installation license as project's starting date as it just right before the starting date of the construction.</p> <p>Answer 09.01.2009:</p> <p>The DOE's recommendation was followed to take the date of the turbines purchase agreement as the project's starting date, as the same is prior to the date of issuance</p>

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			of the construction licence. CAR 64 is considered to be resolved. p
<p><u>Corrective Action Request 65:</u></p> <p>The PDD should mention the main environmental impacts (resulting from the EIA) due to the project activity.</p>	<p>Table 1b, D.1.2.</p>	<p>The main environmental impacts were mentioned in section D.2 of the PDD. Please refer to the ninth version of the document.</p> <p>Answer 10.01.2008</p> <p>The Environmental Impact Assessment was done considering all the hydro plants studied by RIALMA. The approval date of the document was April, 2001.</p> <p>Answer 14.01.2008</p> <p>Formal evidence stating that the EIA was accepted by AGMA is not available. A proof of its approval is the issuance of preliminary and construction license.</p> <p>The EIA is now attached.</p>	<p>Answer 08.01.2008:</p> <p>Main environmental impacts have been mentioned in the last submitted PDD.</p> <p>However, please mention the approval date of the EIA in the PDD.</p> <p>Answer 10.01.2008:</p> <p>The approval document of the EIA should be submitted to the validation team. As it is not mentioned in the IRL, it has not been made available to the auditor yet.</p> <p>Answer 16.01.2008:</p> <p>The installation license has been submitted to the validation team. Thus, it may be concluded that AGMA approved the EIA as the EIA has to be successfully conducted before obtaining the installation license. The information in the last submitted PDD has been revised.</p> <p>CAR 65 is considered to be resolved. p</p>

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<p><u>Corrective Action Request 66:</u></p> <p>A monitoring manual or any other written document explaining how monitoring will look like, who is responsible for what and which monitoring instruments will be used, should be submitted to the validation team.</p>	Table 1b, F.4.2.	This kind of document is not available yet once the plant is not operational at the moment. Please refer to the organogram to the responsible personal involved in the plant's operation.	<p>Answer 08.01.2008:</p> <p>Answer may be accepted.</p> <p>CAR 66 is considered to be resolved. p</p>
<p><u>Corrective Action Request 67 (Answer 08.01.2008):</u></p> <p>A.2. of the PDD mentions that “the project activity reduces emissions of greenhouse gas (GHG) by avoiding electricity generation by fossil fuel sources (and CO₂ emissions), which would be generating (and emitting) in the absence of the project.” Project participants are requested to refer to the grid South-Southeast-Middlewest.</p>	Table 1b	The information was added in the correspondent section of the tenth version of the PDD.	<p>Answer 10.01.2008:</p> <p>Requested information has been included.</p> <p>CAR 67 is considered to be resolved. p</p>
<p><u>Corrective Action Request 68 (Answer 08.01.2008):</u></p> <p>After internal discussion, the DOE decided that the applied benchmark (WACC) is not acceptable.</p> <p>The additionality tool says the following: “Benchmarks for IRR can be derived from: A company internal benchmark (WACC) if there is only one potential project developer (e.g. when the project activity upgrades an existing process). The project developers shall demonstrate that this benchmark has been consistently used in the past, i.e. that</p>	Table 1b	<p>Rialma is the only project developer of the proposed project activity. This can be evidenced through the ANEEL resolutions number 007 and 015, which are attached.</p> <p>These resolutions explicitly authorize the company named RIALMA to proceed with the exploration of the hydrological potential of the river. Hence, this is a proof that the project is being realized by only one company, or rather, project developer.</p> <p>Answer 16.01.2008</p> <p>Rialma Companhia Energética III is a Special Purpose Company (SPC) set up exclusively to construct and operate the Small Hydro Power Plant Santa Edwiges III.</p>	<p>Answer 16.01.2008:</p> <p>By means of ANEEL resolutions number 007 and 015 it is shown that Rialma has the exclusive rights to explore the hydrological potential of the river. Thus, the validation team accepts that Rialma is the only project developer of the proposed project activity.</p> <p>However, the additionality tool requires that the project developer demonstrate that</p>

