



Industrie Service

Validation Report

The World Bank

Validation of the Poechos I Project

Report No. 629731, Revision 01

2005, July 29

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



Report No.	Date of first issue	Revision No.	Date of this revision	Certificate No.
629731	4 th February 2005	1	29 th July 2005	-
Subject:		Validation of a CDM Project		
Executing Operational Unit:		TÜV Industrie Service GmbH TÜV SÜD Group Carbon Management Service Westendstr. 199 - 80686 Munich Federal Republic of Germany		
Client:		The World Bank 1818 H Street, NW Washington DC 20433 United States of America		
Contract approved by:		Werner Betzenbichler		
Report Title:		Validation of the Poechos I Project		
Number of pages		19 (excluding cover page and annexes)		
Summary: <p>The Certification Body "Climate and Energy" has been ordered by The World Bank to perform a validation of the above mentioned project.</p> <p>Using a risk based approach, the validation of this project has been performed by document reviews and on-site inspection, audits at the locations of the project and interviews at the offices of the project owner.</p> <p>As the result of this procedure, it can be confirmed that the submitted project documentation is in line with all requirements set by the Kyoto Protocol, the Marrakech Accords and relevant guidance by the CDM Executive Board.</p> <p>Additionally the assessment team reviewed the estimation of the projected emission reductions. We can confirm that the indicated amount of emission reductions of 220.241 tonnes CO_{2e} over a crediting period of seven years, resulting in a calculated annual average of 31.463 tonnes CO_{2e}, represent a reasonable estimation using the assumptions given by the project documents.</p> <p>It hereby is important to mention that all parameters needed for the calculation of the actual emission reduction will be obtained ex-post and the data presented in the project design documentation is considered to be limited to a prognosis.</p>				
Work carried out by:	<ul style="list-style-type: none">• Michael Rumberg (Project manager, GHG lead auditor, Auditor Environmental Management Systems (ISO 14001))• Klaus Nürnberger (Lead auditor Energy Certification, GHG auditor)• Alfonso Olea (GHG auditor, Local expert)• Mauro Fadda (GHG auditor – trainee, Local Expert)		Internal Quality Control by: Werner Betzenbichler	



Abbreviations

AE	Applicant Operational Entity
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)
KP	Kyoto Protocol
MINEM	Ministry of Energy and Mines
MP	Monitoring Plan
NGO	Non Governmental Organisation
PDD	Project Design Document
TÜV SÜD	TÜV Industrie Service GmbH TÜV SÜD Group
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual



Table of Contents	Page
1 INTRODUCTION	5
1.1 Objective	5
1.2 Scope	5
1.3 GHG Project Description	7
2 METHODOLOGY	7
2.1 Review of Documents	9
2.2 Follow-up Interviews	9
2.3 Resolution of Clarification and Corrective Action Requests	9
3 VALIDATION FINDINGS.....	10
3.1 Project Design	10
3.1.1 Discussion	10
3.1.2 Findings	11
3.1.3 Conclusion	11
3.2 Baseline and Additionality	11
3.2.1 Discussion	11
3.2.2 Findings	12
3.2.3 Conclusion	13
3.3 Monitoring Plan	13
3.3.1 Discussion	13
3.3.2 Findings	14
3.3.3 Conclusion	14
3.4 Calculation of GHG Emissions	14
3.4.1 Discussion	14
3.4.2 Findings	15
3.4.3 Conclusion	15
3.5 Environmental Impacts	15
3.5.1 Discussion	15
3.5.2 Findings	15
3.5.3 Conclusion	15
3.6 Comments by Local Stakeholders	15
3.6.1 Discussion	15
3.6.2 Findings	16
3.6.3 Conclusion	16
4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS	17
5 VALIDATION OPINION.....	19



Industrie Service

Annex 1: Validation Protocol

Annex 2: Information Reference List



1 INTRODUCTION

1.1 Objective

The World Bank has commissioned TÜV Industrie Service GmbH TÜV SÜD Group (TÜV SÜD) to validate the Poechos I Project. The validation serves as a design verification and is a requirement of all CDM projects. The purpose of a validation is to have an independent third party assess the project design. In particular, the project's baseline, the monitoring plan (MP), and the project's compliance with relevant UNFCCC and host country criteria are validated in order to confirm that the project design as documented is sound and reasonable and meets the stated requirements and identified criteria. Validation is a requirement for all CDM projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of certified emission reductions (CERs).

UNFCCC criteria refer to the Kyoto Protocol criteria and the CDM rules and modalities as agreed in the Bonn Agreement and the Marrakech Accords.

1.2 Scope

The validation scope is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations. TÜV SÜD has, based on the recommendations in the Validation and Verification Manual employed a risk-based approach in the validation, focusing on the identification of significant risks for project implementation and the generation of CERs.

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

The audit team has been provided with a draft PDD in December 2004. 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. The final PDD version submitted in February 2005 serves as the basis for the assessment presented herewith. In July 2005 a revised final PDD has been submitted in which next to responses to the issued CAR/CRs the project participants have been changed. The on site audit performed in January 2005 allowed the audit team to gain sufficient information in order to allow also an assessment of the final and revised final PDD versions.

All changes in the revised final PDD version have either resulted in substantiating the arguments already given in the previous version or a more conservative approach with respect to the emission reduction calculation in the final version of the PDD. The changes are not considered to be significant with respect to the qualification of the project as a CDM project - as they rather have contributed to clarify single aspects. Hence no repetition of the public stakeholder process has taken place.



Studying the existing documentation belonging to this project, it was obvious that the competence and capability of the validation team has to cover at least the following aspects:

- Ø Knowledge of Kyoto Protocol and the Marrakech Accords
- Ø Environmental and Social Impact Assessment
- Ø Skills in environmental auditing (ISO 14000, EMAS)
- Ø Quality assurance
- Ø Technical aspects of hydro power plants and grid operation
- Ø Monitoring concepts
- Ø Political, economical and technical random conditions in host country

According to these requirements TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV certification body “climate and energy”:

Michael Rumberg is head of the division CDM/JI at TÜV Industrie Service GmbH TÜV SÜD Group. In his position he is responsible for the implementation of validation, verification and certifications processes for greenhouse gas mitigation projects in the context of the Kyoto Protocol. Before entering this company he worked as an expert for renewable energy, forestry, environmental issues, climate change and sustainability within the environmental branch of an insurance company. His competences are covering risk assessments, quality and environmental auditing (EMS auditor), baseline setting, monitoring and verification due to the requirements of the Kyoto Protocol.

Klaus Nürnberger is head of the division energy certification at TÜV Industrie Service GmbH TÜV SÜD Group. In his position he is responsible for the implementation of verification and certifications processes for electricity production based on renewable sources. The division has assessed more than 600 plants and sites all over Europe. He has received extensive training in the CDM and JI validation processes and participated already in several CDM and JI project assessments.

Alfonso Olea is an auditor for CDM and JI project assessments at ccaqualitas TÜV SÜD Group. He is based in Santiago de Chile, Chile. He has received extensive training in the CDM and JI validation processes and has gained experiences from other CDM projects in Chile and Peru and is also experienced in hydro power operations.

Mauro Fadda is a trainee auditor for CDM and JI project assessments at ccaqualitas TÜV SÜD Group. He is based in Santiago de Chile, Chile.

The audit team covers the above mentioned requirements as follows:

- Ø Knowledge of Kyoto Protocol and the Marrakech Accords (RUMBERG/OLEA)
- Ø Environmental and Social Impact Assessment (RUMBERG / OLEA / FADDA)
- Ø Skills in environmental auditing (ALL)
- Ø Quality assurance (RUMBERG / OLEA / FADDA)
- Ø Technical aspects of hydro power plants and grid operation (OLEA / NÜRNBERGER / RUMBERG)
- Ø Monitoring concepts (NÜRNBERGER / RUMBERG / OLEA)
- Ø Political, economical and technical random conditions in host country (OLEA / FADDA)

In order to have an internal quality control of the project, a team of the following persons has been composed by the certification body “climate and energy”:



Ø Werner Betzenbichler (head certification body “climate and energy”)

1.3 GHG Project Description

The objective of the Poechos I Project is to generate renewable electricity using hydro power resources and to sell the generated output to Electronoroeste S.A. (ENOSA) on the basis of a power purchase agreement (PPA). The project activity will generate greenhouse gas (GHG) emission reductions by avoiding CO₂ emissions from electricity generation mainly by fossil fuel power plants that supply the National Electric Grid of Peru (SEIN).

The proposed Poechos I Project is located in Peru in the North-Western department of Piura. The project involves the installation of turbines with a capacity of 15.2 MW and a envisaged production of 57,740 MWh annually.

