



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	Det Norske Veritas Certification Ltd. (DNV)
Title of the proposed CDM project activity (Section A.2 of the attached CDM-PDD) submitted for registration	Pesqueiro Energia Small Hydroelectric Project – PESHP
Project participants (Name(s))	Pesqueiro Energia S.A. (Brazil)
Sector in which project activity falls	Energy industries
Is the proposed project activity a small-scale activity?	Yes

Section 2: Validation report

List of documents to be attached to this validation report (please check mark):	
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> The CDM-PDD of the Project activity <input checked="" type="checkbox"/> 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 (Note: Included in DNV's Validation Report (DNV report 2005-0595, rev 01)); <input type="checkbox"/> 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 assist it in achieving sustainable development: <ul style="list-style-type: none"> ○ (Attach a list of all Parties involved and attach the approval(in alphabetic order)) <input checked="" type="checkbox"/> Other documents, including any validation protocol used in the validation. <ul style="list-style-type: none"> ○ DNV's Validation Report (DNV report 2005-0595, rev 01), including a validation protocol and a list of person interviewed by DNV validation team during the validation process. <input type="checkbox"/> Information on when and how the above validation report is made publicly available. <input type="checkbox"/> Banking information on the payment of the non-reimbursable registration fee. <input type="checkbox"/> 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 allocation 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 project is located in the South of Brazil. The project consists of a run-of-river small-hydro power plant (12.44 MW) and a small reservoir (0.33 km²) located in the Jaguariaíva River, in the city of Jaguariaíva, state of Paraná. The project has already been implemented and started operation 27 January 2003. It delivers about 80 000 MWh/year to the South-Southeast-Midwest interconnected grid, with an estimated minimum capacity factor of 75%. The entrepreneurship is a joint venture owned by three agricultural cooperatives.

The validation scope is defined as an independent and objective review of the project design document (PDD). The PDD is reviewed against the criteria stated in Article 12 of the Kyoto Protocol, the CDM modalities and procedures as agreed in the Marrakech Accords and the relevant decisions by the CDM Executive Board. The validation team has, based on the recommendations in the Validation and Verification Manual employed a risk-based approach, focusing on the identification of significant risks for project implementation and the generation of CERs.

The following documents were reviewed:

Pesqueiro Energia Small Hydroelectric Project (PESHP) PDD. Version 1 (April 2005);
 Pesqueiro Energia Small Hydroelectric Project (PESHP) PDD. Version 2 (June 2005)
 Spreadsheet of Calculation of Combined Margin (ONS database SSC 2001-2003 v.2005-06-07)
 International Emission Trading Association (IETA) & the World Bank's Prototype Carbon Fund (PCF): Validation and Verification Manual. <http://www.vvmanual.info>
 Appendix B of the simplified modalities and procedures for small-scale CDM project activities: Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activity categories. Version 05: 25 February 2005.
 CDM EB: Tool for the demonstration and assessment of additionality, EB 16 Report, Annex 1.
 Bosi, M., A. Laurence, P. Maldonado, R. Schaeffer, A. F. Simoes, H. Winkler and J.-M. Lukamba. Road testing baselines for greenhouse gas mitigation projects in the electric power sector. OECD and IEA information paper, October 2002.

The following persons were interviewed:

Fernando Souza Machado – Ecoinvest
 Luis Alfredo Teixeira Strickert - Coord. Adm. Com - Pesqueiro Energia S.A.
 Rosmir César de Oliveira - Coordenador Geral - Pesqueiro Energia S.A

The validation team consisted of the following personnel:

Mr Luis Filipe Aboim Tavares	DNV Rio de Janeiro
Ms Cintia Dias	DNV Rio de Janeiro
Mr Michael Lehmann	DNV Oslo

For further details, please refer to the "Introduction" and "References" Sections of DNV's Validation Report (DNV report 2005-0595, 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 consisted of the following three phases:

- a desk review of the project design documents;
- follow-up interview with project stakeholders;
- the resolution of outstanding issues and the issuance of a validation report and opinion.

The Project Design Document submitted by Pesqueiro Energia S.A. on 25 April 2005, and the final PDD of June 2005 were reviewed.

On 13 June 2005 DNV performed interviews with staff of Pesqueiro Energia S.A and Ecoinvest to confirm and to resolve issues identified in the document review.