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<p>project activities under similar conditions developed by the same company used the same benchmark.</p> <p>The proposed project activity (new hydro electric power plant) may be realized not only by one, but by more potential project developers.</p> <p>The DOE took this decision in order not to risk a request for review.</p> <p>Project participants are requested to modify their benchmark.</p>	<p>Hence, this is the first time WACC was applied to projects under similar conditions and developed by the same company.</p> <p>As an evidence of the SPC a copy of the Company's bylaws is attached.</p> <p>Answer 23.01.2008</p> <p>The SHPPs Santa Edwiges I, II and III are not owned by the same company. In 2004 Rialma Companhia Energética S.A. was splitted into three different as follows:</p> <ul style="list-style-type: none"> • SPC: <i>Rialma Companhia Energética S.A. – SHPP: Santa Edwiges II</i> • SPC: <i>Rialma Companhia Energética I S.A. – Usina: Santa Edwiges I</i> • SPC: <i>Rialma Companhia Energética III S. A. – SHPP: Santa Edwiges III</i> <p>The by law of <i>Rialma Companhia Energética III S. A.</i> was already sent to the DOE. Another evidence that these are different companies are the different companies' General Tax Payers Register (CNPJ) number, which are:</p> <ul style="list-style-type: none"> • <i>RIALMA S.A. - Centrais Elétricas Rio das Almas – nr. 03.286.850/0001-96</i> • <i>SPC: Rialma Companhia Energética S.A. – nr. 05.365.005/0001-31</i> • <i>SPC: Rialma Companhia Energética I S.A. – nr. 06.571.745/0001-97</i> • <i>SPC: Rialma Companhia Energética III S. A. – nr. 06.572.941/0001-86</i> <p>The receipts of the General Tax Payers Register's</p>	<p>the WACC has been consistently used in the past, i.e. that project activities under similar conditions developed by the same company used the same benchmark. Please provide an evidence for that.</p> <p>Answer 18.01.2008:</p> <p>In the case that the hydro-plants S. Edwiges I, II and III are all owned 100 % by one company (in this case: Rialma S/A), the validation team may not accept the answer of the project developer and not close CAR 18. Then, project participants have to evidence that WACC has been used in S. Edwiges I and/or S. Edwiges II. It is obvious that the SPC has been founded for only one project and that there will be never another project of this same SPC.</p> <p>In the other case that not all hydro plants are owned by the same company, this should be evidenced and documents should be submitted to the validation team.</p>
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		numbers are attached. Please note that <i>Rialma Companhia Energética I S.A.</i> was bought by another company and had its name altered to RIACHAO ENERGETICA S.A	<p>Answer 23.01.2008:</p> <p>It has been evidenced that Rialma Companhia Energetica III S.A. is an own company. WACC is used for the first time, thus the proof that project activities under similar conditions developed by the same company used the same benchmark is not applicable.</p> <p>CAR 68 is considered to be resolved. p</p>
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Clarification Requests			
<p>Clarification Request 1:</p> <p>It should be clarified if the given GPS coordinates are those of the project site, and if yes, clearly explained at which place of the project site those GPS coordinates were measured. It should be indicated 4-6 GPS coordinates which limit the project site.</p>	Table 1a, A.4.1.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	<p>The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b.</p> <p>p</p>
<p>Clarification Request 2:</p> <p>The project participants should explain to the validation team - how they support CER prices of USD 10. Respective evidences (documents) should be submitted to the validation team.</p>	Table 1a, B.5.8.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	<p>The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b.</p> <p>p</p>
<p>Clarification Request 3:</p>	Table 1a,	The project proponents submitted a revised PDD apply-	The revised PDD is respond-

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The ROE calculation with CER credits includes CER credits beyond 2012, the end of the first commitment period of the Kyoto Protocol. Is this realistic due to price insecurity of CER credits and does it not contradict the principle of conservativeness? Project participants should be conservative in their calculations and justifications.	B.5.8.	ing AMS I-D., version 12 and responding to the requests raised under Table 1a.	ing to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
Clarification Request 4: Regarding the description of the measurement method, the following phrase is not to understand due to poor English: "This parameter is measured each 15 minutes measurement and it is monthly recorded." The phrase should be revised.	Table 1a, B.7.1.2.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
Clarification Request 5: The project participants should information about the exact project start, as on-site the validation team has received some different information to that given in the PDD.	Table 1a, C.1.1.	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p
Clarification Request 6 (Answer 11.07.2007): Regarding the excel-sheet "Arquivo Economico-financeiro": 1. It is not obvious why there is taken a discount rate of 12 % to calculate the NPV. PPs are requested to inform why 12 % and indicate a source if available.	Table 1a	The project proponents submitted a revised PDD applying AMS I-D., version 12 and responding to the requests raised under Table 1a.	The revised PDD is responding to CARs and CRs given by table 1a. Any further new issue or still unresolved issue will be indicated in Table 1b. p