Project participants are SINERSA, Peru and The Netherlands Clean Development Mechanism Facility (NCDMF), The Netherlands.

The International Bank for Reconstruction and Development is the Trustee of the NCDMF.

The project starting date is November 1, 2002. The 7 year renewable crediting period starts April 1, 2004.

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 (for further information see www.vvmanual.info), an initiative of all 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, according to the Validation and Verification Manual. The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements a CDM 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 Figure 1.

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

Validation Protocol Table 1: Mandatory Requirements			
Requirement	Reference	Conclusion	Cross reference
The requirements the project must meet.	Gives reference to the legislation or agreement where the requirement is found.	This is either acceptable based on evidence provided (OK), or a Corrective Action Request (CAR) of risk or non-compliance with stated requirements. The corrective action requests are numbered and presented to the client in the Validation report.	Used to refer to the relevant checklist questions in Table 2 to show how the specific requirement is validated. This is to ensure a transparent Validation process.

Validation Protocol Table 2: Requirement checklist				
Checklist Question	Reference	Means of verification (MoV)	Comment	Draft and/or Final Conclusion
The various requirements in Table 1 are linked to checklist questions the project should meet. The checklist is organised in seven different sections. Each section is then further sub-divided. The lowest level constitutes a checklist question.	Gives reference to documents where the answer to the checklist question or item is found.	Explains how conformance with the checklist question is investigated. Examples of means of verification are document review (DR) or interview (I). N/A means not applicable.	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.	This is either acceptable based on evidence provided (OK), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification is used when the validation team has identified a need for further clarification.

Validation Protocol Table 3: Resolution of Corrective Action and Clarification Requests			
Draft report clarifications and corrective action requests	Ref. to checklist question in table 2	Summary of project owner response	Validation conclusion
If the conclusions from the draft Validation are either a Corrective Action Request or a Clarification Request, these should be listed in this section.	Reference to the checklist question number in Table 2 where the Corrective Action Request or Clarification Request is explained.	The responses given by the Client or other project participants during the communications with the validation team should be summarised in this section.	This section should summarise the validation team's responses and final conclusions. The conclusions should also be included in Table 2, under "Final Conclusion".

Figure 1 Validation Protocol Tables

2.1 Review of Documents

The project design document submitted by the Client and additional background documents related to the project design and baseline were reviewed. A complete list of all documents reviewed is attached as annex 2 to this report.

2.2 Follow-up Interviews

In the period of January 17 – 19, 2005, TÜV SÜD performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the document review. Representatives of SINERSA, COES-SINAC and FONAM as well as from the Lancones District Municipality were interviewed. The main topics of the interviews are summarised in Table 1.

Table 1 Interview topics

Interviewed organisation	Interview topics
SINERSA	<ul style="list-style-type: none"> Ø Project design Ø Technical equipment Ø Sustainable development issues Ø Additionality Ø Crediting period Ø Monitoring plan Ø Management system Ø Environmental impacts Ø Stakeholder process Ø Approval by the host country
COES-SINAC and FONAM	<ul style="list-style-type: none"> Ø Sustainable development issues Ø Baseline determination Ø Additionality Ø Monitoring plan Ø Environmental impacts Ø Stakeholder process
Lancones District Municipality	<ul style="list-style-type: none"> Ø Project design Ø Sustainable development issues Ø Environmental impacts Ø Stakeholder process

2.3 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation was to resolve the requests for corrective actions and clarification 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.



3 VALIDATION FINDINGS

In the following sections the findings of the validation are stated. The validation findings for each validation subject are presented as follows:

- 1) The findings from the desk review of the final project design document and the findings from interviews during the follow up visit are summarised. A more detailed record of these findings can be found in the Validation Protocol in annex 1.
- 2) Where TÜV SÜD had identified issues that needed clarification or that represented a risk to the fulfilment of the project objectives, a Clarification or Corrective Action Request, respectively, have been issued. The Clarification and Corrective Action Requests are stated, where applicable, in the following sections and are further documented in the Validation Protocol in annex 1. The validation of the project resulted in two Corrective Action Request and five Clarification Requests.
- 3) Where Clarification or Corrective Action Requests have been issued, the exchanges between the Client and TÜV SÜD to resolve these Clarification or Corrective Action Requests are summarised.
- 4) The final conclusions for validation subject are presented.

The validation findings relate to the project design as documented and described in the final project design documentation.

3.1 Project Design

3.1.1 Discussion

The project participants are SINERSA, Peru and The Netherlands Clean Development Mechanism Facility (NCDMF), The Netherlands. Both participating Parties, Peru as the host Party, and The Netherlands as the Annex I Party, meet all relevant participation requirements. The project has received a Letter of Authorization and a Declaration of Approval from the Dutch government on November 11, 2004. The project has also obtained a Letter of Approval from the government of Peru on March 13, 2003. But the document submitted is in Spanish only.

The objective of the project is to reduce GHG emissions by installing a hydro power project.

According to the information given in the PDD, the project design engineering does reflect current good practices. The design has been professionally developed and laid out in a project feasibility study. The project itself does apply state of the art equipment and the turbines can be expected to run for the whole project period and it can not be expected that they will be replaced by more efficient technologies.

The project is in line with relevant legislation in Peru. During the visit on site it could be evidenced that the relevant licences and permits are in place. The issuance of the Letter of Approval demonstrates that the project is in line with host country specific CDM requirements and sustainable development policies of the host country.

As the project is located in a politically highly sensitive area it is essential to ensure the support of the local communities not only due to GHG emission reduction effects. Other projects have failed in that region due to the non-consideration of the local stakeholders. The project operator is aware of this issue. It can be expected that the project will create various positive effects, but



mainly - based on training - employment in the erection and operation phase, which will subsequently result in less migration.

The funding for the project does not lead to a diversion of official development assistance as according to the information obtained by the audit team ODA does not contribute to the financing of the project.

The starting date as well as the operational lifetime are clearly defined and also handled in a reasonable manner. The crediting period is with 7 years clearly defined.

Moreover it is assured that as the start of the crediting period is before the registration of the project that the project activities starting date falls in the period between 1 January 2000 and the registration of the first clean development mechanism project. During the validation process the audit team obtained the information and evidences that the start of project activities has been before the registration date of the first clean development mechanism project.

3.1.2 Findings

Corrective Action Request No. 1:

A Letter of Approval from the government of Peru in English as well should be submitted to the audit team.

Response:

A Letter of Approval in English has been submitted to the audit team. The document contains all relevant information.

3.1.3 Conclusion

The project does comply with the requirements.

3.2 Baseline and Additionality

3.2.1 Discussion

The baseline methodology applied has been approved by the CDM Executive Board and is published as under the name ACM0002: "Consolidated baseline methodology for grid-connected electricity generation from renewable sources".

The baseline methodology is deemed to be one, out of the existing approved baseline methodologies, most applicable for this project. The PDD responds convincingly to each of the applicability criteria which are outlined in the baseline methodology.

The application, discussion and determination of the chosen baseline methodology is transparent. The application follows exactly each of the steps outlined in the methodology and answers the corresponding sections in a proper manner. As the operating margin as well as the build margin will be obtained ex-post the exact calculation of the two parameters can only be seen as being indicative giving a prognosis. This prognosis is considered to be plausible.

The baseline has been based on project specific data but could also serve other renewable energy projects in the same grid as a basis for their baseline establishment.

The baseline methodology applied does take into account all relevant parameters. The available data has been used to determine the baseline. All main generators of electricity are listed in the data provided by COES-SINAC. Smaller installations are not listed. But as these installations do not report on a regular basis, their reporting is not crosschecked and their total production in



comparison to the listed and reporting power plants does not exceed 2% they have not been considered by the project proponent. This approach is deemed acceptable.

It should be noted that in the future there might be an exchange of electricity between the grid in Peru and the neighbour grids and it could result in a link of the various grids in this region in the mid term. But as the baseline is defined ex post it will also be possible to integrate this in the calculations of the emission reductions.

The baseline methodology asks for the application of the “tool for the demonstration and assessment of additionality”. The PDD elaborates on the guidelines given by this tool and complies mainly with each defined step. The barrier text in step 3 of chapter B.3 demonstrates that governmental regulations were supportive to gas fired power plants and the governmental policy can be hence seen as barrier to implement hydro projects, a barrier which gas fired projects, one of the alternatives from step 1 does not face. The common practice analysis demonstrates that other projects in the hydro power sector have been developed under other frame conditions not comparable to those faced by the project assessed herewith.

The PDD does moreover elaborate on the starting date of the project activity and hereby successfully responds to the requirements defined in “step 0” of the “tool for the demonstration and assessment of additionality”.