In order to ensure transparency, a validation protocol has been customized 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 validation the identified criteria.

Findings established during the validation can either be seen as a non- fulfilment of validation criteria or where a risk to the fulfilment of project objectives is identified. Such findings are termed Corrective Action Requests (CAR). The term Clarification may be used where additional information is needed to fully clarify an issue. The Corrective Action Requests raised by the validation team were resolved through communications with the project participants. To guarantee the transparency of the validation process, the concerns raised by DNV and the response provided by the project participants are documented in Table 3 of the Validation Protocol in Appendix A of DNV’s Validation Report (DNV report 2005-0595, rev 01).

For further details, please refer to the “Methodology” Section of DNV’s Validation Report (DNV report 2005-0595, rev 01) and the IETA/PCF Validation and Verification Manual (www.vvmanual.info)

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)

DNV Certification published the initial PDD of April 2005 on the DNV Climate Change web site (<http://www.dnv.com/certification/ClimateChange>) and stakeholders were through the UNFCCC CDM web site invited to provide comments within a 30 days period from 30 April 2005 to 30 May 2005. One comment was received in this period. The comment (in unedited form) and how DNV has taken due account of the comment received is given in the “Comments by Parties, stakeholders and NGOs” Section of DNV’s Validation Report (DNV report 2005-0595, rev 01).

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 met. 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

Det Norske Veritas Certification Ltd. (DNV) has performed a validation of the “Pesqueiro Energia Small Hydroelectric Project –PESHP” at Jaguaraiá Municipality; Paraná State, Brazil, (hereafter called “the project”). The validation was performed on the basis of UNFCCC criteria for small-scale CDM project activities and relevant Brazilian criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The project participant is Pesqueiro Energia S.A. No Annex I Party is yet identified for the project. Brazil meets the requirements to participate in the CDM.

The run-of-river small hydro power plant with a capacity of 12.44 MW and with a small reservoir is not expected to have considerable environmental impacts. An Environmental Impact Study as required by Brazilian law has been carried out and the project has received the environmental licences by IAP.

By promoting renewable energy, the project is in line with the current sustainable development priorities of Brazil.

Being a renewable energy project activity with an output capacity of less than 15 MW, the project meets the criteria for Renewable electricity generation for the grid (Category I.D) small-scale CDM project activities as defined in Appendix B of the simplified modalities and procedures for small-scale CDM project activities.

A combined margin emission coefficient of 0.5211 tCO₂e/MWh is calculated in accordance with the simplified baseline methodology for category I.D small-scale CDM project activities, i.e. the average of the approximate operating margin and the build margin. The determination of this combined margin emission coefficient is based on actual electricity generation data provided by the National Electricity System Operator (ONS) for the years 2001- 2003 in the South/Southeast/Midwest grid.

The additionality of the project is demonstrated through a barrier test. The presented barriers demonstrate that the project is not a likely baseline scenario.

By displacing fossil fuel-based electricity, the project results in reductions of CO₂ emissions that are real, measurable and give long-term benefits to the mitigation of climate change. Given that the project is operated as designed, the project is likely to achieve the estimated amount of emission reductions.

The monitoring plan sufficiently specifies the monitoring requirements.

In summary, it is DNV’s opinion that the “Pesqueiro Energia Small Hydroelectric Project –PESHP” as described in the revised and resubmitted project design document of June 2005, meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria and correctly applies the baseline and monitoring methodology for category I.D small-scale CDM project activities. Hence, DNV will request the registration of the “Pesqueiro Energia Small Hydroelectric Project –PESHP” as CDM project activity.

Prior to the submission of this validation report to the CDM Executive Board, DNV will have to receive the written approval of the DNA of Brazil, including confirmation that the project assists in achieving sustainable development.

For further details, please refer to the “Validation Findings” Section and Table 1 of the Validation Protocol in Appendix A of DNV’s Validation Report (DNV report 2005-0595, rev 01).

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.	Prior to the submission of this validation report to the CDM Executive Board, DNV will have to receive the written approval of voluntary participation from the Brazilian DNA.	
Name of authorized officer signing for the DOE	Michael Lehmann	
Date and signature for the DOE	23 June 2005 <i>Michael Lehmann</i>	
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