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<p>2. PPs should inform why the Cash-Flow calculation is based on only 12 years. Power Purchase Agreements are usually signed for more years and the lifetime of hydroplants is much more than 12 years.</p> <p>3. PPs are requested to explain to the validation team why “residual value” (Valor Residual) is considered in the Cash-Flow calculation. This seems not very logical to the validation team.</p> <p>4. It seems that depreciation is not considered in the Cash-flow calculation. PPs are requested to inform and if necessary to correct.</p>			
<p>Clarification Request 7: The project participants should justify why alternatives like “the construction of fossil fuel thermal power plants” and “the construction of other renewable power plants” have not been considered in B.4. of the PDD. The PDD should inform.</p>	<p>Table 1b, B.4.1.</p>	<p>Rialma focused its business I renewable energy. Hence, “the construction of fossil fuel thermal power plants” is not a real alternative from the project owner perspective. In addition, Rialma has already worked on two other SHPPs and has the know-how of operating them. As a consequence “the construction of other renewable power plants” differing from what is being done is not concrete.</p> <p>These two options were mentioned in section B.5. as alternatives to the Project Activity from the country’s perspective.</p> <p>Answer 10.08.2007 The discussion was added in the PDD. Please refer to the tenth version of the PDD.</p>	<p>Answer 08.01.2008: Please explain in the PDD the two alternatives and explain in the PDD why the “construction of fossil fuel thermal power plants” and “the construction of other renewable power plants” are not realistic alternatives for the project owner.</p> <p>Answer 10.01.2008: The discussion about alternatives has been included in the last submitted PDD. CR 7 is considered to be re-</p>

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			solved. p
<p><u>Clarification Request 8:</u></p> <p>Project participants should justify why the IRR calculation was done for only and exactly 12 years. The crediting period is 3 x 7 years and the operational lifetime 30 years, i.e. IRR calculation should be actually done for at least 21 years.</p>	Table 1b, B.5.5.	<p>The Cash-Flow was done considering Rialma's contracts signed with the bank. Consider a longer period is too much vague. Contracts of short duration are better negotiated.</p> <p>In addition, 12 years is the bank's standardized calculation, which means the financing amortization period.</p> <p>Answer 10.08.2007</p> <p>The benchmark does not refer to 12 years or less. The calculation of WACC reflects a parameter used in the decision moment in a determined time period.</p> <p>Answer 14.01.2008</p> <p>Please refer to the answer in CAR 68.</p> <p>Answer 16.01.2008</p> <p>Please refer to the answer in CAR 68.</p>	<p>Answer 08.01.2008:</p> <p>If the IRR is only calculated for 12 years, then it has to be clearly shown that the benchmark also refers to 12 years or less. Please provide sufficient evidences.</p> <p>Answer 10.01.2008:</p> <p>See CAR 68</p> <p>Answer 16.01.2008:</p> <p>See CAR 68</p> <p>Answer 18.01.2008:</p> <p>See CAR 68</p> <p>Answer 23.01.2008:</p> <p>As CAR 68 is resolved, CR 8 is also considered to be resolved. p</p>

Table 3 Unresolved Corrective Action and Clarification Requests (in case of denials)


Clarifications and / or corrective action requests by validation team	Id. of CAR/CR	Explanation of Conclusion for Denial
-	-	-

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Annex 2: Information Reference List