But the three baseline alternatives are not constantly considered in the discussion but single options are selected in the single steps (e.g. step 2: no project; step 3: gas fired power plant).

3.2.2 Findings

Corrective Action Request No. 2:

The three alternatives referred to in step 1 of the additionality should be considered also in all following steps and the tools provided should be correctly applied.

Response:

The respective information has been added and the consideration of the single options is now clearly demonstrated.

Clarification Request No. 2:

The sources for the costs for the single parameters should be named in order to allow the audit team to check the correctness of the entry parameters and the calculations.

Response:

The cost sources have been named by the project proponent: World Bank (Peru Sectoral Baseline Study) and SINERSA (internal data). The audit team has checked the correctness of the data. In cases the data derives from internal sources the data is considered to be plausible.

Clarification Request No. 3:

It should be demonstrated that when the investment decision has been made and that by this time the CDM has been seriously considered in the decision to proceed with the project activity (see chapter B.3 of the PDD).

Response:

Additional documents (confidential) have been provided which demonstrate that the CDM has been considered from the beginning. In the Board of Directors Act and written communication

from the Chairman of the board to the CEO the respective evidence is given. The documents are dated April/May 2002.

Clarification Request No. 4:

As described in step 5 of the additionality tool in the PDD the CDM revenues do only partly close the gap in costing described in step 2. It should be made clearer how the impact of CDM allows to reduce this gap and/or remove the mentioned barriers.

Response:

The project proponent demonstrates in the revised PDD how the project registration impacts the barriers faced by the project. In this context the current CER price is taken as a reference to calculate the revenue stream from CDM.

3.2.3 Conclusion

The project does comply with the requirements.

3.3 Monitoring Plan

3.3.1 Discussion

The monitoring methodology applied has been approved by the CDM Executive Board.

The monitoring methodology is deemed to be one out of the existing approved monitoring methodologies most applicable for this project. The PDD responds convincingly to each of the applicability criteria which are outlined in the monitoring methodology.

The project itself does not cause any relevant project and leakage emissions. Hence no project and leakage emissions become reported.

The monitoring plan does contain almost all relevant parameters in order to monitor the baseline emissions.

The methodology foresees an ex-post definition of the baseline. According to the information obtained during the on site audit this is possible and a limited time will pass before the data of the respective year is available in order to calculate the emission reductions.

A monitoring of sustainable development indicators/ environmental impacts is not required by the applied monitoring methodology. Independent from that relevant parameters are described in the PDD and the respective procedures are outlined in annex VIII to annex 4 of the PDD.

The overall authority and responsibility for the project is described in the PDD especially in the monitoring plan in annex 4 of the PDD (annex VIII).

General maintenance will be performed by the project owner. Moreover the equipment provider guarantees via contract to do the maintenance for the equipment.

During the visit on site training execution of training could be observed. The training includes sessions for CDM specific requirements as well as conventional plant operation.

Procedures for unintended emissions have not been identified as due to the project design unintended emissions can not occur.



3.3.2 Findings

Clarification Request No. 5:

The parameter with ID No. 5 can not be obtained according to the current data publicly provided. It should be demonstrated that the alternative approach leads to a conservative result. Hereby the instructions given in footnote 2 of the methodology should be reflected. The issue will become decisive in verification.

Response:

Parameter 5 ($F_{i,y}$), which is the amount of each fossil fuel consumed by each power source, will be able to be monitored from this year; in the same way COES performs the monitoring of the fossil fuel consumed per MWh per power plant in the SEIN.

The CDM registration of The Project was the motivator for COES authorities to publish the specific internal COES data: The real Net Efficiency Conversion (NECs) per power plant of the SEIN, in COES Annual Statistics, from this year. Having the real NECs information publicly available from now, will allow the ERCP manager estimating Parameter 5 reliably.

Parameter 5 has been included in the monitoring table presented in the PDD under section D.2.1.3. The monitoring plan provided in Annex 4 of the PDD has also been amended by the inclusion of parameter 5, footnote 2 of the methodology has thereby been taken into consideration with this amendment in the monitoring.

The revised approach is deemed to be in line with the requirements set by the methodology. This revised approach can presumably be implemented from January 1, 2005. The actual use of the required data will be checked in the verification phase.

As the crediting period starts with April 1, 2004 the project proponent has to ensure via a different system to obtain the necessary data. The actual use of the required data also for the first phase will be checked in the verification phase.

3.3.3 Conclusion

The project does comply with the requirements.

3.4 Calculation of GHG Emissions

3.4.1 Discussion

The project spatial boundaries are clearly described in chapter A.2 and B.4 of the PDD. The description is in line with the applied methodology. In addition, the location of the site is exactly defined.

The projects system boundaries are defined. The project equipment is described in technical terms. But during the visit on site it was observed that the nominal capacity is 9.5 MVA and the $\cos \phi$ factor is 0.8 resulting in an installed capacity of 7.6 MW per turbine. This figure deviates from 7.7 MW per turbines as described in the PDD.

The project does properly account for all relevant emissions

GHG calculations documented in a complete and transparent manner

All emissions will be finally determined ex post according to the methodology applied at this project.

3.4.2 Findings

Clarification Request No. 1:

The client should clarify the deviation and in case the value of 7.6 is correct adjust the PDD and the GHG emission reduction calculations accordingly.

Response:

The project proponent has adjusted the installed capacity according to actual figures. The envisaged annual production and the resulting GHG emission reduction calculations (both are prognosis data and will be obtained according to actual production data) have been revised accordingly.

3.4.3 Conclusion

The project does comply with the requirements.

3.5 Environmental Impacts

3.5.1 Discussion

The environmental impacts have been sufficiently described in the PDD.

These requirements for environmental approval have been fulfilled.

Negative environmental effects are not expected to be created by the project.

As no significant environmental impacts are expected, such impacts have not influenced the project design.

3.5.2 Findings

None

3.5.3 Conclusion

The project does comply with the requirements.

3.6 Comments by Local Stakeholders

3.6.1 Discussion

A formal consultation process with local stakeholders has taken place and corresponding information has been submitted to the audit team. The process has taken place as part of the EIA and hereby announcements in local and national newspapers were published in order to invite communities and interested parties to discuss the project. Next to this an official meeting was held at the Ministry of Energy and Mines (MINEM).



Industrie Service

The comments have been provided.

No negative comments have been received but in order to strengthen the relationship to the local communities a local electrification programme has been initiated.

3.6.2 Findings

None

3.6.3 Conclusion

The project does comply with the requirements.

4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

A global public stakeholder process on the TÜV SÜD website (via the UNFCCC website) has taken place between March 7, 2005 and April 6, 2005. One comment has been received. The PDD and the comment is publicly available under the following link: http://www.netinform.de/KE/Wegweiser/Guide2E.aspx?Ebene1_ID=172.

The comment has been submitted on April 6, 2005 by Mr. Patrick McCully, International Rivers Network. International Rivers Network is an accredited observer organisation to the United Nations Framework Convention on Climate Change Conference of the Parties. The comment has the following content:

Dear Sirs

The PDD for Poechos I hydroelectric project argues that the project should be considered additional because there is documentation showing that the sponsors wanted to gain carbon finance for the project before it started construction, and because the loan agreement integrates carbon finance cash flows. This facts only prove that the project sponsors stood to gain financially from their project receiving CERs, they do not prove that CERs were necessary for the project to move forward. The fact that the project reached financial closure and construction completion without any guaranteed revenue from CERs shows that carbon revenue would be an added bonus for project developers, not a sine qua non for project construction.

The comment has been submitted during the 30 days stakeholder period and is submitted by an accredited observer organisation. Hence, TÜV SÜD did consider the comment in its validation process. Hereby TÜV SÜD came to the following conclusion:

The project started in 2002 and during the whole project development and implementation phase carbon credits were taken into account. Documents (confidential) have been provided which demonstrate that the CDM has been considered from the beginning. In the Board of Directors Act and written communication from the Chairman of the board to the CEO the respective evidence is given. The documents are dated April/May 2002.

This approach complies with the requirements of “step 0” of the “tool for the demonstration and assessment of additionality” (EB Report 16 Annex 1) considered by the audit team as appropriate guidance, when reviewing the comment above. Hence the project is considered to qualify for CDM.

The modalities and procedures outlined in the “Tool for the demonstration and assessment of additionality” do moreover not require that a project is only commercially viable if carbon credits are obtained but that it faces significant barriers and/or the project is not the least cost option. The project proponent demonstrates in the revised PDD how the project registration impacts the barriers faced by the project. In this context the current CER price is taken at a reference to calculate the revenue stream from CDM.

