CDM Project Activity Registration and Validation Report Form

(By submitting this form, designated operational entity confirms that the proposed CDM project activity meets all validation and registration requirements and thereby requests its registration)

Section 1: Request for registration	
Name of the designated operational entity (DOE) submitting this form	TÜV Industrie Service GmbH TÜV SÜD Group
Title of the proposed CDM project activity (Section A.2 of the attached CDM-PDD) submitted for registration	Poechos I Project
Project participants (Name(s))	SINERSA, Peru The Netherlands Clean Development Mechanism Facility (NCDMF), The Netherlands
Sector in which project activity falls	Energy industries (1)
Is the proposed project activity a small-scale activity?	Yes / No *(underline as applicable)*

Section 2: Validation report	
List of documents to be attached to this validation report (please check mark)*:*	

X The CDM-PDD of the project activity

X An explanation by the submitting designated operational entity of how it has taken due account of comments on validation requirements received, in accordance with the CDM modalities and procedures, from Parties, stakeholders and UNFCCC accredited non-governmental organizations. This explanation is included in the Validation Report No. 629731, rev. 01;

X The written approval of voluntary participation from the designated national authority of each Party involved, including confirmation by the host Party that the project activity assists it in achieving sustainable development:

X Other documents, including any validation protocol used in the validation

- Validation Report (Validation Report No. 629731, rev. 01) including a validation protocol, information reference list and and a list of persons interviewed by DOE validation team during the validation process.

X Information on when and how the above validation report is made publicly available.

q Banking information on the payment of the non-reimbursable registration fee

X A statement signed by all project participants stipulating the modalities of communicating with the Executive Board and the secretariat in particular with regard to instructions regarding allocations of CERs at issuance

Executive Summary and Introduction, including

- **Description of the proposed CDM project activity**
- **Scope of validation process (include all documentation that has been reviewed and name persons that have been interviewed as part of the validation, as applicable)**
- **DOE Validation team (list of all persons involved in the validation, describing functions assumed in the validation)**

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 CO_2 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.

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.

All documentation that has been reiviewed and all persons interviewed have as part of the validation are listed in annex 2 of the validation report (Validation Report No. 629731, rev. 01).

According to the 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 (RUMGERG / 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")

For further details please refer to the "Introduction" section of the validation report (Validation Report No. 629731, rev. 01).

Description of methodology for carrying out validation

- **Review of CDM-PDD and additional documentation attached to it**
- **Assessment against CDM requirements (e.g. by use of a validation protocol)**
- **Report of findings by the DOE, e.g. by use of type of findings (e.g. corrective action requests, clarifications or observations). Please explain the way findings are "labelled" during validation.**
- **Include statements or assessments in the section "Conclusions, final comments and validation opinion" below.**

The validation consists of the following three phases:

Desk review

Follow up interviews

Resolution of clarification and corrective action requests

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

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 completed validation protocol is enclosed in Annex 1 to the validation report.

Findings established during validation can either be seen as a non fullfillment of validation criteria or where a risk to the fulfilment of the project objectives is identified. Such findings are termed Corrective Action request. The term "Clarification request" is used when the vlaidation team has identified a need for further clarification.

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 of the validation report and documented in more detail in the validation protocol in annex 1 to the validation report. The validation of the project resulted in two Corrective Action Request and five Clarification Requests.

For further details please refer to the "Methodology" section of the validation report (Validation Report No. 629731, rev. 01).

Explanation by the submitting designated operational entity of how it has taken due account of comments on validation requirements received, in accordance with the CDM modalities and procedures, from Parties, stakeholders and UNFCCC accredited non-governmental organizations;

- **Description of how and when the PDD was made publicly available**
- **Description of how comments were received and made publicly available**
- **Explanation of how due account has been taken of comments received**
- **Compilation of all comments received (Identify the submitter)**

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 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.

Conclusions, final comments and validation opinion

- **Provide conclusions on each requirement under paragraph 37 of the CDM modalities and procedures, describing how these requirements have been meet. This shall include assessments and findings (e.g. corrective action requests, clarifications or observations) in relation to each requirement, including a confirmation that all issues raised have been addressed to the satisfaction of the DOE.**
- **Final comments and 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.

TÜV SÜD has received a Letter of Approval/Authorization by the Parties involved. The host Party has hereby demonstrated that the project activity assists it in achieving sustainable development.

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.

The validation consists of the following three phases:

Desk review

Follow up interviews

Resolution of clarification and corrective action requests

The Corrective Action Requests and Clarification Requests raised by TÜV SÜD were resolved during communication between the client and TÜV SÜD in a satisfactory manner.

In our opinion, the project does meet all relevant UNFCCC requirements for the CDM and all relevant host country criteria.

The participation requirements defined in paragraph 28-30 of the modalities and procedures

(decision 17/CP.7) for the Clean Development Mechanism are satiesfied.

Comments by local stakeholders have been invited, a summary of comments received has been provided and a report on how due account was taken of any comment has been received.

An analysis of the environmental impacts of the project activity has been submitted.

The project is based on an approved methodology.

By displacing fossil fuel-based electricity in principal with electricity generated from a renewable source, the project results in reductions of CO_2 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.

Provisions for monitoring, verification and reporting are in accordance with the requirements.

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} o ver 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.

Concluding, the project will be recommended by TÜV SÜD for registration with the UNFCCC.

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.

The DOE declares herewith that in undertaking the validation of this proposed CDM project activity it has no financial interest related to the proposed CDM project activity and that undertaking such a validation does not constitute a conflict of interest which is incompatible with the role of a DOE under the CDM.

By submitting this validation report, the DOE confirms that all validation requirements are met. Name of authorized officer signing for the DOE	Michael Rumberg
Date and signature for the DOE	August 12, 2005

Section below to be filled by UNFCCC secretariat	
Date when the form is received at UNFCCC secretariat	
Date at which the registration fee has been received	
Date at which registration shall be deemed final	

Date of request for review, if applicable		
Date and number of registration	Date	Number