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Reference No.	Document or Type of Information
1	On-site interview at Rialma Companhia Energética III S.A., Brazil conducted on April, 02, 2007 by auditing team of TÜV SÜD. Validation team: Johann Thaler TÜV SUD do Brasil, ghg auditor Participants from Rialma Companhia Energetica III S/A. Ricardo Malaquias Ferreira Civil Engineer/contracts Participants from Ecoinvest Carbon Brasil Ltda. Ana Paula Beber Veiga Project analyst
2	Project Design Document for CDM project “Rialma Companhia Energética III S/A. – Santa Edwiges III Small Hydro Power Plant – Small Scale CDM Project, March 16, 2007, version 2.
3	ANEEL authorization about the implementation of hydro-power plant Santa Edwiges III, N° 115, 05.04. 2001, paper-copy, submitted on April, 02, 2007.
4	Technical specifications “Hydraulic Design Consultoria Industrial Ltda., Ficha de Interface Tecnica”, paper-copy, submitted on April 02, 2007.
5	Letter to the environmental authority of Goias, from January, 10, 2007, paper-copy, submitted on April 02, 2007.
6	Time schedule for ANEEL, 14.03.2007, paper-copy, submitted on April 02, 2007.
7	Excerpt do documento “PCH Santa Edwiges III, projeto basico, relatorio final, Rialma S.A.”, end of 2000 (no exact date provided), page 8, paper-copy, submitted on April 02, 2007.
8	ANEEL Resolution N° 007 (attachment to N° 115) about the change of the legal entity, 12.01.2004, paper-copy, submitted on April 02,

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Reference No.	Document or Type of Information
	2007.
9	Location map: Rialma S/A: Locacao das 03 PCH's e Interconexoes, paper-copy, submitted on April 02, 2007.
10	Technical specifications “Rialma, PCH Santa Edwiges III, Proposta Consolidada”, paper-copy, submitted on April 02, 2007.
11	Document about juridical constitution of Rialma Companhia Energetica III S/A, 30.04.2004, paper-copy, submitted on April 02, 2007.
12	Letter to ANEEL about the change of the legal entity, 06.03.2007, paper-copy, submitted on April 02, 2007.
13	ANEEL information Santa Edwiges I, Despacho N° 94, 18.01.2007, paper-copy, presented on April 02, 2007.
14	Letter to the environmental agency of Goias about the Environmental Impact Assessment, 25.01.2001, jpg-file, submitted on March 26, 2007.
15	Protocol of the environmental agency of Goias, Santa Edwiges I, without date, jpg-file, submitted on March 26, 2007.
16	Protocol of the environmental agency of Goias, Santa Edwiges III, without date, jpg-file, submitted on March 26, 2007.
17	Baseline calculation sheet (calculation of the emission grid factor), excel-file, March, 30, 2007
18	Approved methodology, I.D. Grid connected renewable electricity generation, version 10, 23.12.2006.
19	Approved methodology, ACM0002 “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”, Version 6, 19.05.2006.
20	IPCC: Revised 2006 Guidelines for National Greenhouse Gas Inventories.
21	IPCC: 2000, Good Practice Guidance
22	Validation and Verification Manual, IETA/World Bank (PCF).
23	Installation licence for the Small-hydro plants S.Edwiges I, II and III, 26.12.2001, valid until 26.12.2006, paper-copy, submitted on April 02, 2007.
24	Tool for the demonstration and assessment of additionality, UNFCCC, EB 29, Version 3.

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Reference No.	Document or Type of Information
25	Project activity „Garganta da Jararaca SHP – Atiaia Energia S.A. Project Activity”, Under EB review.
26	Registry about ownership of land “Escritura SE III Juarez”, pdf-file, submitted in July 2007.
27	WACC calculation “Custo de Capital Rialma”, excel-file, submitted on September 04, 2007.
28	Equity Risk Premiums: Looking backwards and forwards..., Aswath Damodaran, pdf-file, submitted on September 04, 2007.
29	Time schedule “SE III-preliminar 3”, pdf-file, submitted in September 2007.
30	CER calculation sheet “SEIII_CERs calculation”, excel-file, submitted in September 2007.
31	ANEEL Resolution nº. 2386, from 27.07.2007 (installed capacity 11,6 MW and size of reservoir 0,6439 km2) , pdf-file, submitted in September 2007.
32	Proof that thermal power plants play a significant role in the Brazilian electricity mix. “Comentários Sobre o 4º Leilão de Energia Elétrica” and “Só energia térmica a óleo é vendida em leilão”, Outlook files, submitted in September 2007.
33	Criteria of Small Hydro Plants, ANEEL Resolution nº. 652, from 09.12.2003, pdf-file, submitted in September 2007.
34	Investment costs in Brazil “Custo de investimento no Brasil”, Outlook-file, submitted in September 2007.
35	Social contract Rialma III “Contrato social Rialma III”, pdf-file, submitted on September 18, 2007.
36	IRR (Cash-flow) calculation “Arquivo Economico-financeiro_v.2”, excel-file, submitted on September 18, 2007.
37	Sensitivity analysis “SEIII – Sensitivity Analysis_v.2.”, excel-file, submitted on September 18, 2007.
38	Research about Small Hydro Plants_PROINFA and CDM “Pesquisa PCHs_PROINFA e MDL”, excel-file, submitted in September 2007.
39	Declaration of the project participants about the voluntary participation in the project activity, tif-file, submitted in September 2007.
40	Installation license N° 258/2007“LI_SEIII –1160MW2.pdf”, issued on December 14, 2007, valid until 10/08/2009, pdf-file, submitted on January 10, 2008.
41	Letter by Rialma to AGMA (Environmental Agency of Goiás) for rectification of Installation License 258/2007 to the new installed