The audit team considers the aspects raised in the comment as covered during the validation process as these aspects mandatory belong to a validation audit for CDM projects. As all



Industrie Service

changes in the revised final PDD version have either resulted in substantiating the arguments already given in the previous version the changes are not considered to be significant with respect to the qualification of the project as a CDM project. Hence no repetition of the public stakeholder process has taken place.

5 VALIDATION OPINION

TÜV SÜD has performed a validation of the Poechos I Project in Peru. The validation was performed on the basis of UNFCCC criteria and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM modalities and procedures and subsequent decisions by the CDM Executive Board.

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 does meet all relevant UNFCCC requirements for the CDM and all relevant host country criteria. The project will hence be recommended by TÜV SÜD for registration with the UNFCCC.

By displacing fossil fuel-based electricity in principal with electricity generated from a renewable source, the project results in reductions of CO₂ emissions that are real, measurable and give long-term benefits to the mitigation of climate change. An analysis of the investment conditions and applicable barriers 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.

Additionally the assessment team reviewed the estimation of the projected emission reductions. We can confirm that the indicated amount of emission reductions of 220.241 tonnes CO_{2e} over a crediting period of seven years, resulting in a calculated annual average of 31.463 tonnes CO_{2e}, represent a reasonable estimation using the assumptions given by the project documents. It hereby is important to mention that all parameters needed for the calculation of the actual emission reduction will be obtained ex-post and the data presented in the project design documentation is considered to be limited to a prognosis.

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, 2005-07-29



Werner Betzenbichler

Head of certification body "climate
and energy"

Munich, 2005-07-29



Michael Rumberg

Project Manager



Annex 1

Validation Protocol

Table 1 Mandatory Requirements for Clean Development Mechanism (CDM) Project Activities

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference / Comment
1. The project shall assist Parties included in Annex I in achieving compliance with part of their emission reduction commitment under Art. 3	Kyoto Protocol Art.12.2	p	Table 2, Section E.4.1
2. The project shall assist non-Annex I Parties in achieving sustainable development and shall have obtained confirmation by the host country thereof	Kyoto Protocol Art. 12.2, Marrakesh Accords, CDM Modalities §40a	p	Table 2, Section A.3
3. The project shall assist non-Annex I Parties in contributing to the ultimate objective of the UNFCCC	Kyoto Protocol Art.12.2.	p	Table 2, Section E.4.1
4. The project shall have the written approval of voluntary participation from the designated national authorities of each party involved	Kyoto Protocol Art. 12.5a, Marrakesh Accords, CDM Modalities §40a	CAR 1	<p>The project has obtained a Letter of Approval as well as a Declaration of Approval from the Dutch government on November 11, 2004. The project has also obtained a Letter of Approval from the government of Peru dated March 13, 2003. But the document is Spanish.</p> <p><u>Corrective Action Request No. 1:</u></p> <p>A Letter of Approval from the government of Peru in English as well should be submitted to the</p>



Industrie Service

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference / Comment
			audit team.
5. The emission reductions shall be real, measurable and give long-term benefits related to the mitigation of climate change	Kyoto Protocol Art. 12.5b	p	Table 2, Section E
6. Reduction in GHG emissions shall be additional to any that would occur in absence of the project activity, i.e. a CDM project activity is additional if anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the registered CDM project activity	Kyoto Protocol Art. 12.5c, Marrakesh Accords, CDM Modalities §43	p	Table 2, Section B.2
7. Potential public funding for the project from Parties in Annex I shall not be a diversion of official development assistance	Marrakech Accords	p	According to the information obtained by reviewing the documentation and during interviews, the DOE got convinced that ODA does not contribute to the financing of the project.
8. Parties participating in the CDM shall designate a national authority for the CDM	Marrakech Accords, CDM Modalities §29	p	Both Parties involved have designated national authorities for the CDM. Verification has been done on the following webpage: http://cdm.unfccc.int/DNA .
9. The host country shall be a Party to the Kyoto Protocol	Marrakech Accords, CDM Modalities §30	p	Peru has ratified the Kyoto Protocol on September 12, 2002.
10. Comments by local stakeholders shall be invited, a summary of these provided and how due account was taken of any	Marrakech Accords, CDM	p	Table 2, Section G

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference / Comment
comments received	Modalities §37b		
11. Documentation on the analysis of the environmental impacts of the project activity, including transboundary impacts, shall be submitted, and, if those impacts are considered significant by the project participants or the Host Party, an environmental impact assessment in accordance with procedures as required by the Host Party shall be carried out.	Marrakech Accords, CDM Modalities §37c	p	Table 2, Section F
12. Baseline and monitoring methodology shall be previously approved by the CDM Methodology Panel	Marrakech Accords, CDM Modalities §37e	p	Table 2, Section B.1.1 and D.1.1
13. Provisions for monitoring, verification and reporting shall be in accordance with the modalities described in the Marrakech Accords and relevant decisions of the COP/MOP	Marrakech Accords, CDM Modalities §37f	p	Table 2, Section D
14. Parties, stakeholders and UNFCCC accredited NGOs shall have been invited to comment on the validation requirements for minimum 30 days, and the project design document and comments have been made publicly available	Marrakech Accords, CDM Modalities, §40	p	A global public stakeholder process on the UNFCCC website has taken place between March 7, 2005 and April 6, 2005. One comment has been received on April 6, 2005. The PDD and the comment is publicly available under the following link: http://www.netinform.de/KE/Wegweiser/Guide2E.aspx?Ebene1_ID=172
15. A baseline shall be established on a project-specific basis, in a transparent manner and taking into account relevant national	Marrakech Accords, CDM	p	Table 2, Section B.2



Industrie Service

REQUIREMENT	REFERENCE	CONCLUSION	Cross Reference / Comment
and/or sectoral policies and circumstances	Modalities, §45c,d		
16. The baseline methodology shall exclude to earn CERs for decreases in activity levels outside the project activity or due to force majeure	Marrakech Accords, CDM Modalities, §47	p	Table 2, Section B.2
17. The project design document shall be in conformance with the UNFCCC CDM-PDD format	Marrakech Accords, CDM Modalities, Appendix B, EB Decisions	p	The PDD is in conformance with the CDM Project Design Document (version 02) which is in effect as of July 1, 2004.

Table 2 Requirements Checklist

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
A. General Description of Project Activity <i>The project design is assessed.</i>					
A.1. Project Boundaries <i>Project Boundaries are the limits and borders defining the GHG emission reduction project.</i>					
A.1.1. Are the project's spatial (geographical) boundaries clearly defined?	1, 2, 4, 19, 23	DR, I	The project spatial boundaries are clearly described in chapter A.2 and B.4 of the PDD. The description is in line with the applied methodology. In addition, the location of the site is exactly defined.	p	p
A.1.2. Are the project's system (components and facilities used to mitigate GHGs) boundaries clearly defined?	1, 2, 4, 13, 23	DR, I	<p>The projects system boundaries are defined. The project equipment is described in technical terms. But during the visit on site it was observed that the nominal capacity is 9.5 MVA and the cos • factor is 0.8 resulting in an installed capacity of 7.6 MW per turbine. This figure deviates from 7.7 MW per turbines as described in the PDD.</p> <p><u>Clarification Request No. 1:</u></p> <p>The client should clarify the deviation and in case the value of 7.6 is correct adjust the</p>	CR 1	p

* MoV = Means of Verification, DR= Document Review, I= Interview

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			PDD and the GHG emission reduction calculations accordingly.		
A.2. Technology to be employed <i>Validation of project technology focuses on the project engineering, choice of technology and competence/ maintenance needs. The validator should ensure that environmentally safe and sound technology and know-how is used.</i>					
A.2.1. Does the project design engineering reflect current good practices?	1, 2, 4, 9, 13, 23	DR, I	According to the information given in the PDD, the project design engineering does reflect current good practices. The design has been professionally developed and laid out in a project feasibility study.	p	p
A.2.2. Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country?	1, 2, 4, 9, 13, 23	DR, I	Yes, the project does apply state of the art equipment.	p	p
A.2.3. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	1, 2, 4, 9, 13, 23	DR, I	No the turbines can be expected to run for the whole project period and it can not be expected that they will be replaced by more efficient technologies.	p	p
A.2.4. Does the project require extensive initial training and maintenance efforts in order to work as presumed during the project period?	1, 2, 4, 9, 16, 17, 23	DR, I	Yes the project requires initial training and causes also new requirements regarding the maintenance of the equipment. During the visit on site training execution could be observed. The training includes sessions for	p	p



Industrie Service

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			CDM specific requirements as well as conventional plant operation.		
A.2.5. Does the project make provisions for meeting training and maintenance needs?	1, 2, 4, 9, 16, 17, 23		See comment A.2.4	p	p
A.3. Contribution to Sustainable Development <i>The project's contribution to sustainable development is assessed.</i>					
A.3.1. Is the project in line with relevant legislation and plans in the host country?	1, 2, 4, 23	DR, I	Yes, according to the information given in the PDD the project is in line with relevant legislation in Peru. During the visit on site it could be evidenced that the relevant licences and permits are in place.	p	p
A.3.2. Is the project in line with host-country specific CDM requirements?	1, 2, 4, 10, 23	DR, I	The issuance of the Letter of Approval demonstrates that the project is in line with host country specific CDM requirements.	p	p
A.3.3. Is the project in line with sustainable development policies of the host country?	1, 2, 4, 10, 23	DR, I	Yes, as a Letter of Approval has been issued by the government of Peru, the project is deemed to be in line with the sustainable development policies of the host country.	p	p
A.3.4. Will the project create other environmental or social benefits than GHG emission reductions?	1, 2, 4,	DR, I	As the project is located in a politically highly sensitive area it is essential to ensure	p	p

* MoV = Means of Verification, DR= Document Review, I= Interview

Page A-7

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
	10, 15, 23		the support of the local communities not only due to GHG emission reduction effects. Other projects have failed in that region due to the non-consideration of the local stakeholders. The project operator is aware of this issue. It can be expected that the project will create various positive effects, but mainly - based on training - employment in the erection and operation phase, which will subsequently result in less migration.		
B. Project Baseline <i>The validation of the project baseline establishes whether the selected baseline methodology is appropriate and whether the selected baseline represents a likely baseline scenario.</i>					
B.1. Baseline Methodology <i>It is assessed whether the project applies an appropriate baseline methodology.</i>					
B.1.1. Is the baseline methodology previously approved by the CDM Methodology Panel?	1, 2, 4, 19, 23	DR, I	Yes, the baseline methodology applied has been approved by the CDM Executive Board and is published as under the name ACM0002: "Consolidated baseline methodology for grid-connected electricity generation from renewable sources".	p	p
B.1.2. Is the baseline methodology the one deemed most applicable for this project and is the	1, 2, 4,	DR, I	The baseline methodology is deemed to be one, out of the existing approved baseline	p	p

* MoV = Means of Verification, DR= Document Review, I= Interview

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
appropriateness justified?	19, 23		methodologies, most applicable for this project. The PDD responds convincingly to each of the applicability criteria which are outlined in the baseline methodology.		
B.2. Baseline Determination <i>The choice of baseline will be validated with focus on whether the baseline is a likely scenario, whether the project itself is not a likely baseline scenario, and whether the baseline is complete and transparent.</i>					
B.2.1. Is the application of the methodology and the discussion and determination of the chosen baseline transparent?	1, 2, 3, 4, 19, 23	DR, I	Yes, the application, discussion and determination of the chosen baseline methodology is transparent. The application follows exactly each of the steps outlined in the methodology and answers the corresponding sections in a proper manner. As the operating margin as well as the build margin will be obtained ex-post the exact calculation of the two parameters can only be seen as being indicative giving a prognosis. This prognosis is considered to be plausible.	p	p
B.2.2. Has the baseline been determined using conservative assumptions where possible?	1, 2, 3, 4, 19, 23	DR, I	The baseline is established according to the requirements outlined in the methodology.	p	p



Industrie Service

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
B.2.3. Has the baseline been established on a project-specific basis?	1, 2, 3, 4, 19, 23	DR, I	The baseline has been based on project specific data but could also serve other renewable energy projects in the same grid as a basis for their baseline establishment.	p	p
B.2.4. Does the baseline scenario sufficiently take into account relevant national and/or sectoral policies, macro-economic trends and political aspirations?	1, 2, 3, 4, 19, 23	DR, I	The baseline methodology applied does take into account all relevant parameters. It should be noted that in the future there might be an exchange of electricity between the grid in Peru and the neighbour grids and it could result in a link of the various grids in this region in the mid term. But as the baseline is defined ex post it will also be possible to integrate this in the calculations of the emission reductions.	p	p
B.2.5. Is the baseline determination compatible with the available data?	1, 2, 3, 4, 18, 19, 23	DR, I	Yes, the available data has been used to determine the baseline. All main generators of electricity are listed in the data provided by COES-SINAC. Smaller installations are not listed. But as these installations do not report on a regular basis, their reporting is not crosschecked and their total production in comparison to the listed and reporting power plants does not exceed 2% they have not been considered by the project proponent. This approach is deemed acceptable.	p	p
B.2.6. Does the selected baseline represent the most likely scenario among other possible and/or	1, 2,	DR,	Yes.	p	p

* MoV = Means of Verification, DR= Document Review, I= Interview

Page A-10

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
discussed scenarios?	3, 4, 19, 23	I			
B.2.7. Is it demonstrated/justified that the project activity itself is not a likely baseline scenario (e.g. through (a) a flow-chart or series of questions that lead to a narrowing of potential baseline options, (b) a qualitative or quantitative assessment of different potential options and an indication of why the non-project option is more likely, (c) a qualitative or quantitative assessment of one or more barriers facing the proposed project activity or (d) an indication that the project type is not common practice in the proposed area of implementation, and not required by a Party's legislation/regulations)?	1, 2, 3, 4, 8, 9, 14, 19, 21, 23, 25- 27	DR, I	<p>The baseline methodology asks for the application of the “tool for the demonstration and assessment of additionality”. The PDD elaborates on the guidelines given by this tool and complies mainly with each defined step. The barrier text in step 3 of chapter B.3 demonstrates that governmental regulations were supportive to gas fired power plants and the governmental policy can be hence seen as barrier to implement hydro projects, a barrier which gas fired projects, one of the alternatives from step 1 does not face.</p> <p>The common practice analysis demonstrates that other projects in the hydro power sector have been developed under other frame conditions not comparable to those faced by the project assessed herewith.</p> <p>The PDD does moreover elaborate on the starting date of the project activity and hereby successfully responds to the requirements defined in “step 0” of the “tool for the demonstration and assessment of additionality”.</p>	CAR 2 and CR 2 - 4	p



Industrie Service

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			<p>But the three baseline alternatives are not constantly considered in the discussion but single options are selected in the single steps (e.g. step 2: no project; step 3: gas fired power plant).</p> <p><u>Corrective Action Request No. 2:</u> The three alternatives referred to in step 1 of the additionality should be considered also in all following steps.</p> <p>Next to this the following issues need clarification:</p> <p><u>Clarification Request No. 2:</u> The sources for the costs for the single parameters should be named in order to allow the audit team to check the correctness of the entry parameters and the calculations.</p> <p><u>Clarification Request No. 3:</u> It should be demonstrated that when the investment decision has been made and that by this time the CDM has been seriously considered in the decision to proceed with the project activity (see chapter B.3 of the PDD).</p>		

* MoV = Means of Verification, DR= Document Review, I= Interview

Page A-12

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			Clarification Request No. 4: As described in step 5 of the additionality tool in the PDD the CDM revenues do only partly close the gap in costing described in step 2. It should be made clearer how the impact of CDM allows to reduce this gap and/or remove the mentioned barriers.		
B.2.8. Have the major risks to the baseline been identified?	1, 2, 4, 23	DR, I	No, the PDD does not elaborate on this issue. But as the baseline is defined by centrally obtained and recorded data, this is not considered to be a deficiency.	p	p
B.2.9. Is all literature and sources clearly referenced?	1, 2, 4, 23	DR, I	Mainly all literature and sources are clearly referenced throughout the PDD. See also CR 2.	p	p
C. Duration of the Project/ Crediting Period <i>It is assessed whether the temporary boundaries of the project are clearly defined.</i>					p
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	1, 2, 4, 23	DR, I	Yes, the starting date as well as the operational lifetime are clearly defined.	p	p
C.1.2. Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max. two x 7 years or fixed crediting period of max. 10 years)?	1, 2, 4, 23	DR, I	Yes, the crediting period is with 7 years clearly defined.	p	p
C.1.3. Is it assured that in case the start of the crediting period is before the registration of the	1, 2, 4,	DR, I	According to the information in the PDD the start of project activities has been before the	p	p