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Reference No.	Document or Type of Information
	capacity 11.6 MW on October 10, 2007 - Receipt confirmed by AGMA on October 11, 2007, pdf-file, submitted in October 2007.
42	Project Design Document for CDM project “Rialma Companhia Energética III S/A. – Santa Edwiges III Small Hydro Power Plant – Small Scale CDM Project”, dated 12/11/2007, version 8, pdf-file, submitted for the 2 nd GSP.
43	Approved methodology, I.D. Grid connected renewable electricity generation, version 12, 27.07.2007.
44	Invitation letters to stakeholders, electronic files, submitted in July 2007.
45	Contract with GANS Industria e Comercio for equipment tests, 02/07/2007, pdf-file, submitted on January 07, 2008.
46	Purchase contract about generators, 01/08/2007, WEG Equipamentos eletricos S.A., pdf-file, submitted on January 07, 2008.
47	Contract between Rialma and Ecoinvest (Evidence of CDM consideration), 08/03/2006, tif-file, submitted on January 07, 2008.
48	The ANEEL ordinance nº 28 issued on 23 rd October, 2007, pdf-file, submitted on January 07, 2008.
49	Purchase contract turbines with Electro Aco Altona S.A., 19.07.2007, pdf-file, submitted on January 10, 2008.
50	IRR (cash-flow) calculation sheet including sensitivity analysis, SEIII – Sensitivity analysis_v.4, excel-file, submitted in April 2008.
51	Debt Report, Tesouro Nacional, May 2007, pdf-file, submitted on February 08, 2008.
52	Constitution Assembly from 30.04.2004, pdf-file, submitted on January 16, 2008.
53	Companies’ registries of Rio das Almas, S. Edwiges I + II + III, zip-file, submitted on January 23, 2008.
54	Aneel Resolution, N° 652, published 10/12/2003, pdf-file, submitted on July 07, 2008.
55	Aneel Resolution, N° 1.249, dated 12/02/2008, pdf-file, submitted on July 07, 2008.
56	Final PDD, dated 01/06/2009, version 14.b, submitted in June 2009.
57	Invoices for electricity sale for January, February and March 2009, submitted per Email on April 2009.
58	Alternative Sources’ Auction Press Release, submitted per Email on April 2009.

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Reference No.	Document or Type of Information
59	New Energy Auction Press Release, submitted per Email on April 2009.
60	2007 auction qualified projects, submitted per Email on April 2009.
61	Payment receipts (invoices) of generators, plant's start-up service (WEG), submitted per Email on April 2009.
62	Contract pending payment and company's pay sheet, submitted per Email on April 2009.
63	Audited balance sheet including explanations, DeloitteTouche Tohmatsu, dated 09/07/2009, pdf-file, submitted on 16/07/2009.
64	Balance legal status, submitted per Email on April 2009.
65	ESPARTA, A.R.J. (2008). Redução de emissões de gases de efeito estufa no setor brasileiro: a experiência do Mecanismo de Desenvolvimento Limpo do Protocolo de Quioto e uma visão futura. PhD Thesis, Programa Interunidades de Pós graduação em energia - EP/FEA/IEE/IF da Universidade de São Paulo (available at http://www.teses.usp.br/teses/disponiveis/86/86131/tde-29042008-160752/ , site accessed on 3 April 2009.