* MoV = Means of Verification, DR= Document Review, I= Interview



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
project that the project activities starting date falls in the period between 1 January 2000 and the registration of the first clean development mechanism project?	14, 23		registration date of the first clean development mechanism project. This statement could be verified during the visit on site and the review of respective documents.		
D. Monitoring Plan <i>The monitoring plan review aims to establish whether all relevant project aspects deemed necessary to monitor and report reliable emission reductions are properly addressed.</i>					
D.1. Monitoring Methodology <i>It is assessed whether the project applies an appropriate baseline methodology.</i>					
D.1.1. Is the monitoring methodology previously approved by the CDM Methodology Panel?	1, 2, 4, 20, 23	DR, I	Yes, the monitoring methodology applied has been approved by the CDM Executive Board.	p	p
D.1.2. Is the monitoring methodology applicable for this project and is the appropriateness justified?	1, 2, 4, 20, 23	DR, I	The monitoring methodology is deemed to be one out of the existing approved monitoring methodologies most applicable for this project. The PDD responds convincingly to each of the applicability criteria which are outlined in the monitoring methodology.	p	p
D.1.3. Does the monitoring methodology reflect good monitoring and reporting practices?	1, 2, 4, 20,	DR, I	Yes.	p	p

* MoV = Means of Verification, DR= Document Review, I= Interview

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
	23				
D.1.4. Is the discussion and selection of the monitoring methodology transparent?	1, 2, 4, 20, 23	DR, I	Yes.	p	p
D.2. Monitoring of Project Emissions <i>It is established whether the monitoring plan provides for reliable and complete project emission data over time.</i>					
D.2.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for estimation or measuring the greenhouse gas emissions within the project boundary during the crediting period?	1, 2, 4, 20, 23	DR, I	The project itself does not cause any relevant emissions. Hence no project emissions will be reported.	p	p
D.2.2. Are the choices of project GHG indicators reasonable?	1, 2, 4, 20, 23	DR, I	See comment above.	p	p
D.2.3. Will it be possible to monitor / measure the specified project GHG indicators?	1, 2, 4, 20, 23	DR, I	See comment above.	p	p
D.2.4. Will the indicators give opportunity for real measurements of achieved emission reductions?	1, 2, 4, 20, 23	DR, I	See comment above.	p	p



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
D.2.5. Will the indicators enable comparison of project data and performance over time?	1, 2, 4, 20, 23	DR, I	See comment above.	p	p
D.3. Monitoring of Leakage <i>It is assessed whether the monitoring plan provides for reliable and complete leakage data over time.</i>					
D.3.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for determining leakage?	1, 2, 4, 20, 23	DR, I	The project does not cause any relevant leakage emissions. Hence, leakage emissions are not reported.	p	p
D.3.2. Have relevant indicators for GHG leakage been included?	1, 2, 4, 20, 23	DR, I	See comment above.	p	p
D.3.3. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for determining leakage?	1, 2, 4, 20, 23	DR, I	See comment above.	p	p
D.3.4. Will it be possible to monitor the specified GHG leakage indicators?	1, 2, 4, 20, 23	DR, I	See comment above.	p	p



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
D.4. Monitoring of Baseline Emissions <i>It is established whether the monitoring plan provides for reliable and complete project emission data over time.</i>					
D.4.1. Does the monitoring plan provide for the collection and archiving of all relevant data necessary for determining baseline emissions during the crediting period?	1, 2, 4, 20, 23	DR, I	<p>The monitoring plan does contain almost all relevant parameters in order to monitor the baseline emissions.</p> <p><u>Clarification Request No. 5:</u> The parameter with ID No. 5 can not be obtained according to the current data publicly provided. It should be demonstrated that the alternative approach leads to a conservative result. Hereby the instructions given in footnote 2 of the methodology should be reflected. The issue will become decisive in verification.</p>	CR 5	
D.4.2. Is the choice of baseline indicators, in particular for baseline emissions, reasonable?	1, 2, 4, 20, 23	DR, I	Yes, the choice made is reasonable.	p	p
D.4.3. Will it be possible to monitor the specified baseline indicators?	1, 2, 4, 20, 23	DR, I	The methodology foresees an ex-post definition of the baseline. According to the information obtained during the on site audit this is possible and a limited time will pass before the data of the respective year is available in order to calculate the emission	p	p



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			reductions.		
D.5. Monitoring of Sustainable Development Indicators/ Environmental Impacts <i>It is checked that choices of indicators are reasonable and complete to monitor sustainable performance over time.</i>					
D.5.1. Does the monitoring plan provide the collection and archiving of relevant data concerning environmental, social and economic impacts?	1, 2, 4, 15, 20, 23	DR, I	The methodology does not require the monitoring of such data. Independent from that relevant parameters are described in the PDD and the respective procedures are outlined in annex VIII to annex 4 of the PDD.	p	p
D.5.2. Is the choice of indicators for sustainability development (social, environmental, economic) reasonable?	1, 2, 4, 15, 20, 23	DR, I	Yes.	p	p
D.5.3. Will it be possible to monitor the specified sustainable development indicators?	1, 2, 4, 15, 20, 23	DR, I	Yes.	p	p
D.5.4. Are the sustainable development indicators in line with stated national priorities in the Host Country?	1, 2, 4, 15, 20, 23	DR, I	Yes, as the project has obtained approval by the relevant authorities, it is considered to be in line with national priorities in Peru.	p	p

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
D.6. Project Management Planning <i>It is checked that project implementation is properly prepared for and that critical arrangements are addressed.</i>					
D.6.1. Is the authority and responsibility of project management clearly described?	1, 2, 4, 16, 20, 23	DR, I	The overall authority and responsibility for the project is described in the PDD especially in the monitoring plan.	p	p
D.6.2. Is the authority and responsibility for registration, monitoring, measurement and reporting clearly described?	1, 2, 4, 16, 20, 23	DR, I	Yes, in annex 4 of the PDD (annex VIII) the overall responsibility and authority is described.	p	p
D.6.3. Are procedures identified for training of monitoring personnel?	1, 2, 4, 16, 20, 23	DR, I	During the visit on site training execution could be observed. The training includes sessions for CDM specific requirements as well as conventional plant operation.	p	p
D.6.4. Are procedures identified for emergency preparedness for cases where emergencies can cause unintended emissions?	1, 2, 4, 16, 20, 23	DR, I	No, such procedures have not been identified. But as due to the project design unintended emissions can not occur it is also not seen to be necessary for this specific project.	p	p
D.6.5. Are procedures identified for calibration of monitoring equipment?	1, 2, 4,	DR, I	Yes, the electricity meters have been calibrated and a calibration certificate has	p	p



Industrie Service

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
	16, 20, 23		been provided to the audit team.		
D.6.6. Are procedures identified for maintenance of monitoring equipment and installations?	1, 2, 4, 16, 20, 23	DR, I	Yes, general maintenance will be performed by the project owner. Moreover the equipment provider guarantees via contract to do the maintenance for the equipment.	p	p
D.6.7. Are procedures identified for monitoring, measurements and reporting?	1, 2, 4, 16, 20, 23	DR, I	Yes, in additional documentation provided to the audit team the respective procedures are briefly described.	p	p
D.6.8. Are procedures identified for day-to-day records handling (including what records to keep, storage area of records and how to process performance documentation)	1, 2, 4, 16, 20, 23	DR, I	Yes, in additional documentation provided to the audit team the respective procedures are briefly described.	p	p
D.6.9. Are procedures identified for dealing with possible monitoring data adjustments and uncertainties?	1, 2, 4, 16, 20, 23	DR, I	No, as all monitored on site data derives from calibrated meters this problem should not occur.	p	p
D.6.10. Are procedures identified for review of reported results/data?	1, 2, 4, 16, 20,	DR, I	Yes, in additional documentation provided to the audit team the respective procedures are briefly described.	p	p

* MoV = Means of Verification, DR= Document Review, I= Interview

Page A-20



Industrie Service

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
	23				
D.6.11. Are procedures identified for internal audits of GHG project compliance with operational requirements where applicable?	1, 2, 4, 16, 20, 23	DR, I	No, but as the GHG project success complies with the normal operation of the hydro power plant and this production process is continuously observed , no specific internal audits are necessary.	p	p
D.6.12. Are procedures identified for project performance reviews before data is submitted for verification, internally or externally?	1, 2, 4, 16, 20, 23	DR, I	Yes, in additional documentation provided to the audit team the respective procedures are briefly described.	p	p
D.6.13. Are procedures identified for corrective actions in order to provide for more accurate future monitoring and reporting?	1, 2, 4, 16, 20, 23	DR, I	No, as the monitoring plan is in line with the requirements of the methodology this step is not deemed necessary.	p	p

* MoV = Means of Verification, DR= Document Review, I= Interview

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
E. Calculation of GHG Emissions by Source <i>It is assessed whether all material GHG emission sources are addressed and how sensitivities and data uncertainties have been addressed to arrive at conservative estimates of projected emission reductions.</i>					
E.1. Predicted Project GHG Emissions <i>The validation of predicted project GHG emissions focuses on transparency and completeness of calculations.</i>					
E.1.1. Are all aspects related to direct and indirect GHG emissions captured in the project design?	1, 2, 3, 4, 20, 23	DR, I	The project does not generate any emissions. Hence this question is not applicable to the project.	p	p
E.1.2. Are the GHG calculations documented in a complete and transparent manner?	1, 2, 3, 4, 20, 23	DR, I	See comment above.	p	p
E.1.3. Have conservative assumptions been used to calculate project GHG emissions?	1, 2, 3, 4, 20, 23	DR, I	See comment above.	p	p
E.1.4. Are uncertainties in the GHG emissions estimates properly addressed in the documentation?	1, 2, 3, 4, 20, 23	DR, I	See comment above.	p	p
E.1.5. Have all relevant greenhouse gases and source	1, 2,	DR,	See comment above.	p	p

* MoV = Means of Verification, DR= Document Review, I= Interview



CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
categories listed in Kyoto Protocol Annex A been evaluated?	3, 4, 20, 23	I			
E.2. Leakage <i>It is assessed whether there leakage effects, i.e. change of emissions which occurs outside the project boundary and which are measurable and attributable to the project, have been properly assessed.</i>					
E.2.1. Are potential leakage effects beyond the chosen project boundaries properly identified?	1, 2, 3, 4, 20, 23	DR, I	Relevant leakage does not occur in the project according to the current project design. Hence, this question is not applicable.	p	p
E.2.2. Have these leakage effects been properly accounted for in calculations?	1, 2, 3, 4, 20, 23	DR, I	See comment above.	p	p
E.2.3. Does the methodology for calculating leakage comply with existing good practice?	1, 2, 3, 4, 20, 23	DR, I	See comment above.	p	p
E.2.4. Are the calculations documented in a complete and transparent manner?	1, 2, 3, 4, 20, 23	DR, I	See comment above.	p	p
E.2.5. Have conservative assumptions been used when calculating leakage?	1, 2, 3, 4,	DR, I	See comment above.	p	p

* MoV = Means of Verification, DR= Document Review, I= Interview



Industrie Service

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
	20, 23				
E.2.6. Are uncertainties in the leakage estimates properly addressed?	1, 2, 3, 4, 20, 23	DR, I	See comment above.	p	p
E.3. Baseline Emissions <i>The validation of predicted baseline GHG emissions focuses on transparency and completeness of calculations.</i>					
E.3.1. Have the most relevant and likely operational characteristics and baseline indicators been chosen as reference for baseline emissions?	1, 2, 3, 4, 20, 23	DR, I	Yes, the chosen indicators are relevant and plausible.	p	p
E.3.2. Are the baseline boundaries clearly defined and do they sufficiently cover sources and sinks for baseline emissions?	1, 2, 3, 4, 20, 23	DR, I	Yes, the baseline boundaries are clearly defined.	p	p
E.3.3. Are the GHG calculations documented in a complete and transparent manner?	1, 2, 3, 4, 20, 23	DR, I	Yes.	p	p
E.3.4. Have conservative assumptions been used when calculating baseline emissions?	1, 2, 3, 4, 20, 23	DR, I	The baseline emissions are calculated according to the data obtained from statistical sources. This is deemed to be acceptable.	p	p
E.3.5. Are uncertainties in the GHG emission	1, 2,	DR,	No, the PDD does not elaborate on this	p	p

* MoV = Means of Verification, DR= Document Review, I= Interview

Page A-24

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
estimates properly addressed in the documentation?	3, 4, 20, 23	I	issue. But as the estimates are defined by centrally obtained and recorded data, this is not considered to be a deficiency.		
E.3.6. Have the project baseline(s) and the project emissions been determined using the same appropriate methodology and conservative assumptions?	1, 2, 3, 4, 20, 23	DR, I	Yes, both emissions have been determined according to the methodology applied at this project.	p	p
E.4. Emission Reductions Validation of baseline GHG emissions will focus on methodology transparency and completeness in emission estimations.					
E.4.1. Will the project result in fewer GHG emissions than the baseline scenario?	1, 2, 3, 4, 20, 23	DR, I	Yes.	p	p
F. Environmental Impacts <i>Documentation on the analysis of the environmental impacts will be assessed, and if deemed significant, an EIA should be provided to the validator.</i>					p
F.1.1. Has an analysis of the environmental impacts of the project activity been sufficiently described?	1, 2, 4, 6, 23	DR, I	Yes	p	p
F.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, is an EIA approved?	1, 2, 4, 6, 23	DR, I	Yes, a legal obligation exists and the respective requirements for approval have been fulfilled.	p	p

* MoV = Means of Verification, DR= Document Review, I= Interview

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
F.1.3. Will the project create any adverse environmental effects?	1, 2, 4, 6, 23	DR, I	No, negative environmental effects are not expected to be created by the project.	p	p
F.1.4. Are transboundary environmental impacts considered in the analysis?	1, 2, 4, 6, 23	DR, I	Transboundary impacts are not considered to be of relevance.	p	p
F.1.5. Have identified environmental impacts been addressed in the project design?	1, 2, 4, 6, 23	DR, I	As no significant environmental impacts are expected according to the PDD, such impacts have not influenced the project design.	p	p
F.1.6. Does the project comply with environmental legislation in the host country?	1, 2, 4, 6, 23	DR, I	Yes	p	p
G. Stakeholder Comments <i>The validator should ensure that a stakeholder comments have been invited and that due account has been taken of any comments received.</i>					
G.1.1. Have relevant stakeholders been consulted?	1, 2, 4, 6, 23	DR, I	A formal consultation process with local stakeholders has taken place and corresponding information has been submitted to the audit team. The process has taken place as part of the EIA and hereby announcements in local and national newspapers were published in order to invite communities and interested parties to	p	p



Industrie Service

CHECKLIST QUESTION	Ref.	MoV*	COMMENTS	Draft Concl	Final Concl
			discuss the project. Next to this an official meeting was held at the Ministry of Energy and Mines (MINEM).		
G.1.2. Have appropriate media been used to invite comments by local stakeholders?	1, 2, 4, 6, 23	DR, I	Yes, but for the underdeveloped region where the project is located and people do neither write nor read (ratio 50%) the Lancones District Municipality spread out the information to inform the stakeholders.	p	p
G.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, 4, 6, 23	DR, I	Yes, as part of the EIA..	p	p
G.1.4. Is a summary of the stakeholder comments received provided?	1, 2, 4, 6, 23	DR, I	Yes, the comments have been provided.	p	p
G.1.5. Has due account been taken of any stakeholder comments received?	1, 2, 4, 6, 23	DR, I	Yes, in addition a local electrification programme has been initiated.	p	p

* MoV = Means of Verification, DR= Document Review, I= Interview

Table 3 Resolution of Corrective Action and Clarification Requests

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
<p>The project has obtained a Letter of Approval as well as a Declaration of Approval from the Dutch government on November 11, 2004. The project has also obtained a Letter of Approval from the government of Peru dated March 13, 2003. But the document is Spanish.</p> <p><u>Corrective Action Request No. 1:</u></p> <p>A Letter of Approval from the government of Peru in English as well should be submitted to the audit team.</p>	Table 1	A Letter of Approval in English has been submitted to the audit team. The document contains all relevant information.	p
<p>The three baseline alternatives are not constantly considered in the discussion but single options are selected in the single steps (e.g. step 2: no project; step 3: gas fired power plant).</p> <p><u>Corrective Action Request No. 2:</u></p> <p>The three alternatives referred to in step 1 of the additionality should be considered also in all following steps.</p>	Table 2, B.2.7	The respective information has been added and the consideration of the single options is now clearly demonstrated.	p



Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
<p>The projects system boundaries are defined. The project equipment is described in technical terms. But during the visit on site it was observed that the nominal capacity is 9.5 MVA and the cos • factor is 0.8 resulting in an installed capacity of 7.6 MW per turbine. This figure deviates from 7.7 MW per turbines as described in the PDD.</p> <p><u>Clarification Request No. 1:</u></p> <p>The client should clarify the deviation and in case the value of 7.6 is correct adjust the PDD and the GHG emission reduction calculations accordingly.</p>	Table 2, A.1.2	The project proponent has adjusted the installed capacity according to actual figures. The envisaged annual production and the resulting GHG emission reduction calculations (both are prognosis data and will be obtained according to actual production data) have been revised accordingly.	p
<p><u>Clarification Request No. 2:</u></p> <p>The sources for the costs for the single parameters should be named in order to allow the audit team to check the correctness of the entry parameters and the calculations.</p>	Table 2, B.2.7	The cost sources have been named by the project proponent: World Bank (Peru Sectoral Baseline Study) and SINERSA (internal data). The audit team has checked the correctness of the data. In cases the data derives from internal sources the data is considered to be plausible.	p
<p><u>Clarification Request No. 3:</u></p> <p>It should be demonstrated that when the</p>	Table 2,	Additional documents (confidential)	p



Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
investment decision has been made and that by this time the CDM has been seriously considered in the decision to proceed with the project activity (see chapter B.3 of the PDD).	B.2.7	have been provided which demonstrate that the CDM has been considered from the beginning. In the Board of Directors Act and written communication from the Chairman of the board to the CEO the respective evidence is given. The documents are dated April/May 2002.	
<u>Clarification Request No. 4:</u> As described in step 5 of the additionality tool in the PDD the CDM revenues do only partly close the gap in costing described in step 2. It should be made clearer how the impact of CDM allows to reduce this gap and/or remove the mentioned barriers.	Table 2, B.2.7	The project proponent demonstrates in the revised PDD how the project registration impacts the barriers faced by the project. In this context the current CER price is taken at a reference to calculate the revenue stream from CDM.	p
The monitoring plan does contain almost all relevant parameters in order to monitor the baseline emissions. <u>Clarification Request No. 5:</u> The parameter with ID No. 5 can not be obtained according to the current data publicly provided. It should be demonstrated that the alternative approach leads to a conservative result. Hereby the instructions	Table 2, D.4.1	Parameter 5 ($F_{i,y}$), which is the amount of each fossil fuel consumed by each power source, will be able to be monitored from this year; in the same way COES performs the monitoring of the fossil fuel consumed per MWh per power plant in the <i>SEIN</i> . The CDM registration of The Project	The revised approach is deemed to be in line with the requirements set by the methodology. This revised approach can presumably be implemented from January 1, 2005. The actual use of the required data will be checked in the verification phase. As the crediting period starts with April




Industrie Service

Draft report clarifications and corrective action requests by validation team	Ref. to checklist question in table 1 and 2	Summary of project owner response	Validation team conclusion
<p>given in footnote 2 of the methodology should be reflected. The issue will become decisive in verification.</p>		<p>was the motivator for <i>COES</i> authorities to publish the specific internal <i>COES</i> data: The real Net Efficiency Conversion (NECs) per power plant of the <i>SEIN</i>, in <i>COES</i> Annual Statistics, from this year. Having the real NECs information publicly available from now, will allow the ERCP manager estimating Parameter 5 reliably.</p> <p>Parameter 5 has been included in the monitoring table presented in the PDD under section D.2.1.3. The monitoring plan provided in Annex 4 of the PDD has also been amended by the inclusion of parameter 5, footnote 2 of the methodology has thereby been taken into consideration with this amendment in the monitoring.</p>	<p>1, 2004 the project proponent has to ensure via a different system to obtain the necessary data. The actual use of the required data also for the first phase will be checked in the verification phase.</p> <p>p</p>


- oOo -

Annex 2:

Information Reference List

Final Report	2005-07-29	Validation of the "Poechos I Project" in Peru Information Reference List	Page 1 of 2	 Industrie Service
--------------	------------	---	----------------	--

Reference No.	Document or Type of Information																										
1	<p>On-site interviews at the offices and on site conducted between January 17 and January 19, 2005 by auditing team of TÜV SÜD</p> <p>Validation team on-site:</p> <table> <tr> <td>Alfonos Olea</td><td>ccaqualitas TÜV SÜD Group</td></tr> <tr> <td>Mauro Fadda</td><td>ccaqualitas TUV SUD Group</td></tr> </table> <p>Interviewed persons:</p> <table> <tr> <td>Branislav Zdravkovic</td><td>Sinersa</td></tr> <tr> <td>Jorge C. Gruensberg</td><td>Sinersa</td></tr> <tr> <td>Redy Risco</td><td>Sinersa</td></tr> <tr> <td>Milivoje Boljsakov</td><td>Sinersa</td></tr> <tr> <td>Douglas Chavez</td><td>Siunersa</td></tr> <tr> <td>Carlos Galvez</td><td>Municipalidad Distrital Fronteriza "Lancones"</td></tr> <tr> <td>Jose Garcia</td><td>ACDI (Canada) Promeb Piura Project</td></tr> <tr> <td>Jaime Guerra Montes de Oca</td><td>COES-SINAC</td></tr> <tr> <td>Juan Carlos Pino</td><td>CORS-SINAC</td></tr> <tr> <td>Julia Justo</td><td>FONAM</td></tr> <tr> <td>Lorenzo Eguren</td><td>FONAM</td></tr> </table>	Alfonos Olea	ccaqualitas TÜV SÜD Group	Mauro Fadda	ccaqualitas TUV SUD Group	Branislav Zdravkovic	Sinersa	Jorge C. Gruensberg	Sinersa	Redy Risco	Sinersa	Milivoje Boljsakov	Sinersa	Douglas Chavez	Siunersa	Carlos Galvez	Municipalidad Distrital Fronteriza "Lancones"	Jose Garcia	ACDI (Canada) Promeb Piura Project	Jaime Guerra Montes de Oca	COES-SINAC	Juan Carlos Pino	CORS-SINAC	Julia Justo	FONAM	Lorenzo Eguren	FONAM
Alfonos Olea	ccaqualitas TÜV SÜD Group																										
Mauro Fadda	ccaqualitas TUV SUD Group																										
Branislav Zdravkovic	Sinersa																										
Jorge C. Gruensberg	Sinersa																										
Redy Risco	Sinersa																										
Milivoje Boljsakov	Sinersa																										
Douglas Chavez	Siunersa																										
Carlos Galvez	Municipalidad Distrital Fronteriza "Lancones"																										
Jose Garcia	ACDI (Canada) Promeb Piura Project																										
Jaime Guerra Montes de Oca	COES-SINAC																										
Juan Carlos Pino	CORS-SINAC																										
Julia Justo	FONAM																										
Lorenzo Eguren	FONAM																										
2	Draft Project Design Document, submitted December 2004																										
3	Calculation of the baseline (build and operating margin) for prognosis of emission reductions (excel-sheet), submitted December 2004																										
4	Final Project Design Document, submitted February 2005																										
5	UNFCCC homepage http://www.unfccc.int																										
6	Environmental Impact Assessment, dated 1997, submitted December 2004																										
7	Project Concept Note, dated March 2003, submitted December 2004																										
8	Initial Draft Project Design Document, dated February 2002, submitted December 2004																										

Final Report	2005-07-29	Validation of the "Poechos I Project" in Peru Information Reference List	Page 2 of 2	 Industrie Service
--------------	------------	---	----------------	--

Reference No.	Document or Type of Information
9	Feasibility Study, submitted December 2004
10	Letter of Approval, issued by CONAM, dated March 13, 2003, submitted June 2005 (English and Spanish version)
11	Letter of Authorization, issued by The Netherlands Ministry of Housing, Spatial Planning and Environment (VROM), dated November 11, 2004, submitted December 2004
12	Declaration of Approval, issued by The Netherlands Ministry of Housing, Spatial Planning and Environment (VROM), dated November 11, 2004, submitted December 2004
13	Information on equipment and related efficiencies, submitted February 2005
14	Loan Agreement (confidential), dated October 2002, submitted February 2005
15	Sustainable Development Monitoring Plan (Implementation plan), submitted February 2005
16	Organisational structure and quality control diagram, submitted February 2005
17	Training lectures (powerpoint presentation), submitted February 2005
18	Information on small suppliers not listed in the COES SINAC statistics, submitted February 2005
19	Approved consolidated baseline methodology ACM0002: Consolidated baseline methodology for grid-connected electricity generation from renewable sources, UNFCCC, 2004
20	Approved consolidated monitoring methodology ACM0002: Consolidated monitoring methodology for zero emissions grind-connected electricity generation from renewable sources, UNFCCC, 2004
21	Tool for demonstration and assessment of additionality, issued as EB 16 Report Annex 1
22	Validation and Verification Manual, IETA/PCF http://www.vvmanual.info
23	Revised Final Project Design Document, submitted July 2005
24	Comment to the project submitted during the Public Stakeholder Process period, submitted on April 6, 2005 by Mr. Patrick McCully, International Rivers Network.
25	Study: PERU - Run-of-River Hydroelectric Umbrella Project, National Electrical Grid Baseline Assessment and Emissions Reduction Calculations, World Bank/ The Netherlands Carbon Facility, October 2003
26	Letter issued by Sindicato Energetico S.A. on financial viability of the project Poechos I, dated May 22, 2002, submitted May 2005 (confidential)
27	Board of Directors Act, dated April 26, 2002, submitted May 2005 (confidential)